A COMPARATIVE ANALYSIS OF
SPECIFICALLY PREPARED AND GENERALLY PREPARED
MIDDLE SCHOOL PRESERVICE TEACHERS

A DISSERTATION

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CHAPTER I

Introduction

In 1965, Norman Dixon wrote "that after sixty years of existence, the junior high is still largely a school without teachers- that is, without teachers prepared specifically for this level" (Eichorn, 1974, p. 82). In 1992, this statement accurately describes the modern middle school. Since the first middle level school opened in Columbus, Ohio in 1909 and, especially, for the last thirty years, the literature on middle level education has called for teachers specifically prepared for the middle level. Alexander, one of the leaders of the middle school movement, recently described the problem of adequate staffing "the most persistent and troubling problem of the middle school" (Alexander, 1991, p.11). Despite this, there is seeming reluctance on the part of institutions that prepare teachers to establish middle level teaching programs and state departments of education that provide teacher certification to require middle level programs. While the junior high school and its successor, the middle school, have become a publicly accepted and empirically researched level in the educational organization of this country, the system for preparing teachers for schools is still, primarily, a two tiered organization with preservice teachers being prepared for either elementary school teaching or secondary school teaching. This two tiered teacher preparation organization has not kept up with this three tier educational organization. Middle schools are staffed, primarily, by teachers prepared for either elementary or secondary teaching. These teachers, while being competent educators, often lack the insight, skills, and knowledge for teaching at the middle level (Alexander & McEwin, 1982).

There has been a grass roots movement to look at how teachers are being prepared for the middle level. This movement has been supported by the National Middle School Association for the last thirty years. More recently education centers that focus on the young adolescent such as the Center for Research and Development on Elementary and Middle Schools at John Hopkins University, the National Resource Center for Middle Grades Education at the University of Southern Florida and National Initiatives, Center for Early Adolescence at the University of North Carolina at Chapel Hill have enabled educators to examine more closely who is teaching in the middle school and how this teacher is being prepared. The 1989 publication of *Turning Points: Preparing American Youth for the 21st Century*, a report prepared by the Carnegie Council on Adolescent Development's Task Force on Education of Young Adolescents, emphasized the preparation of teachers for the middle grades.

Turning Points marked, on a national level, interest in middle level education, generally, and teacher preparation for this middle level, specifically. The National Council for Accreditation of Teacher Education and The National Board for Professional Teaching Standards have approved guidelines for middle level teacher preparation, which were developed by the National Middle School Association, thus endorsing specific middle level teacher preparation.

.c2.Statement of the Problem

Preparing teachers for the middle school has been at the heart of the middle school movement, a movement dedicated to developing schools appropriate for the needs and interests of the young adolescent, but currently, only 33 % of institutions that prepare teachers include middle level teacher preparation (McEwin, 1991); and the majority of middle grade teachers report that they have not received specific preparation for teaching young adolescents. When preparation is reported, it is most often experienced at the inservice rather than at the preservice level.

Supporters of specialized middle level preparation contend that elementary majors lack the content specialization needed by the middle school teacher and that while secondary teachers may have the subject matter base, they lack the understanding of adolescent development and teaching methods appropriate for the middle grades. Teachers of students in the middle years, ages about 10 to 15, have these special needs: (1) understanding of the characteristics of the age group and competence to deal with them in the classroom; (2) competence to teach in an organization that is somewhat unique to the middle level- interdisciplinary teaching; (3) mastery of the skills of learning and of their teaching at the middle level; and (4) understanding of and commitment to the middle level school (Alexander & McEwin, 1988). Prospective middle level teachers need healthy attitudes and informed understandings of the developmental characteristics and needs of early adolescents. Most middle school teachers are called upon to help the learner develop interpersonal skills as well as develop academic competency. In addition, the middle level school has a primary function of providing opportunities for its students to explore a variety of interests. This requires the middle school teacher to be grounded in early adolescence and in teacher-student and teacher-parent relationships.

Middle grade teachers, reformers in middle level education and educational licensing organizations are in agreement about what middle grade teachers must know and be able to do. Peter Scales' recent study of middle level teachers concludes that "the middle grade community needs to make a more convincing empirical case for special preparation so that more preservice teachers want to enroll in special programs" (Scales, 1992, p. 8). Working from grant from the DeWitt Wallace Reader's Digest Fund awarded to the Center for Early Adolescence to study middle grades teachers, Scales stated that there needed to be a study that compared the teaching behaviors and efficacy of teachers prepared in a high quality middle grades program with middle grades

teachers prepared in a high quality elementary or secondary program. This was also the conclusion of a recent study conducted through the National Middle School Association.

In 1990, NMSA conducted a study of educators' opinions about the future of middle school education. The panel of experts spoke in one voice about the essential need for middle grades teacher preparation. Almost every respondent listed the necessity for teachers to be specifically prepared or recertified for teaching at the middle level. They spoke about the need for state departments of education and institutions of higher learning to lead this effort. They were eloquent in their beliefs that this cadre of specifically prepared teachers was quite likely the key to the middle school movement's success or failure.

The following comparative analysis attempts to determine if there are differences between preservice teachers who have been prepared in a program designed specifically for middle level teaching and preservice teachers who have been prepared in a general teacher preparation program. The analysis, first, looks at middle level teaching as a global construct and, then, examines separate components of this construct. The separate components which are examined include; the preservice teacher's knowledge base about teaching young adolescents, the preservice teacher's ability to plan lessons which incorporate appropriate middle level teaching strategies, the preservice teacher's videotaped teaching performance, and the preservice teacher's attitudes about middle level teaching both before and after student teaching. Specifically, this study seeks to answer the following questions:

Research Questions

1. Is there a difference in overall middle school teaching ability as measured by knowledge, class performance, planning, and attitude between preservice teachers attending a general teacher preparation program and preservice teachers attending a specific teacher preparation program.
2. Is there a difference in the knowledge base concerning middle school teaching between preservice teachers who have been prepared in a general teacher preparation program and preservice teachers prepared in a specific teacher preparation program?
3. Is there a difference in the lesson plans between preservice teachers who have been prepared in a general teacher preparation program and preservice teachers prepared in a specific teacher preparation program?
4. Is there a difference in the teaching performance as portrayed in a videotape between preservice teachers prepared in a general teacher preparation program and preservice teachers prepared in a specific teacher preparation program?
5. Is there a difference in the attitudes toward teaching between preservice teachers who have been prepared in a general teacher preparation program and preservice teachers who have been prepared in a specific teacher preparation program? Does this perception differ before and after student teaching?

Significance

This study is significant because though middle grade leaders have strongly argued for middle grades preparation, and it makes intuitive sense to believe that teachers specially prepared for young adolescents would teach young adolescents more effectively (Scales, 1992), the data to test this assertion are limited. Experts opinions rather than empirical testing has been the basis for recommending teacher preparation for the middle level as a unique area of teacher preparation. No study could be discovered in the literature which compares the teaching behaviors and beliefs of teachers prepared in a middle grade program with teachers prepared in an elementary or secondary program.

The middle grades community needs to make a stronger empirical case for special preparation so that more preservice teachers want to enroll in special middle level programs. Middle grades' experts need to convince educators that institutions that prepare teachers must develop high quality middle level programs that better prepare teacher for middle level teaching, and middle grade experts need to convince state certification officials to establish and require middle level certification.

The middle school movement has reached the point where empirical investigation of its tenets is necessary. If teacher preparation is to move forward, particularly teacher education directed toward middle level teachers, then basing programs on what constitutes success in teaching must be implemented in program considerations. Successful middle school student teaching means student teachers whose teaching behaviors and practices meet the needs of the young adolescent. If those student teachers prepared specifically for middle school teaching are better able to meet these needs then teacher educators must take a serious look at the transformation of teacher education into a three tiered organization, an organization that matches the educational organization of this country's school system.

Limitations

Limitations of this study include: the naturalistic conditions; the limited number of generally prepared elementary student teachers who student taught at the middle level; the location of the middle schools at which the student teachers were placed; the organizational pattern at the middle school in which the student teachers taught; the cooperating teacher with whom the student was placed; and the instruments utilized by the researcher.

The lack of randomization, manipulation, and control are weaknesses which characterize this kind of study. A possibility always exists that the groups are different on some major variable besides the one identified in this study, the teacher preparation program.

This study was conducted under naturalistic conditions. The researcher attempted to utilize the student teaching experience to uncover information about the preservice teacher's preparation program. Neither the student teaching placement nor the preparation programs were developed to conduct this particular inquiry.

The preservice teachers were chosen because they met the criteria of having been prepared in either a traditional teacher education program or having been prepared in a middle school teacher education program. The students taught in a middle school during the spring term for ten weeks. The limitations of this subject selection were that there was a limited number of subjects available, thus randomization was not possible. From the seventy five preservice teachers who were student teaching this spring and were prepared in a traditional K-8 or 1-8 program, only eight of these students were placed either by choice or through assignment in a middle school. For purposes of analysis it was preferred that this number was larger, but the figure is telling. Few elementary student teachers wish to student teach at the middle level. Most of the student teachers reported that they would rather student teach at the elementary level, grades 1-5. The number of student teachers available did not

allow for random selection but required the researcher to study all of the sample. This dependence on all of the subjects limits the generalizability of the study.

The secondary preservice teachers who chose or were assigned to a middle school numbered twelve out of a possible forty. In the case of these student teachers, middle school student teaching was seen as prohibitory in terms of "landing" a secondary teaching position. For purposes of analysis, it was necessary to collapse the elementary and secondary prepared students into one group.

It would have been preferable if the traditional preservice teachers had requested their middle level assignment as did the middle school preservice teachers. While each of the elementary preservice teachers accepted their assignment, each did not specifically request this placement nor have input into the selection of the cooperating teacher.

Each of the preservice teachers included in the study had been accepted into the university's college of education. The background of each of the preservice teacher was not thoroughly reviewed for differences which they might bring to their preparation program. Each was a senior education major who planned to pursue a teaching position upon graduation. This study focused on their preparation program and assumed the preservice teachers within each group to be of relatively equal ability.

The middle school sample included the fourteen preservice teachers who were involved in the middle school strand for five terms or fifty weeks. Their preparation had been unique both in its emphasis on the middle level and its exposure to urban schools.

While not required, these preservice teachers were encouraged to student teach in an urban placement. While preservice teachers from both the traditional and the middle level preparation had field experiences in urban schools, this kind of preparation was particularly emphasized in the middle school strand. Ten out of fourteen middle level prepared student teachers chose to teach at an urban middle school. Three out of twenty traditionally prepared student teachers taught at an urban middle school and only two of

these chose this placement. This study did not investigate the influence that an urban or suburban placement might have on the student teaching experience.

While each of the student teachers taught at a school labeled middle school, the schools were at various stages of implementation of the middle school philosophy. A school which adheres to the middle school philosophy would be characterized by interdisciplinary teaching, teachers arranged into teams, an advisory period, exploratory subjects, flexible scheduling and other organizational practices appropriate for the middle level learner. Schools which are in the process of transformation from the mini high school to the middle school may have implemented some of these organizational strategies in hopes of adopting others. Some middle schools in the study had already adopted the structures identified as those followed by a "true" middle school. Still other middle schools are replicas of the high school in organization and philosophy. The school's implementation of instructional strategies and organization influenced how the student teacher taught. Three of the schools at which the student teachers were placed were very well developed in terms of implementing the middle school philosophy. Their funding and organization encouraged implementation of middle school practices. The remaining schools were either in the initial stages or were not committed to the middle school concept. Those schools which were well developed in the implementation of the middle school philosophy had invested time in the inservice education of their teachers. Neither group of student teachers was exclusively assigned to a middle school which had a well developed program. This study did not investigate how much influence the setting had on the behavior, beliefs, or planning of the student teacher.

It seems reasonable to assume that the scope of knowledge of the middle school learner, the middle school philosophy, and appropriate middle level practices differed among cooperating teachers as did the cooperating teachers preparation program. The cooperating teacher is required by the state to be certified in the same area that the student teacher with whom she/he is working would be eligible to be certified. This insured that the student teacher and the cooperating teacher were prepared in an elementary preparation

program for the elementary prepared teachers, and in a secondary prepared program for the secondary prepared teachers. There were no cooperating teachers in the study who had been prepared in an undergraduate middle school preparation program, and only one teacher who had middle school preparation at the graduate level. Whatever preparation the middle school cooperating teachers possessed came either through experience or inservice training. This study did not investigate how much influence the cooperating teacher had on the behavior, planning or beliefs of the student teacher.

The researcher could find no instrument which measured the knowledge, behaviors, competencies and planning of middle school teachers or student teachers. The development of these instruments was based on the research in the middle school literature.

The instrument which measured the knowledge base of the middle school student teacher was based on the central document of the middle school movement, *This We Believe*.

In the case of the instrument which measured the number of instructional practices which have been identified in the literature as being appropriate to the middle level learner, the researcher could only assess for those practices for which the student teacher had control. For example, while interdisciplinary team teaching is considered especially appropriate at the middle level (Beane, 1991; Epstein and MacIver, 1990), this organization arrangement is determined by the school, itself, and the student teacher cannot dictate that he/she team teaches. Other instructional practices over which the student teacher had no control included: retention policy; flexible scheduling; exploratory courses; computer instruction; diagnostic teaching; transition programs; and extracurricular activities. Those recommended instructional practices over which, it was believed, the student teacher could control and plan for included: grouping practices; cooperative learning; affective concerns; responsive evaluation; drill and practice; problem solving and decision making.

By allowing each student teacher to choose his/her ten best lessons, the researcher was able to determine if the student teacher was aware of which

instructional practices were appropriate at the middle level. This also reduced the variation in school assignment and cooperating teacher assignment..

The videotapes were done in different schools and in different content areas. This potential limitation was reduced by allowing and encouraging each student teacher to choose his or her best middle school lesson. By allowing the student teacher to dictate his/her best teaching moment, which included choosing the class with which the teacher felt he/she related best and the content for which he/she was most prepared, the researcher was given the opportunity to discover if the student teacher knew what comprised the best in middle school teaching.

The study was conducted in a manner that attempted to support the student teacher during the challenging student teacher period.

Definitions

For the purposes of this study, the following definitions will be used:

GENERAL PREPARATION: This preparation adheres to traditional divisions in teacher preparation programs. The elementary preparation includes grades 1-8 and the secondary preparation includes grades 7-12.

MIDDLE SCHOOL CONCEPT: This term refers to the beliefs embodied in the document, *This We Believe*, and considered by leaders in the middle school movement as appropriate to the needs of the young adolescent.

MIDDLE SCHOOL PRINCIPLES: Those organizational practices recommended by middle school experts and characterizing middle schools identified as examples of "true" middle schools.

INTERDISCIPLINARY TEACHING-describes teaching which attempts to allow students to see relationships among subject areas.

EXPLORATORY SUBJECTS-offerings that encourage and allow students to explore new arenas of interest both as specific courses and as methodology within courses.

ADVISOR/ADVISEE-Group advisory periods assign a small group of students to a teacher , administrator, or other staff member for a regularly scheduled meeting to discuss topics important to the students.

INTERDISCIPLINARY TEAM TEACHING- teams of teachers who teach different subjects but share the same students.

MIDDLE SCHOOL MOVEMENT: This movement is based on the assumption that the ages between ten and fourteen represent a unique time in the development of the individual and require appropriate instructional strategies.

MIDDLE LEVEL SCHOOL: The term, today, most frequently refers to schools embracing grades 6-8, but can also be applied to those middle schools incorporating grades 5-8, 7-8 or 7-9. For the purposes of this study, middle level and middle school will be used interchangeably.

MIDDLE SCHOOL STRAND: This term refers to a specialized teacher education program which incorporates the essential elements as designated by NCATE and NMSA.

PRESERVICE TEACHER: A student who is enrolled in a teacher preparation program and has not yet received the necessary teaching credentials for a teaching position. This includes the student teaching experience.

SPECIFIC PREPARATION: This term refers to a teacher preparation program where the designation is middle school teaching incorporating those characteristics of the middle school movement.

TRADITIONAL PREPARATION: This term incorporates teacher education preparation programs where the designation is either elementary or secondary, where the student teachers teach for a ten week term, and where the student teachers have experienced a semester hour preparation program.

ELEMENTARY PREPARATION - preparation for teaching in grades 1-8

SECONDARY PREPARATION - preparation for teaching in grades 7-12.

YOUNG ADOLESCENT: This refers to the time period between childhood and full blown adolescence, typically considered the ages of 10-14, beginning prior to the onset of puberty and extending through the early stages of adolescence. This designation is based on physical, social, emotional, and intellectual changes in the body. Young adolescent, in this study, refers to the middle level learner.

Summary

This study attempted to compare middle school student teachers who had been prepared in a traditional teacher preparation program with middle school student teachers who had been prepared in a program which was designed specifically for middle school teaching. This study is important in its attempt to develop an organizational pattern for teacher education which is consistent with the dominant organizational pattern in K-12 education. Determining whether specifically prepared teachers know more about young adolescents, plan more appropriately for middle level teaching, display effective middle school teaching behaviors, and perceive themselves as better able to work at a middle school will help inform teacher educators about the manner in which teachers for the middle years should be prepared.

CHAPTER II

Introduction

Chapter 2 will introduce the reader to the literature related to the middle school movement and the preparation of teachers for today's middle school. The first section will discuss the origins of the junior high school and reforms in junior high school education. The emerging middle school will be examined with the characteristics of the emergent middle school identified. The document, *This We Believe*, which includes the essential elements of the middle school concept will be reviewed. Support for middle level education will be discussed. Finally, the reader will be introduced to the characteristics of the modern middle school.

The second section of this chapter will examine the history of middle level teacher preparation. The interaction between reform in teacher preparation, in general, and specific middle level teacher preparation will be discussed. This discussion will include an examination of the relationship between teacher education and state departments of education. The reader will be given the opportunity to look at the recommended components of a middle level teacher education program. The reader will examine how these programs are rated. Finally, the behaviors and competencies of effective middle level teachers will be identified.

The third section of this review presents effective middle level instructional strategies. Various methodologies have been utilized to identify those practices which are particularly appropriate for middle level learners.

The fourth and final section looks at an essential component of middle level teacher preparation, the student teaching experience. The influences which impact the way a student teacher plans and implements instruction will be examined. The persons and environments which influence student teaching will be reviewed.

Review of the Literature

Middle School Movement

.The Junior High

The junior high school, established early in this century, had become widespread by 1960, when four out of every five high school graduates had gone through a 6-3-3 school organization (Lawton, 1989); by contrast, in 1920 about four of every five had gone through the traditional 8-4 organization.

The junior high school was conceptualized when educators saw an imbalance in the continuum of education (George, Stevenson, Thomason, & Beane, 1992). In 1872, concern over the average age of entering freshmen at Harvard prompted Charles W. Eliot, president of the college, to initiate an investigation of ways to improve and reduce the total program of elementary and secondary education prior to college admission. He pursued this issue throughout his chairmanship of the famous Committee of Ten on Secondary School Studies.

The Committee of Ten recommended, in 1893, that the secondary school program should begin two grades earlier, with six years of elementary and six years of secondary education. This issue of correct balance between elementary and secondary became the subject of discussion for the next twenty years (George et al., 1992). Eventually, the Committee on Economy of Time in Education, reporting in 1913, made the first specific mention of a separate junior division of secondary education. In the years to come, school districts all over the nation experimented with either a 6-6 or a 6-3-3 programmatic division to

the schools(Gruhn and Douglas, 1971). The rising birth rates following World War I added a practical reason for the configuration to the middle school.

Plans for the first junior high schools contained components that would be very familiar to today's middle school educator. The school was to be based on the characteristics of young adolescents and concerned with all aspects of growth and development. "It would be a school designed to provide continued work in learning skills while bringing more depth to the curriculum than had been the case in the elementary school" (George, et.al, 1992, p.3). It would emphasize guidance and exploration, independence and responsibility. The junior high school would provide the final portion of general education and offer a transition to the high school years (Tye, 1985).

Even at the time the earliest junior high schools were established, however, there were factors, other than ideas about what would constitute the most effective program, that significantly influenced the design of the system. In many less populated states, for example, the junior high school became a substitute for the high school. That is, if a particular community had a small enrollment of students of high school age, then they were likely to be designated as a junior high school district, and the few students who did go on to high school had to do so at the county seat, where sufficient student enrollment could be assembled (A.O. White, 1989).

In most cases, the high school was seen as the preparation for the college. The "preparation for preparation" had begun (George et al.1992, p. 4). The universities across the nation exerted influence on the high schools across the nation. Preparation for college was the central reason for the high school until the middle of the twentieth century. There are some who argue that this is still the central focus of the high school.

The junior high school took on the characteristics and components of the high school and became a replica of the high school. This choice was made rather than focusing on the characteristics of the young adolescent.

By the middle of the 20th century, following World War II, the junior high school reached the height of its popularity, in terms of numbers. Dramatic

growth occurred. The number of junior high schools soared from a few hundred in the first two decades of the century to well over 5,000 by 1960 (Howard & Stroumbis, 1970). By that same year, 80% of high school graduates had gone through an elementary-junior-high school organization (Alexander & McEwin, 1989). The influence of higher education, the need to deal with growing masses of immigrants, and the larger number of students following the world wars all contributed to the increasing number of junior highs.

During this time, junior high schools became more like high schools in almost every way. Teachers were organized into academic departments, as they were at the university and at Harvard, rather than in the interdisciplinary core curriculum that the literature of the junior high school recommended (Koos, 1920). Students were promoted or retained on a subject-by-subject basis. Elective programs focused on specialization that would lead to majors at the high school rather than the exploration envisioned by the other early junior high proponents. Rigid grouping practices based on perceived ability as measured by the I.Q. test or prior achievement became characteristic of the junior high. Teachers who had prepared for high school teaching often ended up in the junior high school until a secondary position came up. Many administrators saw the junior high school as their step to the secondary school where they would ascend to the job of assistant principal before assuming their real goal, that of high school principal. The junior high school was influenced by Harvard, by the university system, and by the high school organization.

Junior High School Reform

By 1961, reformers were calling for the reform of the junior high school. Sufficient criticism had mounted over the high school's domination of the junior high program that some districts were ready to experiment with a new organization for the middle grades. The Association of School Curriculum Development pointed out that the junior high school was a school with an identity problem. The seventh and eighth grades retained some of the characteristics of the elementary school but the ninth grade most resembled the

high school. This was especially true because the credit counting process for high school graduation always had and continued to include the ninth grade.

The publication of *The Junior High School We Need* (Grantes et al., 1961) described the ideal junior high school as characterized by moderate size, block of time instruction, flexible scheduling, teachers prepared for and devoted to teaching adolescents, and modern instructional techniques.

The author predicted that the middle school of the future would be "ungraded" in the sense of permitting student groupings to be designated without depending on the chronological age of the student, would be without bells, and would develop democratic values as its central commitment (Grantes et al, 1961).

The new junior high school never came to be, but rather by 1965 the call for the middle school was being heard throughout the educational community.

The Emerging Middle School

The middle school movement was primarily a grass roots movement without the impetus of national reports, which had helped to accelerate the earlier growth of junior highs. A study (Alexander) in 1968 identified 1,101 reorganized middle schools; and the most frequently cited reason given for their establishment was "to eliminate crowded conditions in other schools." The next most cited reason was "to provide a program specifically designed for students in this age group. In a 1988 study by Alexander, the order of these two reasons was reversed.

In 1965, Paul Woodring wrote in *Saturday Review* (October) about "The New Intermediate School" and stated that the 6-3-3 plan with its junior high school seemed to be on the way out (Lawton, 1989). In the same year, Gordon Vars commented in *Educational Leadership* that junior highs were changing and that educators needed to rethink the way young adolescents were being educated. *Clearing House* reported that a survey (Brod, 1966) showed that 45 out of 50 states now had one or more middle schools. During 1965-66, Cuff surveyed the number of middle schools in existence. He reported that 499 schools had grades 6 and 7, with no grade below 4 and none above 8. He

concluded that the number of middle schools in the nation was increasing while at the same time the number of junior high schools , nationally, was decreasing.

There seems to be a great similarity between the vision of the abandoned junior high school and the emerging middle school; but the organizational needs and reality of the times, rather than pedagogical vision, contributed to the increase in numbers of the middle school.

Two decades after World War II, a baby boom was causing a large number of children to enter elementary school. This along with the advent of kindergarten caused elementary buildings to be pushed beyond capacity while high school buildings were attended by fewer students than had attended previously. By moving the ninth graders to the high school, an increase in high school enrollment would result. At the same time moving the sixth graders to the old junior high school building would create more room in the elementary building and make it unnecessary to build new elementary buildings. Administrators who were unfamiliar with the pedagogical base for the restructured schools found themselves supporting the middle school in place of the junior high.

Concurrently, school district administrators were faced with the mandate to racially integrate schools. A school district faced with the order to desegregate would submit a plan to close the junior high school and move the ninth graders to the high school. Then the sixth and fifth graders would be moved into the newly created middle school. These students, having attended sharply segregated neighborhood elementary schools in the past, were now bused to the new, much more desegregate middle school. "It is possible that hundreds of middle schools were created to achieve this urgent and important social goal." (George et al., 1992 p. 7).

Other historically significant events which helped to advance the middle school movement were the "Sputnik induced obsession with academic mastery" (Lounsbury, 1992, p. 10) and the recognition in the research that young people were maturing physically earlier. To many who were concerned with catching up with the Russians, the movement to introduce new math and science in the middle grades and to return ninth grade to the high school where a full four year

sequence could be taken would improve academic success. An English scientist, J.M.Tanner, was the most widely quoted authority on the physical development of the adolescent. He reported that yesterday's seventh or eighth grader was like today's sixth grader (1972).

Many middle schools were merely renamed versions of the junior high with grade level changes. Gatewood (1973) revealed that there were virtually no significant differences between the new middle schools and the old junior highs.

The inability of the middle school initially to incorporate real reform did not, however, slow down acceptance in principle or practice. In 1967, Alexander secured a grant from the U.S. Office of Education to support a survey of reorganized middle schools (Alexander & McEwin, 1989). This study defined the middle school as a school which combines into one organization and facility certain school years, usually grades 5-8 or 6-8, which have been in the past separated in elementary and secondary schools under such plans as the 6-3-3, 6-2-4, and 6-6. Through correspondence and telephone calls with state departments of education, state directories and lists of middle schools were secured. This comprehensive survey revealed that there were 1,101 schools having at least three but not more than five grades and including grades 6 and 7 in 1968. Alexander & McEwin's 1971 survey revealed that this number had risen to 2,434 and by 1986 to 5,456. By the mid-1980's, then, the 5-3-4 organization had become the most common single form of school organization in the country, replacing the previously popular 6-3-3. In the 1989-90 school year there were 6,451 grades 5 or 6 through 8 middle schools and only 1,680 grades 7 through 9 junior high schools (McEwin, 1992). By comparison, there were 6,606 junior high schools in 1964 (Van Til, Vars & Lounsbury, 1967) and only a few hundred 5 or 6 through 8 middle schools. This means that in the period from 1970-1990, the total number of junior highs (7-9) declined by 53 percent, while the total number of middle schools (5 or 6-8) increased by over 200 percent.

A major professional organization, The National Middle School Association, was founded in 1963 and had achieved stability by the mid-seventies with 1,000 members. In 1976, the National Middle School Leadership Seminar Conference was held in Gainesville, Florida under the direction of Paul George. Three hundred middle school educators discussed the most important issues in middle level education. A national office had been established in Fairborne, Ohio (Lawton, 1988) with a full time national director. The first middle school journal devoted to matching the growing volume of literature on early adolescents with practical classroom practices was published in 1976.

Today there are 10,000 members of NMSA with a thriving office in Columbus, Ohio and conference attendance membership has gone from 3,500 in 1985 to 8,000 in 1991 (personal communication, 1992). NMSA's region covers all 50 states, the Canadian provinces, and has 40 state affiliates and even a European affiliate.

In 1982, the National Middle School Association published *This We Believe*, which established the "clear philosophical and programmatic bases for middle level education. Before this time, practitioners knew about the developmental aspects involved with the onset of puberty, but there was no unifying document to promote what thousands of dedicated educators knew to be the best for the education of young adolescents (Smith, 1992).

Many fine professional organizations dot the educational landscape today, but none are driven to the extent that our Association is by a unifying philosophy that is central to its reason for being. *This We Believe* sets out a simple premise: if we know the nature of the learner, then we must provide a school program to match that nature and thus nurture the adolescent that will emerge from the metamorphic state of human development variously called transience, early adolescence, or pre-pubescence. This small but potent document has done that, and we recognize the significant contribution of Alexander, Arth, Cherry, Eichorn, Lounsbury, Toepfer, and Vars in helping define today's middle school.

The document was reissued in 1992 to celebrate a full decade of the existence of *This We Believe* and reassert that it had accomplished the objectives of defining the middle school movement. An understanding of this document is central to an understanding of the philosophical foundations of the middle school concept.

Components of This We Believe

The section entitled "In Brief" captures the essence of the middle school movement. The National Middle School Association believes that:

- * the middle school is an educational response to the needs and characteristics of youngsters during the transition from childhood to full adolescence and, as such, deals with the full range of intellectual and developmental needs
- * young people going through the rapid growth and extensive maturation that occurs in early adolescence need an educational program that is distinctively different from either the elementary or the secondary model
- * existing programs for this age group have all too often lacked focus on young adolescents
- * educators, school board members, parents, and citizens generally need to become cognizant of this age group and what an effective educational program for this group requires
- * no other age level is of more enduring importance because the determinants of one's behavior as an adult, self-concept, learning interests and skills, and values largely are formed in this period of life
- * the developmental diversity of this age group makes it especially difficult to organize an educational program that adequately meets the needs of all
- * the academic needs of middle school students are affected greatly by their physical, social, and emotional needs which also must be addressed directly in the school program

Support for the Middle School Concept

In 1981 Alexander and George published a comprehensive textbook in the field, *The Exemplary Middle School*. Wiles and Bondi also published *The Essential Middle School* at the same time, a detailed history of the middle school movement and discussion of the change process necessary in developing a middle school. Joan Lipsitz *Successful Schools for Young Adolescents* presented case studies of four exemplary middle schools. She explored the relationship between the young adolescent and developmentally appropriate schools. The National Middle School Association has continued to support and publish texts which advance the middle school movement.

The National Association of Secondary School Principals, one of the nation's most influential professional associations, declared itself as an advocate and has publications which support the middle school movement. At the same time that the NMSA was adopting a set of beliefs which merged and confirmed middle school beliefs, NASSP issued *An Agenda for Excellence at the Middle Level* (NAASP, 1985). This document advocated schools' "adapting to students' developmental needs by including student advisement programs and variety in instructional strategies" (p. 10). NASSP's vision for the middle school was very similar and included the same emphasis and components as NMSA.

A renewed interest in reform of the middle school has been seen as national attention has been focused on education during the '80's. Comprehensive state legislation has accompanied the plethora of critical education reports such as: *A Nation at Risk* (National Commission on Excellence in Education, 1983); *Making the Grade* (The Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy, 1983); and *Action for Excellence* (Education Commission of the States, Task Force on Education for Economic Growth, 1983). Almost every state responded to the demand for improvement by strengthening high school academic

programs. Educators took another look at the middle school and found that, properly organized and operated, middle schools delivered substantial improvements for the district (George & Oldaker, 1985).

Strahan (1992) believes that the publication of *Turning Points: Preparing American Youth for the 21st Century* (Carnegie, 1989) is a milestone in focusing on the middle school. This document, produced by the prestigious Carnegie Council on Adolescent Development, presented the findings of its Task Force on Education of Young Adolescents. The recommendations of the task force underscored the objectives of the middle school movement and provided a national impetus to the movement.

Individual states have endorsed the middle school concept and have encouraged their districts to move toward middle school organization and practices. The California State Department of Education published *Caught in the Middle*, Florida published *Speaker's Task Force* and Georgia, Maryland, and New York published similar documents.

Recently more professional organizations have begun to provide research to support this movement. Educational Leadership Institute, The Center for Early Adolescence, National Resource Center of Middle Grades Education, Center of Education for the Young Adolescent, Center for Research and Development on Elementary and Middle Schools have been involved in middle school research during the 80's and continuing into the 90's. Since 1988, Phi Delta Kappa, Association of Teacher Educators, and the Association for Supervision and Curriculum Development have devoted journals to the middle school movement.

Along with revealing that the reason cited most often for the establishment of the middle school was "to provide a program specifically designed for students in this age group," Alexander's 1988 study summarized the findings on the characteristics or "earmarks" of today's middle school:

Characteristics of the Emergent Middle School

1. An interdisciplinary organization, with a flexibly scheduled day
2. An adequate guidance program, including a teacher advisory.
3. A broad-based exploratory program.
4. Curriculum domains providing for such broad goals as basic knowledge, continued learning skills, and personal development.
5. Varied instructional methodology appropriate for the age group.
6. Continued orientation and articulation for students, parents and teachers.

Currently, much of the organization and instructional practice employed in the middle schools is based upon recommendations of experts in the field, preferences of local administrators, boards of education, or the give and take among teachers, administrators and community special interest groups. This grass roots movement began when those who taught young adolescents were discouraged by the mismatch which existed between the schools which the young adolescent was attending and the characteristics of the young adolescent. The middle school organization has come a long way in establishing itself as the accepted organizational arrangement for the education system in this country.

Middle Level Teacher Preparation

The movement to provide schools which are responsive to the needs of young adolescents is intertwined with the movement to prepare teachers who are prepared to respond to these needs. One cannot discuss middle schools without discussing the teachers for the middle school. This section of the paper will trace the history of teacher preparation for the middle level, will analyze the relationship between middle grades teacher preparation and other trends in education reform, will examine teacher certification for the middle grades, will synthesize the recommended components of a middle level teacher preparation program, will report how the preparation of middle level teachers is rated and, finally, will discuss the current status of middle grades teacher preparation.

The History of Middle Level Teacher Preparation

Historically, teachers have been formally prepared in either the normal school or the university. Both of these influences can be seen in the early preparation of teachers. During the nineteenth century, the normal school was growing in numbers, while the beginnings of departments of education could be seen (Urban, 1990). The normal school was a step away from the "on the job" training that earlier teachers had experienced and focused on the realities of classroom life. The universities at this time were often oriented to advanced study and research; and their approach to the study of education was much less focused on classroom reality and much more focused on subject acquisition for the secondary student. In the first two decades of the twentieth century, university departments of education maintained their focus of preparing high school teachers, while the normal school became the teacher's college. As a teacher's college, it began to offer bachelor's degrees and to compete with universities as producers of high school teachers. One could obtain a degree in either secondary or elementary teaching. The elementary degree continued to focus on classroom life while the secondary degree utilized faculty in academic subjects not related to the general purpose of training teachers. Their goal was not the training of teachers but they pushed to get students to major in a subject area. The identity, then, of high school teachers was formed by their subject matter professors.

The separate preparation for elementary and secondary teachers continued into the later twentieth century. In spite of the popularity of middle level schools, the recognition of special needs for the early adolescent, and the identification of appropriate curricula and teaching strategies, very little has been done to prepare educators to function at a separate level (Alexander, 1968; Alexander & McEwin, 1984; Clark & Clark, 1983; Clark & Jones, 1986; Clark & Valentine, 1981; Walter & Fanslow, 1980).

One of the handicaps to the development of the junior high school was the lack of specifically trained teachers (Lounsbury, 1991). Thomas Briggs and Leonard Koos, both junior high pioneers, pointed out in their separate books

published in 1920 that there was a critical need for specific teacher preparation. Koos stated that:

Professional colleges are sympathetic with the junior high movement, but are more disposed to emphasize the training of administrators and other leaders in the field than the training of junior high school teachers. They also stress the training of secondary-school teachers, but the tradition is for these trainees to look forward to work in senior and four-year high schools rather than in junior high schools. (p. 454)

The vast majority of teachers employed in the early junior highs were prepared as high school teachers who saw themselves as subject-matter specialists. Teachers who had been prepared for high school teaching often ended up by default in the junior high school. Many saw their assignment to the junior high as a way station, an intermediate step to their real aspiration, which was the senior high. They did not see their job as guiding social, emotional, and physical development. This is one of the factors which contributed to the development of the junior high school as the miniature version of the high school, despite the theoretical advocacy to the contrary (George et al., 1992). This junior status contributed to the notion that the junior high was a place to get the students ready for the high school and that teachers at this level were waiting for a chance to teach at the senior high school. Junior high school teachers were allowed to teach with lower levels of preparation than their senior high school colleagues and were paid lower salaries (McEwin, 1991).

The dearth of classroom teachers who had specific middle level preparation has been evidenced by several studies. Valentine et al. (1981) in a NASSP sponsored study found that 41% of principals reported that teachers at their school had middle level teacher preparation. 72% got this preparation through in-service programs while only 44% included university courses.

In 1982 McEwin and Clay reported from their national survey of middle level principals that 61% of the 408 responding middle level principals indicated having no teacher in their building with specialized preparation in

middle level schooling. Alexander & McEwin reported from their 1988 survey that of the 394 schools responding, 61 % said that less than 25 % of the faculty had "specific university or college preparation for middle level teaching," with only 9% of responding schools having more than 75% of their faculties with specific preparation.

In the most recent update of an earlier survey, 1,010 teacher education institutions were surveyed (AACTE and non-AACTE members) and 715 responded. Only 34% had a special middle grades program at one or more degree level. If the analysis is limited only to the AACTE members in the 1991 sample, then 38% had special programs, versus 33% four years earlier (McEwin, 1991). Either method of analysis yields the conclusion that the growth in the number of middle grade programs has been slow.

The Center for Early Adolescents conducted a survey of a randomly selected sample of teacher education deans and asked them about their middle grades preparation (Scales, 1992). The deans responded that 70% of the programs had just 2-5 faculty who were knowledgeable about and active in middle grades education, and another 15% had just one middle grades faculty member. Only 20 of the deans said that at least 26 of their graduates become middle grades teachers, and 28% did not know what percentage did.

Scales (1992) extrapolates that in 1987, no more than approximately 15% of undergraduate preservice teachers were enrolled in a substantial specialization devoted to the middle grades, and that by 1991, that figure had risen slightly to no more than approximately 18%. Calculating percentages of allocated teacher assignments suggest that 25% of preservice teachers will be assigned to the middle grades (6-8). The majority of these teachers (71%) will have been in elementary programs.

Most middle grades teacher education continues to be offered at the undergraduate level, but as indicated earlier the pace of growth in these programs has been slow. In 1987, less than half of those (41%) of those undergraduate programs were major specializations equivalent in scope to an elementary or secondary specialization, and only slightly more than half (52%) of the masters programs were that substantial. Most were "add-ons" or

consisted only of a few specialized courses. By 1991, there had been noticeable improvement in the scope of the programs, with 57% of the undergraduate and 71% of the masters' programs being major specializations (McEwin 1991).

In 1990, The National Middle School Association (NMSA) conducted a study of educators' opinions about the future of middle school education, using what is known as the Delphi technique. Delphi forecasting is a technique used to systematically develop expert opinion and consensus about the future. This technique, in essence, pools individual opinion and consensus about issues and events in a given area to develop forecasts that are likely to be more accurate than any one individual's opinion (Dull, 1988).

The NMSA study included four rounds during which the panel worked on a mandatory consensus model and responded to all items from the last consensus. In this study the questions asked of the Delphi panel concerned what issues or events in middle level education would affect the profession in the next twenty years. From several hundred initial responses, the consensus technique and a cross impact matrix analysis resulted in thirty-four top priorities. Panel member agreed on the importance not only of building but sustaining the middle school concept as the most desirable educational model for young adolescents. Not only did the panel affirm the middle school concept, it recognized the need to promote middle schools as a legitimate third tier of American education. Panel members spoke of their concerns that although there is a common vocabulary for both elementary and secondary levels, too few people are aware of the issues and concerns specific to the middle school.

From its inception, the need to prepare teachers for the middle school has been a recommendation of proponents of the middle school. This need was echoed in the Delphi study. The panel of experts spoke in one voice about the essential need for middle grades teacher preparation. Almost every respondent listed the necessity for teachers to be specifically prepared or recertified for teaching at the middle level. They spoke about the need for state departments of education and institutions of higher learning to lead this effort.

They were eloquent in their beliefs that this cadre of specifically prepared teachers was quite likely the key to the movement's success or failure.

McEwin (1992) states that "The specific preparation of teachers and other professional personnel for the middle level has not kept up with the rapid movement toward middle level schools. The full realization of the potential of middle level education awaits the specific preparation of professional personnel for the newer organization" (p. 369).

Middle Level Teacher Preparation and Reforms in Teacher Education

Teacher education, in general, is receiving a kind of scrutiny it has not experienced for decades (Scales, 1991). The relationship between middle level teacher preparation and teacher education, in general, will be explored in this section. The early reform reports (*A Nation at Risk, Making the Grade, Action for Excellence, Excellence in Our Schools*) largely ignored the middle level. Most reform reports discuss reform in elementary and secondary education.

The second wave of reform reports, many of which are directed, specifically at reform in teacher education continued to ignore middle level teaching. *Tomorrow's Teachers*, The Holmes Group (1986); *A Call for Change in Teacher Education*, National Commission for Excellence in Teacher Education (1985); *Improving Teacher Education*, Southern Regional Education Board, (1985); and *Restructuring the Education of Teachers for the 21st Century*, ATE did not include recommendations specific to the middle level. *The Carnegie Forum on Education and the Economy*, Task Force on Teaching (1986) is a notable exception to the reports. This general reform report mentions preparing teacher specifically for the middle level and this was followed by *Turning Points, Preparing Youths for the 21st Century*, the report of the Carnegie Council on Adolescent Development (1989). One of the recommendations in *Turning Points* is to "staff middle grades with teachers who are expert at teaching young adolescents" (p. 9)

This document states:

Many teachers of young adolescents today dislike their work. Assignment to a middle grade school is, all too frequently, the last choice of teachers who are prepared for elementary and secondary education. Teachers view duty in the middle grades as a way station. After suffering through a few years with young adolescents, teachers move on to assignments they prefer and for which they feel they were prepared in their own education.

Other teachers of young adolescents lack confidence in their ability to teach these students. For some, this feeling comes from the structure of middle grades schools: like the students, they feel overwhelmed by the impersonality of the environment, they feel ineffective with the large number of students they must teach. For others, it comes from a lack of training related to early adolescence, coupled with the pervasive stereotype regarding the near impossibility of teaching young adolescents.

This situation must change dramatically. The success of the transformed middle grade school will stand or fall on the willingness of teachers and other staff to invest their efforts in the young adolescent students. Teachers must understand and want to teach young adolescents (p. 58).

Individual states such as California and Maryland have addressed middle level teacher reform as have individual leaders in education reform. Orlosky talks about the need for specific teacher preparation in *Societies, Schools, and Teacher Preparation*. Haberman (1988) stresses that "the major problem of the middle level educator is the lack of preparation to withstand the chaos of puberty" (p.521). Goodlad's *A Place Called School* (1984) showed career disenchantment at the middle level. Junior High teachers experienced less career fulfillment than their elementary or high school counterparts. For the most part, however, educators, colleges of education and state departments of education have not supported the middle school movement by promoting specifically prepared middle school teachers. The next paragraphs will explore the relationship between teacher preparation programs and state certification.

The Relationship between Teacher Education and State Departments of Education

The absence of middle level teacher certification to encourage and require the development of specialized teacher preparation programs has contributed to the lack of widespread development of specialized middle level preparation programs, past and present (Eccles & Midgley, 1990; Howard & Stoumbis, 1970).

There are a variety of paths which lead to middle level teaching certificates. Elementary certificates most often include a 1-8 certification. Secondary certificates generally include 7-12 certification. Specialty certificates such as physical education, music education, art education and special education, provide K-12 certification.

A recent study (Scales, 1992) revealed that 57% of deans of colleges of education believe that states should require a unique and distinctive middle-grades certificate.

There is a direct relationship between certification and the establishment of middle level teacher preparation programs (McEwin, 1992). For example, in 1987, 83 per cent of all specialized middle level teacher preparation programs were located in states with specific middle level teacher certification (McEwin, 1992)..

The Educational Testing Service (1992) indicates that there are 26 different certifications that cover the middle grades. Examples include "K-8 (one state), Intermediate 4-6 (One state), "middle school" no grades indicated (six states), "middle school 5-8" (three states), "middle grades 4-9" (one state), and other configurations. Thus, since 1979 the total number of middle grades certificates has been reduced from 34 (Lipsitz, 1984) to 26. Curtis (1991) found that 35 states now have some form of certification for the middle grades, but 32 of those states have elementary and/or secondary certificates that overlap the middle grades thus allowing teachers without special certification or endorsement to teach in those middle grades.

A 1990 survey reported that 28 states had established some form of middle level teacher certification/license. This compares with 2 states having special certification in 1968, 15 in 1978, and 25 in 1982 (Gillan, 1978; McEwin & Allen, 1983; Pumerantz, 1969). When results from middle level teacher certification studies conducted in 1987 and 1990 are compared, an identical number of states reported having a special certification for middle level teachers. In the intervening three years, however, five states discontinued middle level certification programs and five states established them (Alexander & McEwin, 1988). These data, according to McEwin (1991) reflect the instability of the middle level certification issue.

A common problem among states that have discontinued middle level certification is that of overlapping certification. When the certification levels in a state are grades K-8, 5-9, and 7-12, for example, there is little chance that a sufficient number of prospective teachers will select programs limiting them to 5-9 certification. By selecting the K-8 plan, they can be licensed to teach in the elementary and middle grades. The problem with this certification is that programs leading to this certification traditionally focus on the elementary student. The grades 7-12 certification continues to be a roadblock to specialized middle level preparation by providing teachers who are certified to teach at the middle school.

Overlapping certification plans, which include a specialized middle level certification, provide the opportunity for the establishment of specialized middle level preparation programs. They do not require this kind of preparation program, however. Representatives from many state departments of education state that no specialized teacher certification/license plan will be adopted until specialized middle level teacher programs are established. Conversely, representatives from teacher preparation institutions state that their institution does not plan to institute specialized middle level teacher preparation until special middle level teacher certification exists (McEwin, 1991).

The National Board for Professional Teaching Standards, which will become available in 1993, will provide certification at standards beyond required state licensure. This board plans to offer certification as a middle grades teacher. Such certification will provide a prestige to the job of middle level teacher.

In addition to the issue of individual certification, institutional certification has impact on middle level teacher preparation. The National Council for the Accreditation of Teacher Education's acceptance of National Middle School Association developed curriculum guidelines should result in institutions making changes in their teacher education curriculum to comply with the standards. This hypothesis is based on the report by Burch (1991) that more than half of institutions being evaluated under the NCATE elementary and secondary standards reported making changes in their curriculum.

The Center for Research on Elementary and Middle Schools at Johns Hopkins University recently conducted a study based on a probability sample of 2400 public schools, selected from the 25,000 in the United States having 7th grade Students. The CREMS study shows that eighty percent of middle grade students are in schools in which less than half of the faculty members hold elementary certificates (McPartland, 1989). Elementary certificates are less common in schools that serve grades seven and eight and rare in junior high schools. Fifty-nine percent of middle grade students attend schools in which a majority of teachers hold secondary certificates.

Seventy percent of junior high teachers hold secondary certificates. McPartland further reports that that an analysis of the 1985-86 National Assessment of Educational Progress found that seventh graders who were taught by specialized subject experts showed higher achievement than did seventh graders taught by less specialized teachers. Furthermore, middle grade teaching staffs that are made up primarily of subject matter specialists can be expected to produce higher achievement in subjects such as science and history. The perceptions of sixth graders of the quality of their instruction was also higher if taught in departmentalized settings. On the other hand, strong evidence was reported that the relationship between student and teacher was

more positive if the sixth grade student has fewer teachers. The researchers conclude that if the statistical controls on family background are given greater weight, they would postpone the use of departmentalization until after grade six, especially for disadvantaged students (p.468).

The CREMS study concludes that teachers' education and certification have important implications for the instruction of young adolescents. They suggest that secondary certified teachers may need additional education on early adolescents and instructional approaches for the middle school that may differ from the secondary school. Elementary certified teachers may need additional depth in subject area. The middle school teacher, then, must balance the elementary "student centered" approach with the content matter expertise of the secondary certificate.

Recommended Components of a Middle Level Teacher Preparation Program

Among middle grade experts, there appears to be a high degree of consensus about what special preparation the middle grade preservice teacher should experience. Boyer (1983), Gretes, Queen, & Daguna (1983), Clark & Jones (1986), NASSP (1981,1983) looked at the components of teacher education thought to be necessary for middle level teaching.

Boyer surveyed ninety middle level teachers in Pennsylvania to find out what they perceived to be essential in middle level preparation. They reported needing the psychological, physical, and intellectual needs of the middle level learner along with classroom management skills and methods and materials appropriate for this age group.

Greates, Queen, & Daguna (1983) surveyed 466 first year middle grade teachers in North Carolina to investigate their preservice programs in relation to their first year teaching. When asked to identify what could have been added to their preservice program to make it more valuable, middle school teachers identified "survival skills" (33.9%) and more field experiences earlier in their academic experiences (31.8%). The authors concluded that one reason for this response was that many of these teachers did not receive specific preparation

for teaching at the middle level. Almost half of the respondents (47.5%) in this study reported not being given a realistic picture of what their first year of teaching would be like.

Clark & Jones (1986) confirmed an earlier study by Clark and Clark (1986) that middle level teachers saw classroom management, student teaching at the middle level, characteristics of the middle level learner, and teaching methods of the middle school as essential to their education.

Similarly, The National Association of Secondary School Principals conducted a survey of middle school teachers in 1981 and 1983 which listed psychology of the middle level student and teaching methods for the middle level student as the most important courses needed to teach in a middle school. In 1987, the National Association of Secondary School Principals (NASSP) position paper declared:

Middle level youngsters require special kinds of attention and teaching. Therefore, it is important that only the very best teachers - those who understand the subjects they teach and the development of early adolescents - be permitted to work with these dynamic youngsters ... their preparation must include study in human development, counseling, differentiating instruction, classroom management, and home-school cooperation (p. 13)

Alexander and McEwin's 1988 paper for the National Middle School Association concluded that the five "essential elements" of middle grades teacher preparation are:

1. Thorough study of the nature and needs of early adolescents;
2. Middle level curriculum and instruction;
3. Broad academic background, including concentration in at least two academic areas at the undergraduate level.
4. Specialized methods and reading courses.
5. Early and continuing experiences in good middle schools.

Scales survey of middle school teachers and education deans indicated that the majority of both the teachers and the deans believed that there are particular ideas, principles, or understandings that an effective middle grades teacher should have, that an effective elementary or secondary teacher need not have, with deans much more strongly in agreement; 89 % of deans and 68 % of teachers believed that middle grades teachers need a different knowledge base. Teacher respondents (N=401) were asked to list three such ideas, principles, or understandings. The most frequent responses were; early adolescent development; social relationships and self-awareness; and a variety of teaching and assessment techniques such as cooperative learning. More than 90% of teachers responding believed that knowledge of early adolescent development, social relationships, and the importance of self awareness issues were the most critical elements of preparing to teach at the middle level.

The consistency among the various studies, guidelines and recommendations indicates that there appears to be a high degree of consensus about what special preparation the middle grade teachers should experience. Besides the general program recommendations, experts have suggested specific concerns which middle level teacher preparation programs must address. Beane (1990) advised that the context for the appropriate middle grades preparation is found at the "intersection of personal and social concerns" (p.3).

Turning Points presents case studies which demonstrate how teachers are called upon to provide guidance and counseling to students. Middle grade teachers are likely to be among the most in need to this type of knowledge. The data on social problems increasingly presents a large number of at risk young adolescents. *Turning Points* states that "young adolescents today make fateful choices, fateful for them and for our nation, The period of life from ages 10-15 represent for many young people their last best chance to choose a path toward productive and fulfilling lives" (p, 20). If personal and social concerns take precedence, then middle grades teacher preparation should emphasize personal and social concerns. The most likely reason for a middle school teacher to predict that he would leave teaching is that he believed that the

data on social problems increasingly presents a large number of at risk young adolescents. *Turning Points* states that "young adolescents today make fateful choices, fateful for them and for our nation, The period of life from ages 10-15 represent for many young people their last best chance to choose a path toward productive and fulfilling lives" (p, 20). If personal and social concerns take precedence, then middle grades teacher preparation should emphasize personal and social concerns. The most likely reason for a middle school teacher to predict that he would leave teaching is that he believed that the social problems of his learners made teaching too difficult (Metropolitan Life Study of the American Teacher, 1991). Forty three per cent of middle school teachers gave this reason for leaving teaching while this was the response of only 33 per cent of high school teachers.

Jones(1989) studied gender issues in teacher education and reported that both the literature and her own studies show male students receive more teacher communication than all kinds of female students. In consideration of these findings, Jones suggested that gender socialization, the evolution of coeducation, and male and female differences in adolescent psychosocial development calls for more attention in teacher preparation programs. This recommendation is even more important with the knowledge of studies that show females, especially white females, emerge from early adolescence with a significantly lesser self image than males. The middle grade teacher would seem to need an understanding of these considerations.

Roach, Bell, & Salmeri (1990) suggest that teacher preparation in the middle grades should include parent involvement and school-home cooperation. They indicate that middle school teachers need to develop adolescent positive social interaction with adults and peers. Scales states, "the literature reveals a growing consensus that the social and emotional development of young adolescents is an inseparable dimension of their growth, inevitably affecting the cognitive skills and are the primary emphasis of most schools." This strongly suggests an emphasis on counseling and guidance skills at the middle level.

An indication of agreement over what middle grades teacher preparation programs should include is the National Middle School Association Curriculum Guidelines (1991) which have been approved by NCATE and reflect the recommendations of Alexander and McEwin (1988). These guidelines became implemented with NCATE accreditation visits beginning in the autumn of 1991. The 26 guidelines go from the very general ("create and maintain a developmentally responsive program") to the very specific ("full time student teaching of at least 10 weeks in grades 5-9")

The NCATE approved guidelines carry more influence than some of the other recommendations included above, but all of the recommendations for middle grades teacher preparation are consistent. In fact, middle grades reformers seem to have a greater consensus than education reformers in general about how teachers ought to be prepared.

Rating of Middle Level Teacher Preparation

Howard & Stroubis (1970) researched that middle level teacher education programs had low status because of an unfavorable image and the low status of teaching in an intermediate school. Sage's study looked at the grade choices that preservice teachers make. The middle grades were chosen last by most of the preservice teachers because of perceived problems with this grade level learner (1988). A study of preservice teachers in California found that high school teaching is "more like the real thing (Sage, 1988)." In this study teachers who had positive experiences with young adolescents were more likely to desire to teach at the middle level and those who did not want to teach the young adolescent attributed this to rumors they had heard about the age group.

The Center for Early Adolescence conducted a recent study which examined how teachers and education deans rated the quality of teacher preparation for the middle grades. They asked teachers how well their professional education programs had prepared them for 11 specific issues of activities related to middle grade teaching.

1. Using varying instructional techniques
2. Understanding adolescent development
3. Motivating students
4. Student assessment alternatives
5. Involving community resources
6. Involving parents
7. Cooperative learning
8. Interdisciplinary curriculum and/or teaming
9. Teacher based guidance
10. Teacher's role in site based management
11. Cultural and/or language diversity

Only about half or fewer of the teachers thought they had been adequately or well prepared. A substantial majority of the deans surveyed believed their programs were doing a very good or adequate job in preparing teachers for the middle grades. In addition to the disparity in the teachers' and deans' ratings, their responses reflected two other important points, according to Scales. First, even those items that were rated as adequate by a majority of the teachers were rated as inadequate by relatively large proportions. For example, nearly 3 in 10 of the middle grades teachers felt their programs had not done a good job in preparing them to understand early adolescent development, and this was the second most favorably rated item.

Second, even though it appears that the majority felt "adequately" prepared to understand early adolescent development, their other responses suggest that this understanding is not translated into classroom behavior. In this study only about half (N=421) of the teachers responding believed that their professional education programs prepared them for middle grades teaching. A substantial majority of the deans surveyed believed that their programs were doing a very good or adequate job in preparing middle grades teachers.

Those areas that were rated most highly by relatively large proportions of respondents (eg. understanding early adolescent development) were rated as inadequate by relatively large numbers of respondents. Interdisciplinary curriculum, cooperative learning, teacher-based guidance and parent and community involvement are all practices listed as critical to middle school

teachers in in the middle school literature, but these were areas in which the middle school teachers felt that their preparation was least adequate.

Teachers in this study were asked for recommendations to improve the preparation of teachers for the middle grades. Topping the list of teachers' specified recommendations was to improve field experiences and student teaching. Respondents asked for earlier and lengthier field experiences and student teaching. They called for mentor and cooperating teachers to be selected on the basis of expertise not for reasons of convenience or seniority. Teachers also recommended a greater variety of teaching and assessment techniques, more on social relationships and self awareness, more on classroom management, more on early adolescent development, and deeper academic subject content.

One finding of this study was that while the majority of both deans of education (72%) and the majority of middle level classroom teachers (58%) agreed that middle grades teachers ought to be prepared differently from elementary or secondary teachers, there was not overwhelming agreement with this statement. Even fewer of the respondents, 57% of deans and (40%) teachers agreed that states should require a unique and distinctive middle grades certificate. The researchers hypothesized that the current preparation and certification programs provide the greatest degree of professional, geographic, and economic options. They suggest that "teachers will be unwilling to give up mobility in teaching unless they are convinced either by compelling argument or legal mandate that separate middle grades preparation and or certification is really necessary to be an effective middle grades teacher" (p. 14).

A school for middle level learners is an established part of the school system in this country. Specific preparation for the teachers who teach in these schools is not established as evidenced by the small number of middle level teachers who have had specific middle level preparation and the small number of institutions which prepare teachers that offer specific middle level

preparation. Theorists and practitioners agree on the components of a middle level teacher preparation program. *Turning Points* and NCATE have endorsed middle level teacher preparation.

Teacher Behaviors and Competencies

This section of the paper will attempt to determine what is known about effective middle school teacher behavior and essential characteristics of middle school teachers. What middle school teachers need to know is a subset of what teachers in general should know. These behaviors would seem to apply equally to all level of teachers; therefore, an attempt was made to ferret out teacher behavior research that was conducted specifically with middle level teachers. Manning in *Contemporary Studies of Teaching Behaviors and their Implications for the Middle Level Teacher* (1989) reviews the studies of Joyce (1988), Brophy (1987), Walberg (1988), and Porter & Brophy (1988) and applies these studies for middle school teachers. Manning concludes that middle school teachers have not been subject to the scrutiny of other levels of teaching.

What Research Says to the Middle Level Practitioner (Johnston & Markle, 1988) lists seventeen behaviors of effective middle school teachers as identified from the research on effective teachers. Primarily, Rosenshine ; Tikunoff, Berliner, & Rist; and Aspy & Buhler are cited as the sources of these behaviors. Johnston & Markle synthesize and describe the behaviors and competencies of effective middle school teachers (p. 17).

1. Have a positive self concept

They identify with others, feel adequate, trust themselves, and see themselves as worthy and likeable. They need not be the center of attention at all times, and are comfortable letting the classroom activities or the students themselves take precedence

2. Demonstrate warmth

Teachers who seek contact with students, use affectionate words, smile and look pleasant are generally regarded as more effective. Teacher displays of warmth are important because teachers who like students and show it tend to have students who like each other.

3. Are optimistic

More effective middle school teachers express positive attitudes and pleasant feelings in the classroom. They are optimistic in their assessment of individual student capabilities and tend to be encouraging.

4. Are enthusiastic

Effective teachers are vigorous in their presentations and involved in the activities of the class. They tend to use gestures and avoid "reading" prepared lessons.

5. Are flexible

These teachers can change the focus in the middle of a lesson if the students become bored or disinterested; they adjust easily to changes in plans, time schedules, absence or student behavior.

6. Are spontaneous

Spontaneous teachers can capitalize on unexpected incidents that arise in the classroom. They also tend to encourage student expression and do not avoid situations which deviate from planned activity.

7. Accept students

Accepting teachers avoid criticism, not refusing to tell a student he is right or wrong, but by using sincere and frequent statements of approval. These teachers are disinclined to berate or belittle children in front of others or to display negative perceptions publicly.

8. Demonstrate awareness of developmental level

They assign tasks appropriate to a student's ability and adjust tasks when students become confused or uncertain. They show less tendency to push students into activities for which they are not ready, and they express less bewilderment over student inability to perform tasks.

9. Demonstrate knowledge of subject matter

Knowledgeable teachers are able to structure lessons and alter instruction on the basis of student needs. They are able to monitor learning and engage students in instructional activities related to significant concepts.

10. Use a variety of instructional activities and materials

These teachers are able to vary instruction in accordance with individual student learning styles.

11. Structure instruction

Teachers who spend time discussing, explaining and stimulating cognitive processes in organized ways encourage greater pupil performance. They tend to review previous lessons, outlining main topics of planned lessons, signaling the beginning and endings of lessons, underscoring important points and summarizing. These teachers are less likely to begin lessons without organizing them, change activities abruptly, or begin new topics without summarizing previous ones.

12. Monitor learning

These teachers check test papers and student work in order to adjust instruction. They also move about the room observing students and making suggestions. In lieu of "busy work," they use extra time for creative, social, or interest-directed activities.

13. Use concrete materials and focused learning strategies

These teachers use models, objects, and visual aids to provoke imagery; attend to the manipulation of concrete images before moving to formal operations; and focus student attention on problem-solving situations.

14. Ask varied questions

Using both higher order and lower order questions, in appropriate situations, produces improved student performance. Using a variety of question types for maximizing instructional effectiveness is preferable to relying on a single type of question.

15. Incorporate indirectness in teaching

Indirect teachers build on student statements, praise students, encourage student talk, and minimize criticism, lecture, and confusion.

16. Incorporate "success building" behavior in teaching

Success oriented teachers use positive reinforcers, encouragement, and praise of student work. They are disinclined to use sarcasm, shame, and harassment.

17. Diagnose individual learning needs and prescribe individual instruction.

More effective teachers monitor the completion of tasks, perceive various learning rates and allow adequate time for completion. They design interest-based learning tasks, define expectations on an individual basis, and allow for independent and small group activities. They also demonstrate less of a tendency to teach an entire class the same lesson and to grade on a group standard.

18. Listen

Teachers who listen to students, attend to and build upon student thoughts and expressions. They acknowledge student input by summarizing what was said and by avoiding the appearance of preoccupation.

Doda, George and McEwin (1987) list truths about effective middle level teachers. These truths are:

- * do not sit down while they teach
- * work to create lessons which bring students as close to the real thing as possible
- * have a sense of humor
- * think big but teach small
- * work to weasel their way into the hearts of the young adolescents they teach

Who They Are - How We Teach; Early Adolescents and their Teachers discusses the behaviors and characteristics of effective middle school teachers. McEwin & Thomason (1989) believe that since middle grade teachers must balance diverse learning styles with basic skill development, the teachers must be aware of their own behavior pattern, accept diversity in others, interact in meaningful ways with other adults and students, and provide consistent leadership models. Additionally, this more balanced approach necessitates that teachers competently manage the learning environment, increase quality time on task for all students, and indicate through planning and presentation a thorough knowledge of subject content. Additional essential behaviors of the middle grades teacher are effective instructional techniques, classroom management strategies, and content mastery. By applying the effective schools research and what is known about the developmental level of middle

grade learners, the authors suggest that middle grade teachers hold high expectations for learners, monitor student progress in a frequent and effective manner, frequently change delivery systems, provide materials of appropriate difficulty, maintain a businesslike climate, rely on praise, demonstrate good planning and provide effective classroom management.

McEwin & Thomason (1989) state that an essential characteristic of middle grades teachers is an cognizance of and acceptance of young adolescent development. Teachers who are unaware of or unable to accommodate early adolescent behavior can create tremendous barriers to educational change in the middle school. Teachers who have a thorough knowledge of the normal and expected behavior of their cliental make sound educational decisions concerning the balance between teacher-directed and student initiated activities.

Due to the unpredictable nature of the early adolescent, middle grades teachers should have a strong self-concept and present consistent, reliable role models.

During this time of increased stress and insecurity among students, youth look to adults who are in control of themselves, their lives, and their work environment. Teachers who are effective in these areas demonstrate their competence by willingly taking risks, being receptive to new ideas, and by accepting new challenges. They seem less concerned with power and ego and manage classrooms without being overly controlling or rigid. They are genuinely sensitive to the feelings of others without appearing unprincipled. They have a pervasive sense of rightness about classroom procedures. Perhaps one of the most essential ingredients effective middle level teachers have is a healthy sense of humor (p. 12).

McEwin & Thomason's (1989) description of the effective middle school teacher is based on their application of the effective schools research; but their beliefs concur with the list presented by Howard and Johnston.

Brogdan's 1978 study of 325 Alabama middle grade teachers found that the teachers supported the following competencies for middle grade teachers.

- * social-emotional development
- * teaching across the curriculum communication skills such as reading, listening, speaking, and writing
- * diagnosing individual learning levels and problems and prescribing for them
- * intellectual developmental stages
- * management of classroom groups
- * working with teachers across subject areas and with other resource personnel
- * physical development stages
- * techniques of counseling individual middle school learners
- * teaching problem solving techniques
- * providing opportunities and guidance to help
- * identifying appropriate resources for teaching in the middle school
- * working with small groups of learners
- * techniques for studying alternative values and developing a personal valuing system
- * providing opportunities and guidance for group decision making
- * helping students to develop leadership
- * use of audiovisual materials and equipment

ASCD states that energy, enthusiasm, and curiosity are characteristics essential in middle school teachers. In a 1989 study by George and Stevenson, principals identified teachers who "work at understanding their kids,... accept all kids and they don't give up on them... and, finally, treat their kids like customers" as the best teachers in their middle level buildings.

Research, beliefs of experts and a survey of middle school teachers provides similar characteristics and behaviors which middle level teachers should possess and display. These characteristics and behaviors must be considered in tandem with instructional strategies which are appropriate for the middle level learner.

Middle Level Instructional Strategies

The middle school literature abounds with statements about practices being responsive to the needs of the young adolescent and the National Middle School Association document, *This We Believe*, is a cornerstone of the middle school movement, but there has been little verified knowledge of "what works" at the middle school level. This paper is an attempt to determine which practices are empirically based. The middle level learner is defined to be a student in grades 5 through 8 or between the ages of 10 and 14. Primarily, three approaches have been utilized to determine which middle level instructional practices have been proven effective.

The monograph, *What Research Says to the Middle Level Practitioner*, provides research which has been published in a column of the same name in the Middle School Journal from 1979 to 1986. The use of this text was augmented by the National Middle School Association Research Annual 1977 through 1988. These texts were the primary sources of effective practices. They provided research about instructional practices at the middle school level. These practices have a research base as documented in these texts; retention and promotion, grouping practices, diagnostic prescriptive teaching, problem solving, decision making, and computer assisted instruction.

A second method for determining effective practices was to look at recent surveys of middle school practitioners to determine what they perceive as effective practice at their level. A 1989 survey conducted by Irvin and Connors compared randomly selected middle schools with middle schools which were identified by the National Institute of Education (1986) as "schools of excellence." These excellent schools as reported on the survey differed from the random schools in the types of programs offered and types of practices employed. Advisory programs were offered by fifty-seven percent of the exemplary schools, interdisciplinary teams by sixty-eight percent, flexible scheduling by forty-nine percent, exploratory programs by eighty-eight percent, and extracurricular/intramural activities by ninety-seven percent. A 1988 study conducted by the Center for Research on Elementary and Middle

Schools (CREMS) at Johns Hopkins University surveyed middle level principals and reported their beliefs. This survey is based on a probability sample of 2,400 public schools that enroll seventh graders, selected from the 25,000 such schools in the United States (Epstein & McPartland, 1988, p.436). These beliefs of principals support the Connors and Irvin survey. The CREMS study informs that the single highest predictor of higher ratings of the quality of school programs for the young adolescent, overall, is the use of common planning time for interdisciplinary teams (MacIver, p.460). Other significant predictors of high ratings are; flexible scheduling, extracurricular activities, and cooperative learning. Principals responding to this study also perceived their school as better if the school provided exploratory or mini courses, transition programs between grades and report cards which included teacher comments.

The third method used to determine effective practices was to look at case studies of effective schools and to determine what practices were common to these schools. An examination of Lipsitz's *Successful Schools for Young Adolescents* provided case studies of four schools which were determined to be successful. Lipsitz's criteria for success were that a school 1) had to score at above the national mean on standardized tests 2) demonstrate a low absentee rate 3) exhibit low incidence of vandalism 4) exhibit low suspension rate 5) report parent satisfaction and 5) have a reputation for excellence. A similar study by George and Oldaker analyzed 130 schools which they determined to be exemplary based on achievement test scores and students' reported attitudes. They examined practices which were strikingly similar in these schools. Both of these studies concluded that interdisciplinary team teaching, a flexibly scheduled school day, and a home base advisor-advisee plan were elements of effective schools.

Based on this research, this paper will examine; retention and promotion, grouping practices, cooperative learning, interdisciplinary team teaching, advisory groups, study skills and decision making, flexible scheduling, exploratory courses, report cards, drill and practice, computer-assisted instruction, diagnostic prescriptive teaching, problem solving, transition programs, and extracurricular activities.

Promotion and retention

The issue of retention is especially important at the middle level because the trends in retention rates by grade level show that while the highest rates occur in the primary years, they decline throughout elementary school and increase sharply at the seventh grade (Johnston & Markle, 1986). An early study by Coffield and Bloomers (1954) studied the academic performance of 147 Iowa school children who had been retained between grades 3 and 7. When performance at grade 7 was studied, the researchers concluded that there was no advantage to keeping a child in a grade for more than one year. The study further concluded that if retention was to occur, it should be done as early as possible in a child's school career. The greatest differences in 7th grade achievement gain occurred when the retention occurred in the early rather than the middle grades. Kamii and Weikart (1963) found that retained groups on the whole achieved less in grade seven than promoted groups achieved in grade six.

Other researchers looked at the personal-social factors involved in retention. These studies are summarized by Purkerson and Whitfield. While overage students are not accepted by their classmates at grades five and six, by grade seven athletic prowess and other forms of sophistication seem to have a major role in their acceptance by peers. This study concluded that the earlier the retention was made the better the chance the student had for social acceptance. While the studies, generally, demonstrate small or no achievement gains for retained students and difficulties in social acceptance for retained students; there does exist some support for retention in the early grades rather than in the middle grades.

Grouping practices

Among middle grade students attention to grouping practices is of paramount importance, because the peer group emerges as an alternative to parent and other adult influences. Grouping practices include both the use of homogeneous and heterogeneous grouping and the use of intact or restructured groups.

Homogeneous groups

Homogeneous instructional grouping can be established through between-class or within-class assignments. Approximately two-thirds of the nation's schools serving early adolescents report using at least some between class ability grouping, and more than twenty percent assign students to all of their classes according to ability (Braddock, 1989). The proportion of principals reported as using no homogeneous grouping declines from about one third of schools at grade 5 to one fourth at grade 8. Said another way, homogeneous grouping increases from seventy percent for fifth grade students to eighty percent for sixth grade students and to eighty-five percent for seventh and eighth grade students. Schools increasingly group students by ability for mathematics and English as they move to higher grades and least often group by ability for science and social studies (Braddock, 1988).

Advantages and disadvantages exist for both homogeneous and heterogeneous grouping. The most commonly cited advantage of homogeneous grouping is the opportunity to target the instruction to the students' ability level thus increasing motivation and ,consequently, achievement. The grouping practices of a school assume even greater significance in light of Braddock's findings that principals in middle schools that report a higher minority population also report a higher percentage of homogeneous grouping. This indicates a stratifying of students according to their background.

Flowers (1966) conducted a study of two junior highs in two cities. He used fictitious ability groups to determine the effects of teacher expectations on student performance. Teachers of the "superior" groups were more positive, found no discipline problems, and stated that they preferred teaching the "superior group. Stern & Shavelson (1981) reported an ethnographic study designed to learn how fifth and sixth grade fared when assigned to reading groups. They concluded that students were grouped according to reading ability and that once grouped, the group rather than the individual became the focus of teaching decisions. Evertson, Sanford, and Emmer (1981) reported that too much reliance on student's entering achievement in junior high English

classes limits the teacher's adaptation to student's individual needs. Again researchers find that teachers teach a group not the individual learner.

Levinson (1979) studied sixth grade students and concluded that ability grouping leads to stereotyping and prevents healthy social interactions. Levinson also reported that students in the low ability groups incorporated the teachers and classmates lowered perception of his ability into his self concept. Generally, students perceptions of himself and his classmates are affected by the ability group to which he belongs and students in higher ability groups are seen more positively by others than those in lower ability groups (Fagan, 1980). Since it is generally believed that the middle level years emphasize the peer group, the importance of the grouping strategy for this age group becomes extremely important.

A review of relevant studies by Johnston, Markle, & Stingley (1982) told that peer acceptance is largely related to academic achievement and that high status students consistently have their academic achievement over-estimated by their peers. Conversely, low status students have their academic achievement under-estimated. Johnston & Markle further state that teachers at the middle level seem to be poor estimators of a student's acceptability by the peer group, so students are often put in situations which require performance that is inconsistent with their status in the group. For example, in kindergarten teachers estimate student's status with sixty-three percent accuracy, but by seventh grade teachers are only about twenty-five percent accurate in determining a student's status. Although the importance of peer groups is legendary among persons working with middle level students; and students are grouped by ability groups more often in the middle level grades than in elementary grades, not much conclusive has been reported about ability grouping nor about how to use peer groups effectively.

Intact groups

School policy may dictate that a student change classmates once, twice, or many times during the school day. The CREMS study asked principals which of three scheduling practices were utilized: 1) Students stay with same classmates for all academic subjects. 2) Students remain with the same classmates for most academic subjects but are regrouped for one or two academic subjects. 3) Students change classmates for all or most academic subjects. The use of intact groups, groups in which the student remains with the same group for the entire day, declines as the students progress to higher grades. Epstein and MacIver's analysis of the data found that students in the sixth grade are equally divided: one third keep the same classmates, one third change classmates for one or two subjects, and one third change classmates for most periods during the day. By grade seven most students change classmates for most subjects. While the CREMS study is interesting in the picture it gives of grouping practices at the middle level, it does not provide documentation of the best grouping patterns for the middle level learner. The way students are assigned to groups and how often they are regrouped determines much of their student interactions. While there seems to be agreement that rigid grouping based on ability is a negative influence especially for low ability students, clear evidence to assess which grouping practices are most advantageous for the middle level learner does not exist. Slavin (1973) cites the advantages of regrouping for selected subjects over intact ability groups. First, students who stay with the same students all day are more likely to identify with that group, thus creating the possibility of racially identifiable ability groups. Second, students grouped on the basis of achievement does not allow for students' strengths in particular areas. Third, regrouping plans tend to be a more flexible way of scheduling. Slavin's conclusions can be applied to the middle level learner, although the studies were not developed with these students.

Conversely, some middle school educators maintain that keeping students together for most activities in the middle school will help the personal development of the student by allowing him to identify with a group

(James,1989). Further research using young adolescents as the sample would help determine the best grouping practices for the middle level learner.

Cooperative learning

Cooperative learning, an approach that allows students to work in small, mixed-ability learning teams, is perhaps the most widely recommended and best documented instructional strategy for addressing the problem of student diversity in heterogeneous classrooms. Johnson and Johnson have stressed that a cooperative goal structure works best for most school situations and learning tasks (1978). Slavin reported that achievement for all students was increased when the group was rewarded based on the average learning of the group members (1983). This instructional strategy is used in only twenty-one percent of schools which teach young adolescents (Braddock, 1988). However, schools which are perceived as excellent by middle schools principals report cooperative learning as a "key" instructional practice (Epstein,1988, p. 443).

While the research is conclusive that this is a valuable learning strategy; its implementation at the middle level requires further evidence.

Interdisciplinary teaming

Interdisciplinary teaming is the most frequent mode of organizing teachers and students for instruction in the middle school(Plodzick & George, 1989). About forty-two percent of middle school students surveyed in the CREMS study receive instruction from interdisciplinary teams. With other geographic, demographic, and school variables taken into account, principals in schools which use interdiscipline report their schools to be effectively meeting students' needs and to be "exemplary." More middle schools use interdisciplinary teams than do any other types of schools (Braddock,1989). Similarly, George and Oldaker (1985) report that interdisciplinary team organization was a central feature in ninety percent of schools which they determined to be exemplary. Interdisciplinary teaming involves colleagues who teach different subjects but share the same students. In the Encyclopedia of

Educational Research, Albery states that interdisciplinary block teaching does not lead to significant increases in student achievement but is measurably superior to more conventional methods for the development of attitudes that foster learning in the adolescent. Vars (1984) reports that middle school students in interdisciplinary teams do as well, and often better on standardized tests when compared with those in the usual separate subject programs.

A 1988 study compared the interdisciplinary team organization pattern with the departmentalized organizational pattern in a sample of middle schools. The conclusions revealed that interdisciplinary teams were more effective in fostering math achievement for seventh graders; interdisciplinary teaming was equally effective for fostering reading achievement for seventh graders; heterogeneously grouped low, average, and high ability seventh grade students in the interdisciplinary teams did significantly better in math achievement than homogeneously grouped low, average, and high ability departmentally teamed seventh graders; accelerated high ability homogeneously grouped math students did better if departmentalized. There was not significant difference in attendance of students in the interdisciplinary teams or the departmentalized teams. Parents of students who participated in interdisciplinary teams were significantly more positive in their perception of the personal attention their child received in class (Bradley, 1988). These studies seem to offer support for interdisciplinary teaming at the middle school, but the results are not conclusive in nature. Even the studies which offered strong support for this instructional practice, mentioned the need for adequate planning time and the need for inservice teacher training as integral in providing interdisciplinary teaming at the middle level.

Advisory groups

Group advisory periods assign a small group of students to a teacher, administrator, or other staff member for a regularly scheduled meeting to discuss topics important to the students. Ninety-three percent of the schools in the George & Oldaker study include a home base adviser - advisee plan. Sixty-six percent of the schools in the CREMS national survey have one homeroom

or group advisory period, and nine percent have two such periods. According to principals' estimates in the CREMS study, with other geographic, demographic, and school variables taken into account, schools that have strong group advisory programs are more successful at meeting students' needs for guidance, advice, and counseling and at lowering the proportion of students who will drop out before finishing high school. The data in this study suggests that a school which averages nine group advisory periods a month saves two percent of its students from dropping out of school before graduation as opposed to a school which does not practice advisory periods. The George and Oldaker evidence also supports the advisory plan, finding that it occurs in ninety-three percent of "exemplary" schools. The advisory plans take various formats (James, 1989). One format would be for students from different grades to remain with the same advisor throughout their stay at the middle level; another format would be for students of the same grade to remain with the same advisor throughout their stay at the middle school; a third format would be for students to change advisors each year. Other questions involve whether students remain with the same peer group or change groups, whether all staff members serve as advisors, and whether all groups follow a guided format in planning advisee-advisor time. These decisions have not been addressed by empirical studies. No study could be found to document the effects of an advisory period on students' perceptions or achievement. Before school districts adopt such a plan, research must provide support for this strategy. This strategy can be seen as the instructional plan in most dire need of a research base. While it is one of the beliefs most closely aligned with the middle school movement (This We Believe, 1982), it is one of the least studied innovations.

Study Skill and decision-making

Atman & Hanna (1988) demonstrated that teaching study skills has improved students' grades when a staff received training in developing these skills and was committed to these skills. O'Sullivan (1988) conducted a study to determine if a decision making program for at risk middle school students would improve grades, attendance, behavior rating and disciplinary ratings.

While data did not support that participation in the program would have these desired effects, staff members did choose to continue to be involved in the program which taught decision making skills. Perhaps further study could be done to determine the basis for the decision to retain the decision-making program.

Flexible Scheduling

The CREMS study reported that principals of schools dedicated to the early adolescent will increasingly rely on flexible scheduling. This system of scheduling gives teachers more control over time and allows them to revise schedules with one or two other teachers. According to predictions based on this study, thirty-five percent of all schools which teach middle level learners will use flexible scheduling in the next three years (p.442). Connors & Irvin found flexible scheduling and exploratory courses an integral component of their "recognized" schools.

Exploratory Courses

The number of middle schools that offer exploratory courses and minicourses will increase from the current forty-five percent to sixty-five percent in three years (CREMS, p.442). The Irvin & Connors survey included exploratory courses and mini-courses as components of the middle schools which are labeled "Schools of Excellence." One of the instructional practices associated closely with the middle school movement has been the offering of exploratory courses or mini courses (This We Believe, 1982). But none of the effective schools advocated this strategy, and no research could be found which studied this innovation at the middle level. This is disquieting in light of the number of middle schools which employ or plan to employ this strategy.

Report Cards

Report cards which include progress grades and effort grades are reported by middle school principals to contribute to their schools' "responsiveness" to middle level students (CREMS). Research shows that

report card grades tend to go down as students enter middle school (Peterson, 1986), and that boys, on the average, tend to get lower grades and may need motivators other than traditional grades to help keep them in school (MacIver & Epstein, 1988).

Drill and Practice

Most research on teaching practices in elementary and secondary school has found an overwhelming emphasis on basic skills and student memorization of facts (Goodlad, 1984). By contrast, recent middle school literature has expounded the problem solving and decision making skills. The information provided in the CREMS survey indicates that drill is prominent in English, mathematics and science instruction. Principals reported that English teachers assign routine skill building activities twice as often as reading and discussion. Three fourths of mathematics teachers give daily drill on computation, while only one fourth emphasize problem solving, as reported by their principals. Memorizing science facts is much more prominent in classrooms than lab work or critical thinking about science problems, as reported by principals. Daily drill is not as prevalent in social studies. The majority of principals reported daily and weekly discussions in this class. Overall, twenty-one percent of principals reported that their teachers use non-drill in more subjects than they use drill activities. This is supported by a study which indicates that sixty percent of the questions that teachers ask require the recall of facts and about twenty percent require students to think and another twenty percent are procedural in nature (Frase, 1968). Several general studies have reported no significant link between types of questions asked and student achievement. It would appear that drill and practice is an appropriate learning activity and an appropriate method of asking questions for the middle level learner, but more studies which test classroom procedures at the middle level must be conducted.

Computer-Assisted Instruction

Seltzer (1971) reports that computers are used in three basic ways in classrooms: to conduct drill and practice, to provide tutorial instruction, and to dialog with the student in an interactive way. Seltzer studied the effects of CAI. Students in grades 7,8,and,9 half of whom were assigned to CAI augmented programs and half of whom were assigned to receive traditional instruction, were assessed on the following dimensions: control over environment, responsibility for mathematics, aptitude for math, and social relations. No differences could be found between the groups on these measures.

While various studies could be found to support the use of computer assisted instruction in the classroom and various studies could be found which demonstrated none or negative gains after computer-assisted instruction (Johnston & Markle, 1986). Seltzer's study was the only one conducted with young adolescents. Computer-assisted instructions' possibilities for the middle level learner must be researched in terms of achievement and in terms of social skills.

Diagnostic Prescriptive Teaching

Diagnostic prescriptive teaching is an instructional strategy that requires the teacher to analyze what is known about the student, pinpoint the nature of the learning deficiency, and provide experiences that will correct the deficiency. Saunders and Yeany (1980) studied a middle school population to assess the effect of diagnostic prescriptive teaching on the immediate and retained information of young adolescents. Three intact groups of students were used. Each group experienced one of three treatments: no diagnosis or remediation; diagnosis with no remediation; or diagnosis and remediation. Immediate achievement was measured at two points during the experiment and retention was measured thirty days following the experiment. There were no significant differences among groups on the immediate test. However, on the retention test the groups that received diagnosis with and without remediation both outscored the group that received no diagnosis or remediation. Diagnostic testing accompanied by feedback on performance apparently improved the retention of

information. Laughter found similar results when teaching reading to middle age students. This middle school research is consistent with studies at other grade levels (Bloom, Hastings & Meadus, 1971). This teaching strategy may have potential for the middle level teacher, but certainly more study is needed with this level learner.

Problem Solving

Teaching students to solve real life situations is a popular educational goal. The achievement of this goal is difficult for teachers because of the definition of problem solving and the measurement of real life success. Russell and Chiapetta (1981) found that eighth grade science students who engaged in problem solving laboratory activities developed better problem solving skills than did those who experienced laboratory lessons that simply confirmed earth science concepts.

A review of the literature by Johnston & Markle reveals recent findings about student thinking and problem solving. Students developed their ability to think creatively when uncommon responses were encouraged by their teacher. Students will develop the ability to develop problem solving skills when cooperative learning is practiced in the classroom. Students need opportunities to discuss their thinking strategies with the teacher and students so that traps and fallacies can be circumvented. This analysis of research suggests that middle level teachers include critical thinking and problem solving in a cooperative classroom atmosphere.

Transition programs

The Center for Research on Elementary and Middle Schools (1988) asked principals to report on their use of transition programs to orient incoming students and their parents to the programs and procedures at the middle school and to prepare them for the new curricular and social demands. Forty percent of the principals reported some form of transition program with the most frequent being: having elementary students visit the middle school; having the administrators of middle grade and elementary schools meet to discuss

programs and transition; having middle grade counselors meet with elementary counselors or staff members. Schools containing a large percentage of students living in poverty are less likely to have a transition program. Schools serving a large percentage of professional or managerial families are more likely to have transition programs. Schools serving a large percentage of high ability students have more extensive programs. Principals in schools which utilize transition programs report fewer incidents of retention of students in the transition grade. That is that transition programs actually result in measureable success for students in their first year at the middle school. Principals who use transition programs, generally, gave their programs good ratings and recommended their adoption by other administrators.

In addition to transition from the elementary school to the middle school, middle schools offer bridging programs from the middle school to the high school. This type of transition program is reported less frequently by middle school principals and there were no results to indicate if the programs which do exist are successful.

The transition program has been documented as being successful for transition to the middle school. The extension of this type of program for exit from the middle school to the high school must be examined.

Extracurricular activities

Almost one hundred percent of the respondents in both the CREMS and the Irvin & Connors surveys reported utilizing extracurricular or activity periods. This practice seems firmly entrenched in the middle school literature. Both Lipsitz and George & Oldaker included extracurricular activities among the characteristic of schools which were found to be effective. This practice is believed to be an effective one for educating young adolescents. Descriptively and correlationally, the practice of enabling middle level students to engage in recreational and interest activities as part of their school life is seen in a favorable light by school administrators and researchers. There have been some studies which point to the advantages of less competitive activities for this age group (Johnston, Markle, 1986). This factor should be considered when

planning extracurricular activities for the middle level learner. Researcher must examine the types of activities offered to students in terms of student attitude and achievement and thus determine the types of activities most profitable to students. The utilization of this practice seems evident, how this practice can best be utilized is less evident.

Conclusions

An examination of the research base for the young adolescent reveals that while survey and descriptive studies exist, there is almost no experimental research which has developed from studies undertaken exclusively with middle level learners. In looking at the descriptive-correlational-experimental loop, there seems an adequate description of middle school practices; there is little in the way of correlational studies which identify practices which result in more optimal learning for students; there are almost no experimental studies which support current practices or suggest promising practices.

The investigation of effective educational practices often has to rely on the application of studies with other age groups to the middle level learner. This is at odds with the beliefs of middle level practitioners that the transescent represents a unique age level. If this group of students is to be addressed as uniquely different from elementary and secondary learners and requiring separate teacher preparation and certification then it must be researched separately and uniquely. The challenge to provide a research base for effective instructional practices provides opportunities for definition and understanding. There exists a strong rationale for including these instructional practices in the preparation of teachers for the middle grades. Preservice teachers who are preparing for middle level teaching would have the opportunity to see these practices modeled and would have the opportunity to practice using these practices in planning lessons and implementing lessons for middle level learners.

Influences on Student Teachers

Middle school student teachers must possess many of the characteristics and competencies that middle school teachers must possess. While students have spent two to four years in university programs learning to teach, much of their teaching experience comes during the student teaching experience. This section of this study examines the influences on the student teaching experience which are in addition to the student teacher's preparation program. Students consistently rate the student teaching experience as the most valuable part of their teacher preparation program (Cruickshank, 1984). The literature on student teachers will explore who and what influences how a student teacher teaches and how a student teacher determines what she/he will teach.

Individuals Who Influence Student Teachers

Student teachers perceived beliefs, attitudes, and behaviors were influenced significantly by the persons they encountered during their training period (Manning, 1977). Professional persons who are introduced deliberately into the training process are the most influential - cooperating teachers, college supervisors, and other college professionals. This indicates that the interventions constructed by the teacher training institutions are effective in positively influencing their preservice teachers. Other groups of people, such as parents and friends, had a less significant influence. Setting and training variables had some effect on the perceived nature influence exerted by each group. Student teachers who were placed in an inner-city environment, without having been trained specifically about that environment, were more likely to indicate that their pupil's parents and the community were sources of negative influence on their attitudes. Also, their perceptions of student discipline and beliefs about children's learning, generally, were negatively affected by being in the inner city and by not being prepared for that setting.

Other studies have failed to make direct comparisons of setting and training variables to perceived influences of others. The work of Karmos &

Jacko (1977) focused only on positive influences on the student teaching experience. Both professional and nonprofessional sources of influence were mentioned by the student teachers, although the cooperating teachers were mentioned more often than any of the others. In addition, the cooperating teachers' most critical functions, in descending order, were perceived to be: a) promoting the student teacher's role development; b) providing the student teachers with personal support; and, c) assisting the student teachers to gain professional skills.

The research on student teaching indicates that the primary influence on the student teacher is the cooperating teacher (Yee, 1969; Karmos & Jacko, 1977; Jansen et al., 1971; Tullis, 1988). The cooperating teacher's role has been described as influential, important, and essential to the student teaching experience (Copeland, 1980).

Vogt suggests that the widely observed shift from liberal to authoritarian views on the part of the student teacher may be attributed to being caught between opposing viewpoints of the cooperating teacher and the university supervisor. When placed in a triadic relationship, there is a tendency for two members to move closer together and exclude the third (1988). The status of third member is determined by least frequent contact with the others, in the case of student teaching this is almost always the university supervisor. Gray (1962) found that those students rated higher by their university supervisors tended to align with the cooperating teacher more than those students who were rated lower. This seems reasonable when considering that these student teachers would "work out" better and be less problematic. Relying on key people in settings that are unfamiliar underscores Cruickshank's findings (1977) indicating that the cooperating teacher's influence was more in personal support and role development than in skill development.

There is a substantial body of empirical evidence that focuses on the student's change in philosophy and beliefs during student teaching. Griffin's review of the research in this area substantiates the belief that student teachers' attitudes tend to change negatively during the course of student teaching.

Second, student teachers' attitudes, values and/or philosophies tend to shift toward increasing conformity with those of their cooperating teachers.

Mahan & and Lacefield (1978) examined the possibilities of mutual influence and greater congruity or incongruity in attitude changes as a function of student teaching. Their review of the literature indicated that, generally, student teacher's values on several dimensions were more "emergent" or "liberal" than those of cooperating teachers. This information, together with the observed trends towards increasing congruity and similarity to the cooperating teachers' attitudes, enabled the authors to explain student change on the basis of cognitive dissonance theory. If a student teacher is exposed to a cooperating teacher's set of beliefs that are moderately different from his/her own, the resultant dissonance should be resolved over time by a shift in student attitudes. Moreover, given the limited discrepancy between student beliefs and the situational/organizational constraints surrounding the dyad, the shift should be one of increasing similarity to the beliefs of the cooperating teacher. Finally, the extent of the shift should be a function of the duration of exposure to the cooperating teacher. In this study, the student teacher perceptions did become more compatible with local reality over time. Some researchers list as a negative influence on the part of the cooperating teacher, the encouragement to the student teacher to make decisions (Mistretta, 1987). It is contended that during this experience, student teachers learn to student teach rather than to teach (Fukui, 1986)

In summary, while it is clear that the cooperating teacher is of major influence during the student teaching experience, it is less clear how the cooperating teacher influences the student teacher. It appears that the cooperating teacher's influence rests more in the ability to provide support and bolster confidence and provide a role model, than in the ability to teach teaching skills.

The university has little control over which teachers will serve as cooperating teachers. The local school district, usually the building principal, makes the assignments. The criteria used for selecting cooperating teachers is unrelated to the goals of the university for the student teaching experience

(Hicks, 1969). Teachers volunteer for the assignment, take turns, are selected by contractual agreements, or other non-educational reasons.

The state departments of education offer little support to universities in demanding qualifications for cooperating teachers. In 1982, fully twenty-four states had no legal requirements for serving as a cooperating teacher. In two states, a person need only to be a certified teacher. In sixteen states an additional requirement of 2-3 years of teaching experience was required. Nine states demanded course work in supervision of teachers and three also required a Master's Degree. Only Kentucky and West Virginia had more extensive paths to certification of cooperating teachers. Each state has three levels of student teacher supervision that a cooperating teacher may achieve. The state of Texas requires that the universities must provide continuing education in student teaching supervision to those public school teachers the institution wishes to use as cooperating teachers and those teachers must be mutually selected by the university and the local officials (Haberman & Harris, 1982).

Cooperating teachers at the middle school, like their counterparts, are not controlled by either the university or state departments of education to any extent. Middle school teachers have been certified to teach elementary school (1-8) or secondary school (7-12). The state requires that cooperating teachers possess the same certification that the student teacher is attempting to obtain. This would suggest that cooperating teachers possess many of the same educational beliefs as the student teacher, for example the emphasis on student centered for elementary certified teachers or subject centered orientation for secondary certified teachers. Similar beliefs concerning role definition would provide student teachers with cooperating teachers who have similar philosophies.

The university supervisor's role has been described as overlapping the role of the cooperating teacher. Supervisors report (Koehler, 1986) that they felt that they contributed little to the student teaching experience. A 1974 study of student teachers found no significant difference between the performance and adjustment of student teachers who had a university supervisor and those who

did not; the supervisor who supervised on an occasional basis had little effect on the student teacher's experience. Conversely, in a study by Manning (1977) supervisors followed the cooperating teacher as the second most important influence on the student teacher. This was followed by other college professors then by the student teacher's peers.

Karmos & Jacko (1977) found that student teachers reported that pupils served two critical functions. First, the pupils responses to student teachers worked to legitimize the latter's place in the classroom. Second, their task-related behaviors worked to determine the success or failure of student teachers' lessons. University supervisors were not given any significant mention in this study. There is a limited amount of research on persons who influence the student teacher and the research on the influence of the university supervisor is unclear.

Contextual Influences

The university context The university exerts a direct influence on student teachers through such properties as rules and regulations, policies regarding evaluation and recommendation for certification, evaluation of student teachers and assignment of student teachers. The research literature dealing specifically with student teaching does not include disciplined inquiry into the influences these properties exert on the student teaching experience.

In addition to the direct influences the university exerts on preservice teachers through courses and supervision, the university also has indirect influence through the university community's values, beliefs, and standards (Griffin, 1981). The values that become incorporated into teacher education programs and are articulated by faculty provide some primary socialization experiences for preservice teachers. The student teacher is also influenced by the university in its assistance to basic supervisory personnel. The emphasis and support that the university places upon the supervisory role is part of the student teaching experience.

The public school context. "While it is generally agreed that cooperating teachers exert a great deal of influence on student teaching, there has been little examination of the impact of the public school environment or context on the student teaching experience (Griffin, 1981, p. 38). Some general recommendations from the field suggests that this context may be important. Several of the recommendations developed for student teachers include that students be exposed to children of various backgrounds and levels of ability. Recently, educators have placed more emphasis on student teaching experiences that include various ethnic groups.

DeVoss (1979) demonstrated the impact of setting (classroom, university, school, home) upon the student teacher. He concluded, first, that when student teachers and cooperating teachers were mutually supportive and similar in philosophy, orientation, and attitudes, the student teacher was likely to have a successful experience. Secondly, the student teachers' ability to focus personal energy on the experience was associated with success. Those student teachers who had large portions of their time, energy, and attention consumed by the demands of unrelated settings (ie., spouses and children, other jobs, etc.) were less likely to experience success in their placements.

Poole (1972) suggests that school context is quite important to student teacher's perception of adequate training. In this study, student teachers were asked to rate 30 statements about their experiences with their cooperating teacher, the principal, and other staff; physical arrangements within the school; and contacts with fellow student teachers. They were also asked to rate the value of the student teaching experience.

The questions about experiences in the school were factor analyzed, revealing six factors: 1) experience in well-organized, supportive situations; b) experience of criticism; c) good working relationships with other staff d) lack of support; e) good working relationships with fellow students; and f) good, informal, working relationships with the children. When these factors were correlated with the student teachers' perceived value of the experience, the

strongest predictor of each student's rating (that she/he had learned a great deal from student teaching) was having experienced a well-organized, supportive environment.

Another very significant part of the public school influence on student teachers is what Hoy and Rees (1977) call "bureaucratic socialization." They define this socialization process as an organization's attempt to mold role ideology and role performance of personnel through a variety of procedures and mechanisms designed to make individual beliefs, values, and norms correspond with those of the organization. In their study the authors assessed students' bureaucratic orientation before and after their clinical experiences. They found that student teachers' beliefs and orientations were more bureaucratic following the student teaching experience. They were more likely to state that orders were to be followed without challenge and that one should be loyal to superiors without questioning their authority.

Pruitt and Lee (1978) found that "innovative and idealistic student teachers often meet stern opposition, become frustrated and then conform in a last ditch effort to salvage a grade" (p. 71). The combined pressures of certification, graduation, and approval from the cooperating teacher results in a high degree of conformity.

The public school exerts both a supportive and a bureaucratic influence on the student teacher. The same system of colleagues that serve as a support system also can create pressure to conform to the rules of school organization.

In addition to the separate influences of the university and the public school, their interaction has considerable influence on the student teaching experience. There was no research available that explored this interaction.

In summary, how a student teacher teaches, what she/he believes and what she/he teaches is influenced by the professionals with whom she/he interacts, the university and its supervisory support, and the school setting in which the experience occurs. Each of these influences acts separately and interacts to influence the student teaching experience.

Since middle school student teaching can occur in a variety of organizational patterns, the context of the student teaching experience can have considerable impact on the student teachers' beliefs about young adolescents and about middle level education.

Summary

Sufficient documentation exists to support middle level education as a legitimate second tier in a three tier education system. The origins of the junior high school followed by the middle school support the belief that middle level education represents a unique level of education. There is growing evidence that proponents of the middle school movement have been correct in insisting that there is an effective way to educate young adolescents.

The history of teacher preparation reveals little movement to transform the preparation of teachers into a three tier system, although proponents of both the junior high school and the middle school have supported staffing middle level education with teachers who are prepared through education and field experiences for this unique teaching area. The most recent reforms in education, generally, and in teacher education, specifically, have focused attention on the middle level. The relationship between teacher education and teacher certification has had impact on this teaching level. Various organizations and individuals have supported middle schools which are responsive to the needs of the young adolescent and teachers who are prepared for these needs. Middle school proponents are in basic agreement about the components necessary to prepare preservice teachers for effective middle school teaching. The knowledge base which middle school teachers should possess and the behaviors and competencies which effective middle school teachers display have been identified.

Recent research has identified instruction practices which are effective at the middle level. These practices are appropriate to the cognitive, physical, emotional and social development of the young adolescent. These practices have been identified by educators, principals and parents as the "earmarks" of effective middle schools and should be made known to those persons preparing to teach at the middle level.

Preservice programs which are preparing teachers, specifically, for middle level teaching are supporting the middle school movement by preparing teachers who are responsive to the unique needs of the young adolescent and who are prepared to teach in ways that are appropriate to these needs. Student teaching, perhaps the most intensive component of this preparation, provides student with the opportunity to practice teaching. The student teaching experience provides the opportunity to staff the middle school with teachers who are responsive to the needs of the young adolescent and possess the knowledge and skills necessary for successful teaching at this level.

CHAPTER III

Introduction

In order to determine whether preservice teachers specifically prepared to teach at the middle school level differ from preservice teachers generally prepared for either grades teaching, a study was conducted with thirty four student teachers who taught in middle schools during the spring of 1992. Each preservice teacher had experienced either traditional, general teacher preparation or specific middle level preparation. The preservice teachers were compared on the basis of their knowledge about middle level education, the instructional practices included in their lesson plans, an example of their teaching performance, and their beliefs about middle level teaching.

This chapter will review the methodology of the study, the criteria used to determine the validity and reliability of the data, and how the data were analyzed to respond to the research questions presented in the study.

Methodology

Design

This is a causal comparative study which examined the preparation, knowledge, attitudes, performance and planning of middle school student teachers and sought to determine the differences between specifically prepared and generally prepared student teachers. A variety of measures were utilized to compare student teachers specifically prepared for middle level teaching and student teachers generally prepared for middle level teaching. The independent

variable is the teacher preparation program and the dependent variables include the student teacher's middle level knowledge base, teaching performance, lesson planning and beliefs about middle level teaching.

Subject Selection

The Ohio State University recorded three hundred and sixty three student teachers for the spring term. After successfully completing the student teaching requirement, three hundred of these student teachers would be certified to teach at the middle level. There are several routes for arriving at this certification. Elementary education students who are certified K-8 or 1-8 are certified to teach at the middle level. Secondary majors who are certified 7-12 are certified to teach at the middle level. Special subject area teachers such as physical education, art, music, and special education teachers are certified K-12 and so are eligible for middle level teaching. Only one area, vocational studies, does not prepare its students for middle level teaching and school nurses and speech pathologists are not eligible for classroom certification. This meant that there were approximately 60 preservice teachers who had been prepared in an elementary preparation program; 80 preservice teachers who had been prepared in a secondary program; 14 preservice teachers who had been prepared in a specific middle school program; and 100 preservice teachers who had been prepared in a K-12 program.

There were 80 student teachers student teaching in middle schools during the spring term. Forty-one of these student teachers were eligible for K-12 certification (8 in foreign language, 4 in health education, 2 in industrial technology, 12 in music education, 3 in physical education, and 12 in special education), with the middle school fulfilling the K-12 state certification requirement. Five of the middle school student teachers were prepared in the post degree program and had a separate and unique preparation. These forty-six student teachers were not eligible for this study.

This study focused on preservice teachers who were student teaching in a middle school, either by choice or by assignment, and would be eligible for either a 1-8 certification or a 7-12 certification and had been prepared in either a traditional undergraduate preparation program or a specific middle school teacher preparation program. There were thirty-four student teachers who met these criteria.

While the certification is two tiered, the preparation program at The Ohio State University has been three tiered. Of the thirty-four eligible student teachers, eight student teachers have been prepared in an elementary program; fourteen student teachers have been prepared in a middle school program; and twelve student teachers have been prepared in a secondary program. In other words, twenty of these teachers had been traditionally prepared and fourteen of these student teachers had been prepared in a program which focused on the middle level learner.

Each of these subjects had been admitted into the college of education. Each of the traditional students chose either elementary or secondary education. Eight of these students chose elementary education as his major area of study, preparing to teach in grades 1-8. Twelve of the students chose secondary education, which also requires choosing a subject specialization area. These students prepared to teach one subject to students in grades 7-12.

Fourteen of these student chose a nontraditional teacher preparation program. Their program focused specifically on young adolescents and their education.

This study, then, divided the middle school student teachers into two groups. One group consisted of those middle school student teachers who were prepared in a traditional elementary or secondary teacher preparation program. These student teachers would be eligible for either would be elementary or secondary certification depending on their preparation program. The second group consisted of those middle school student teachers who were prepared in the middle school strand and would be eligible for elementary

certification. While the state of Ohio does offer a 4-9 middle school certification, the 1-8 blanket certification provides the preservice teacher with a broader certification and is the certification route available to the students at The Ohio State University.

Preparation

All of the education majors at the university at the time of this study were required to complete 45 credit hours in basic education requirements. This includes 15 hours in science, 15 hours in social science, and 15 hours in the humanities. Those student preparing for grades K-8 are required to take 42-48 credit hours in broad content areas which include English, anthropology, communication, geography, health, math and music. Those students preparing for 7-12 teaching are required to take the 45 credit hours in basic education courses but their content area classes are not broadly distributed as are those of the elementary prepared teachers. These secondary students complete the bulk of their hours in their content major and are required to take from 5-15 credit hours in this broad area of "college requirements." These classes include English, math, statistics and computer information systems. Each of the students is required to take two professional introduction courses. The first course focuses on the learner and includes a field experience of 6 hours in an elementary school and 6 hours in a high school. The second course focuses on teaching methods and includes a 14 hour middle school field experience component.

The major difference between the courses of study of the secondary and the elementary majors is in the amount of time spent in the area of concentration. While elementary majors spend 30 hours in their concentration area, secondary majors spend from 60 to 90 hours. Specifically, English majors take 60 credit hours in their area of concentration, math majors take 75 hours, science majors take 85 hours, and social studies majors take 90 hours. Rather than this subject area emphasis, elementary majors take methods courses in every subject that they might be called upon to teach. For example, every

elementary major takes language arts methods, math methods, music methods, social studies methods, science methods, reading methods, art methods, health and physical education methods. The focus in these courses is broad coverage of materials for usage with a broad range of grades.

Each term except for the term in which the student teaches, the elementary major completes a field experience in conjunction with his course work. This field component is supervised by both the university and the school district to which the student has been assigned. This experience typically is three hours each week.

The secondary course of study is different from the elementary curriculum in its emphasis on depth rather than breadth. In addition to the general, professional requirements, each secondary major is required to take a secondary methods class in their major. For example: social studies education majors take "Social Studies in Secondary Schools," mathematics education majors take "Teaching Mathematics in Secondary School;" Language Arts majors take "Fundamentals of Secondary Reading Instruction," "Teaching the Reading of Literature," and "Teaching Language and Composition in Secondary School;" and science education majors take "Science in Secondary Schools" Each of these courses is designed to provide the secondary preservice teacher with teaching methods specific to his/her area of study appropriate to secondary teaching. In addition, each area required a course in media components specific to the area of study in secondary education. For example: English majors take "Laboratory Experiences in English in English Education," social studies education majors take Curriculum, Materials, Resources and Teaching Strategies for Secondary Teaching;" science majors take Foundations for Teaching and Learning Science;" and mathematics majors take Teaching Mathematics in the Secondary Schools I."

The field experience component of a secondary teaching preparation program varies by subject area. Mathematics majors spend time each term in the field; English majors have a three hour field experience between the professional introduction course and the student teaching experience.

In both the elementary and secondary programs, the student teaching experience is a 15 credit hour experience which is in either of the final terms.

The specifically prepared middle school majors must follow the guidelines required of elementary prepared teachers but their courses are tailored to the middle level student. While it is recommended that they have two areas of concentration, they are required to have only one area of concentration which follows the elementary guidelines of 30 hours.

Many of the courses are similar to those required of elementary majors. The students were required to take a learning methods courses similar to the professional introduction course but the difference is in the focus on the learner from 10 -14. The teaching methods course emphasized teaching practices appropriate for grades 6-8. The students were required to take methods courses in each of the broad range of subject areas. The difference is that the courses were taught, whenever possible, by an instructor who had middle school experience and were directed toward "responsiveness to the middle level learner." The students were also required to take a course in classroom discipline. This course, too, focused on those methods that would be applicable to middle level learners. All field experiences occurred at both suburban and urban middle schools. The students were required to conduct a case study of a young adolescent and were required to conduct a case study of a middle school. The students were encouraged to consider urban teaching and were required to experience some of their field activities at urban middle schools. For the student teaching experience, the students were given the opportunity to choose between urban and suburban middle schools. Ten of the student teachers chose to teach in an urban middle school, while four of the student teachers chose to teach in a suburban middle school.

These course requirements meet those recommended by the National Middle School Association and the NCATE endorsed standards. The students are required to concentrate in at least one content area and it is recommended but not required that they have an additional concentration. There were fifteen students when the strand was formed. Each of the students had been accepted into the college of education and had elected to take part in a strand specifically

focused on preparation for middle level teaching. The students realized that while their certificate at the end of their preparation would make them eligible for teaching 1-8, their preparation would be exclusive to the middle level. The students worked with various professors and cooperating teachers in the course of five terms. One professor was responsible for the strand and one teaching assistant coordinated the strand for the five terms. The strand was modeled, to a large extent, on the advisor/advisee model which is recommended for the middle level learner. Providing the opportunity for the students to work together and with one "significant adult" throughout the five terms during which the students were preparing to be middle school teachers, demonstrated the structure recommended for middle schools. The middle school philosophy relies heavily on the beliefs that each student must know and be known by a significant adult in the school. The middle school concept also includes emphasis on the social and emotional development of the individual. The students were advised to student teach with a cooperating teacher with whom they were familiar and in a school with which they were familiar.

To summarize, the middle level preparation program is different from the elementary and secondary program because of its emphasis on the nature and needs of early adolescents, middle level curriculum and instruction, a broad academic background with specialized methods courses, and early and continuing experiences in middle schools.

This middle school program is similar to the elementary program in that it emphasizes a broad coverage of content areas, and is similar to the secondary program in that it recommends more depth in a content area than an elementary program. The middle school program is different from either the elementary or the secondary program because of the emphasis on middle level learners and middle level schools.

Selection

Each of the preservice teachers eligible for the study, as determined by the questionnaire and by a computer search conducted by the student teaching placement department at the university, was contacted first by letter then by phone and asked to be in the study of programs that prepare teachers for the middle level. Each of the preservice teachers contacted agreed to participate in the study.

The thirty-four participants were each assigned to student teach in the spring term of 1992 in a school which was designated by the school district as a middle school. There were eight school districts in the Columbus and surrounding areas in the study. These sites included: Columbus (Mohawk, Dominion, Starling and Mifflin Middle Schools); Westerville (Blendon Middle School), Upper Arlington (Hastings and Jones Middle Schools); Hilliard (Hilliard Middle School), Southwestern (Norton Middle School); Dublin (Sells and Davis Middle School) ; New Albany (New Albany Middle School); and Worthington (McCord Middle School). These middle schools were located in both urban and suburban settings and were supervised by The Ohio State University. The participants in the study were divided among the schools with both specifically prepared and generally prepared student teachers assigned to both urban and suburban settings. Ten of the specifically prepared student teachers were in urban settings and four of the specifically prepared student teachers were in a suburban setting. Three of the generally prepared student teachers were in urban settings and seventeen of the generally prepared student teachers were assigned to suburban schools. Each of the participants taught either grade 6, 7, or 8.

Instrumentation

In attempting to determine which group of preservice teachers was most representative of modern research in middle school teaching, the researcher had to determine how the "best" in teaching could be determined. Knowledge seemed basic to measuring the best in teaching. How much a teacher knows about the learner and about teaching is believed to be important. In this case, how much the prospective teacher knew about the middle level learner and about middle level teaching was believed to be important. The researcher then set out to develop an instrument which would measure how much the prospective teacher knew about young adolescents and about teaching young adolescents in a manner consistent with research in that area.

The researcher determined that knowledge alone, was not sufficient for measuring teaching success. The researcher then determined that measuring teaching performance would help determine if the student teacher was effective in teaching young adolescents.

How teachers plan and what practices they choose to implement in their classroom reveal much about teaching. The researcher then decided to find out what kind of teaching practices these prospective teachers were planning to utilize.

Finally, the beliefs of the prospective teachers and their level of commitment to middle level teaching were important factors to include in a comparative study. The researcher, then, set about to discover the beliefs and commitment level. Knowledge, performance, planning and beliefs were the factors which the researcher believed would indicate which group of student teachers were more responsive to the middle level learner.

(1) Knowledge base Questionnaire

A two part instrument measuring knowledge about middle level learners, knowledge about middle level teaching methods, and knowledge about the middle school concept was administered to the student teachers prior to their

student teaching experience. This questionnaire was based on The National Middle School Association document, *This We Believe*. This document was chosen, primarily, because it represents the core of the middle school movement and should be a part of the working knowledge of a proponent of the middle school movement (Dickenson, 1992). This document was first published in 1982, and while recently revised (1992), contains the essentials of the earlier document. The questionnaire consists of thirty multiple choice questions. The knowledge questionnaire consisted of 30 multiple choice questions each of which was comprised of a stem and four distractors. The students were asked to choose one correct answer from among four choices (Appendix A).

The validity of the knowledge test is based on its adherence to the document, *This We Believe*. There is a correspondence between the multiple choice questions and the paragraphs in the document. Each of the questions can be traced in both wording and content to *This We Believe*. The correct answer to each question can be found in *This We Believe*.

The questionnaire was determined reliable by administering it to 138 students who registered to student teach in the spring term but who did not meet the criteria to be included as subjects in the study. Each of 138 student teachers was in attendance at the orientation meeting for student teachers and completed the 30 questions at the request of their supervising teacher.

The Kuder Richardson test has been determined to be appropriate for testing the reliability of the instrument. The application of the KR 20 formula results in an estimate of reliability based on internal consistency and is appropriate for measuring reliability when a multiple choice test with one correct answer is the instrument utilized (Gay, 1987). The reliability of the test as determined by the Kuder Richardson test for reliability is a .7328. This is considered to be a conservative measure of reliability and is considered an acceptable reliability score (Nunnally & Nunnally, 1967).

(2) Attitude Survey

The second component of this questionnaire was a survey which provided demographic and attitudinal formation about the student teachers. The first part of the survey identified those student teacher who were placed, either by choice or assignment, at a middle school. A computer search verified these assignments. The second part of the survey was administered to the middle school student teachers and asked twelve questions which sought to determine the beliefs and attitudes of the middle school student teacher about: plans to teach at a middle school; grade level preferences; feelings about preparation either through field experiences, college courses, or teacher preparation program; their understanding of young adolescents; their ability to implement appropriate middle school teaching strategies; their understanding of the middle school philosophy; middle level teaching preparation; and their familiarity with the National Middle School Association. The respondents were asked to reply to each of the questions by circling either "strongly agree," "agree," "disagree," or "strongly disagree." This belief questionnaire was administered to the thirty four participants before and after the student teaching experience. (Appendix B)

(3) Videotape Evaluation Form

The middle school student teachers were asked to submit a video of their favorite student teaching performance for scrutiny by raters who evaluated their responsiveness to the middle level learner and their implementation of methodology appropriate to the middle school. Johnston and Markle's research about appropriate behaviors and competencies of middle level teachers was used to evaluate these videotapes. Two versions of this instrument were utilized. One version explained each of the behaviors and was used to instruct each of the persons who served as raters. (Appendix C) An abbreviated version was utilized to make rating easier. (Appendix D)

Each of the thirty four student teachers agreed to allow the researcher to videotape them teaching one of their "best" lessons. The researcher was willing to tape any time of the school day and any class which the middle school student teacher defined as the best.

The researcher began taping whenever the period began and continued to tape until the students had emptied the classroom or had proceeded to the next subject. This usually consisted of a forty to fifty minute time period. One preservice teacher was very unhappy with her performance and requested that she be taped again at a different time. The researcher complied with this request and offered the same invitation to each subject. In telephone calls and discussions with the subjects, the researcher emphasized that it was to be what they considered to be an example of their best teaching with a "good" class. Each of the student teachers was given a copy of their videotape in thanks for allowing the researcher to videotape their teaching.

Two raters were selected based on their knowledge of middle level learners and the middle school philosophy. One of the raters was a graduate student with teaching experience. She had taught middle level learners and planned to return to middle level teaching. One of the raters was a middle level teacher. Neither of the raters was acquainted with any of the subjects. The raters attended a one hour training session where the researcher and the raters discussed the evaluation form (Appendix A) and determined agreement on definitions of terms.

The interrater reliability has been deemed an essential element of this discussion. The mean score of the two raters on each of the 16 characteristics or behaviors identified by Johnston and Markle was utilized to evaluate the student teacher's middle school teaching performance. When the raters scores were correlated to determine the extent of agreement between the judges; the resulting correlation was determined to be .91. The raters examined each of the thirty four tapes for: warmth; enthusiasm; flexibility; spontaneity; acceptance of students; awareness of developmental level; knowledge of subject matter; variety of materials; structure; monitoring; use of concrete materials;

questioning; indirectness; success building; diagnosis of learning need; and listening. They rated the performance in each category from "highly visible" to "somewhat visible" to "slightly visible" to not "visible."

(5).c4.Lesson Plan Checklist

In order to examine what kinds of teaching practices middle school student teachers included in their lesson plans, the student teachers at the middle schools were asked to submit their ten best lesson plans to determine if their lesson plan evidenced responsiveness to middle level learners and methodology appropriate to the middle level learner. The Center for Research in Elementary and Middle School study by Epstein that reported national middle school practices, the studies of Oldaker & George and Lipsitz on effective middle schools, the contribution of *What Research Says to the Middle Level Practitioner*, and the recommendations of The National Middle School Association guided this determination.

The researcher coded each set of ten lesson plans with a number to retain the anonymity of the student teacher. This system was utilized because the researcher served as rater. The researcher then examined each set of plans to determine which recommended practices the student teacher had included. The recommended practices are: cooperative learning; interdisciplinary teaching; active participation; varied instructional practices; attention to affective development; varied evaluative strategies; problem solving/decision making; and flexible grouping.(Appendix E) While research had identified a variety of recommended middle school teaching practices, the researcher rated the student teacher only on those practices over which he/she had control. For example, while interdisciplinary team teaching is a recommended practice, the school structure rather than the student teacher determines if interdisciplinary team teaching will be implemented; therefore interdisciplinary team teaching was not a part of the rating structure. The researcher examined each of the sets of lesson plans provided and gave the student teacher credit if a recommended practice was apparent. The practices were found either in the lesson plan objectives or in the lesson plan procedure.

While the lesson plans followed different formats, each plan submitted described teaching practices which the student teacher planned to employ.

Analysis of Data

The researcher distributed the knowledge questionnaire to the two hundred preservice teachers who met for the required orientation meeting prior to the spring quarter student teaching experience. Those in attendance at this meeting included: traditional elementary majors, traditional secondary majors, music majors, art majors, and special education majors. The results of the scores on this questionnaire were used to determine the reliability of the knowledge instrument. The demographic information reported on this questionnaire enable the researcher to select those preservice teachers who would be student teaching at a middle school.

From this group of preservice teachers, those teachers who were assigned or who elected to student teach at a middle school were identified. The student teachers were divided, for purposes of analysis, into two groups. One group included the fourteen student teachers who had been prepared in a specific middle level teacher preparation program. The other group included the twenty student teachers who had been prepared in a general 1-8 or 7-12 teacher preparation program.

The number of correct answers was computed for the entire group of student teachers who were eligible for middle school certification (N=138) and for the thirty-four student teachers who taught in a middle school for their student teaching experience and were prepared in a 1-8, 7-12 or middle school preparation program. The correct answers of student teachers who were eligible for middle level teaching but who were not teaching at a middle score was used to test the reliability of the instrument. The correct score of the middle school student teachers was utilized to compare the two groups on their knowledge base.

The belief survey was administered to the thirty four subjects who met the criteria for inclusion in the study and who agreed to participate in the study within the first week of the term.

During the next nine weeks, each student teacher was videotaped . During week 10, each student teacher again completed the belief survey and handed in a set of ten lesson plans.

A multivariate t-test (Hotelling T) was utilized to determine if there was a difference in overall teaching ability, as measured by knowledge, planning, performance, and attitude, between preservice teachers who have been prepared in a specific middle school teacher preparation program and preservice teachers who have been prepared in a general teacher preparation program? The number of subjects in each group provided power of approximately .70 for detecting a "large" effect size ($D^2=1.00$) and power of approximately .90 for detecting a "very large" effect size ($D^2=2.23$) according to Stevens (1986, p.141).

Separate univariate t-tests were utilized to measure each dependent variable. These dependent variable included; the total score on the knowledge questionnaire; the number of instructional practices; the mean score on the performance videotape; and the score on the belief survey which was taken before the student teaching experience. This enabled the researcher to explore the relationship between teacher preparation program and student teaching knowledge, performance, planning and beliefs. The strategy of the t test is to compare the actual mean difference observed with the difference expected by chance. Thus the researcher could determine if the differences between the two groups could be expected if there was actually no significant difference between the two groups.

In order to investigate changes in attitude relative to the student teaching experience and to investigate differences in attitude change for specifically prepared and generally prepared preservice teachers, a split plot (2X2) repeated measures ANOVA was conducted. This analysis allowed the researcher to investigate changes between the two groups and changes that occurred relative to the student teaching experience.

Summary

This study is a comparative analysis of two groups of preservice teachers all of whom are eligible for certification which enables them to teach at the middle school level but who have participated in different teacher preparation programs. By means of statistical analysis, the researcher has attempted to determine which preservice teachers are more successful in teaching young adolescents. If one group of preservice teachers is shown to know more about young adolescents and how to teach them, plans more appropriately for teaching at the middle level, displays teaching behaviors more appropriate to middle level learners, and perceives themselves as better able to teach at the middle level; a case will have been made for specific middle level teacher preparation.

CHAPTER IV

Introduction

This chapter will discuss the results of the statistical analyses utilized to answer each of the research questions in this study. In review, a multivariate t-test followed by four individual t-tests were conducted to examine differences among specifically prepared preservice teachers and generally prepared preservice middle school teachers in regard to their knowledge, planning, teaching performance and beliefs. For the multivariate analysis, these measures were considered together as for "middle school teaching preparedness" as a global construct. This analysis was followed by the four univariate t-tests in order to identify differences between groups on each of the four dependent variables separately. In order to investigate changes in attitude relative to the student teaching experience and to investigate differences in attitude change for specifically prepared and generally prepared preservice teachers, a split plot (2X2) repeated measures ANOVA was conducted. This analysis allowed the researcher to investigate changes between the two groups and changes that occurred relative to the student teaching experience.

Research Question 1: Is there a difference in overall middle school teaching ability as measured by knowledge, class performance, planning, and attitude between preservice teachers attending a general teacher preparation program and preservice teachers attending a specific teacher preparation program.

Multivariate Analysis

The results of the multivariate show that when considering the dependent variables; knowledge, planning, performance, and attitude, as a single multivariate construct reflecting global middle level teaching ability, there was a multivariate significance ($F=37.10$; $Df=4,29$; $p,.001$).

Univariate Analysis

Results of the univariate analyses showed that the specifically prepared preservice teachers made significantly more favorable scores on knowledge, planning, video performance, and attitude than generally prepared preservice teachers. Results of the univariate analyses and descriptive statistics for each of the four dependent variables can be seen in Table 1.

Table 1

Results of Univariate Analyses and Descriptive Statistics for Knowledge, Planning, Performance, and Attitude

<u>Group</u>	<u>Mean</u>	<u>SD</u>	<u>t-value</u>	<u>Df</u>	<u>P</u>
<u>Knowledge</u>					
Specific n=14	23.36	1.86	9.15	32	<.001
General n=20	16.75	2.34			
<u>Video</u>					
Specific n=14	33.57	6.78	4.60	32	<.001
General n=20	22.90	6.48			
<u>Planning</u>					
Specific n=14	5.64	1.95	3.14	32	<.004
General n=20	3.65	1.63			
<u>Attitudes</u>					
Specific n=14	29.90	1.29	16.11	32	<.001
General n=20	16.14	3.45			

Research Question 2. Is there a difference in the knowledge base concerning middle school teaching between preservice teachers who have been prepared in a general teacher preparation program and preservice teachers prepared in a specific teacher preparation program?

Results of the univariate test measuring the difference in the knowledge base concerning middle school teaching between preservice teachers who have been prepared in a general teacher preparation program and preservice teachers prepared in a specific teacher preparation program show a significant univariate difference between the two groups ($t = 9.15$; $p < .001$). The knowledge questionnaire was utilized to determine what the preservice teacher knew about young adolescents, about middle level teaching practices and about the middle school philosophy. Each of the 34 student teachers included in the study answered thirty multiple choice questions. The mean score for the entire group on the knowledge test was 19.47. The range was 13-26 with a standard deviation of 3.93. The median score was 20.0. The highest scores of 26 occurred in the specifically prepared group and the lowest score of 13 occurred in the generally prepared group. Table 1 shows that 14 specifically prepared students took the knowledge test and the mean score for this test was 23.357. The range was 20-26 with a standard deviation of 1.86 and a median score of 23.5. Scores for the general group indicate that 20 students took the knowledge test and the mean score of this test 16.75. The range was 13-22 with a standard deviation of .308. The median score was 16.00.

Research Question 3. Is there a difference in the planning of preservice teachers who have been prepared in a general preservice teacher preparation program and preservice teachers who have been prepared in a specific preservice teacher preparation program.

Results of the univariate test measuring difference in the lesson plans between preservice teachers who have been prepared in a general teacher preparation program and preservice teachers prepared in a specific teacher preparation program show a significant univariate difference between the two groups ($t=3.14$; $p<.004$).

Each of the thirty four student teachers agreed to provide the researcher with their ten best lesson plans. The researcher did not define "best" but allowed the student teacher to decide which were the "best" lessons. The lesson plans were rated on the total number of responsive middle level teaching strategies which occurred in the ten lesson plans. Every instructional practice was included in the plans of at least one student teacher but no strategy was planned for by every student teacher. Table 2 illustrates the strategies that were most often included in the lesson plans of the preservice middle school teachers.

As Table 2 indicates, active participation, varied evaluative strategies, and flexible grouping were the most frequently planned strategies. Cooperative learning was used least often by both groups of preservice teachers. The widest margin of difference occurred when considering attention to affective development. More than half of all specifically prepared preservice teachers planned to use this strategy while less than a fourth of generally prepared student teachers planned to attend to the middle level student's affective development. Table 2 illustrates the practices which were found in the ten best lesson plans presented to the researcher as the best lesson plans.

Table 2

Frequency Table of Recommended Practices included in the Lesson Plans of Preservice Teachers

<u>Practice</u>	<u>Specific</u>		<u>General</u>		<u>Total</u>	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Cooperative Learning	4	29	2	10	6	18
Interdisciplinary Teaching	11	79	6	30	17	50
Active Participation	14	100	13	65	27	79
Varied Instructional Practices	9	64	4	20	13	38
Attention to Affective Development	9	64	3	15	12	35
Varied Evaluative Strategies	10	71	15	75	25	74
Problem Solving	11	79	14	70	25	74
Flexible Grouping	11	79	14	70	25	74

Research Question 4. Is there a difference in the teaching performance as portrayed in a videotape between preservice teachers prepared in a general teacher preparation program and preservice teachers prepared in a specific teacher preparation program?

Results of the univariate test measuring the difference in the teaching performance as portrayed in a videotape between preservice teachers prepared in a general teacher preparation program and preservice teachers prepared in a specific teacher preparation program show a significant univariate difference ($t = 4.60$; $p < .001$).

The mean score of the two raters on each of the 16 characteristics or behaviors identified by Johnston and Markle was utilized to evaluate the student teacher's middle school teaching performance.

Table 3 indicates the mean scores for each of the behaviors. A score of 4 correlates to "highly visible;" a score of 3 correlates to "somewhat visible;" a score of 2 correlates to "slightly visible" and 0 correlates to "not evident."

Table 3

Mean Scores of Videotaped Teaching Performance

<u>Behavior</u>	Specific		General		Total	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Warmth	2.3	.5	1.6	.5	1.8	.7
Enthusiasm	2.0	.6	1.3	.6	1.6	.7
Flexibility	1.6	.7	1.0	.7	1.3	.8
Spontaneity	1.6	1.1	0.9	1.0	1.3	.8
Accepts students	2.9	.4	1.9	.4	2.3	.9
Aware of developmental level	2.4	.7	1.5	.7	1.9	.9
Knows subject	2.9	.4	2.6	.4	2.7	.6
Varies instructional materials	2.5	.7	1.6	.7	2.0	.9
Structures instruction	2.6	.6	1.9	.6	2.2	.4
Monitors learning	1.6	.8	1.4	.8	1.5	.8
Utilizes concrete materials	2.5	.7	1.4	.7	1.8	.9
Asks varied questions	1.7	.8	1.3	.8	1.5	.9
Incorporates indirectness	1.4	.9	1.2	.9	1.3	.6
Incorporates success building	1.8	.9	1.1	.9	1.4	.8
Diagnoses learning needs	0.9	.7	0.7	.7	0.8	.9
Listens	2.8	.4	1.7	.4	2.1	.9

As can be seen from the table, both groups of teachers appear to know the subject matter, but neither group diagnosed individual needs. There is the widest disparity between the two groups in their listening. Specifically prepared teachers listened more to middle level learners. While the special group was higher in every category, there was evidence that both groups displayed warmth, were enthusiastic, were flexible, were spontaneous, were accepting, were aware of developmental level, knew subject matter, used a variety of materials, structures instruction, monitored learning, implemented concrete materials, asked questions, used direct teaching, provided for success building, and listened to students at a slightly visible level. Neither group of preservice teachers was reported to be even "slightly visible" at diagnosing individual needs.

Research Question 5. Is there a difference in the attitudes toward middle level teaching between preservice teachers who have been prepared in a general teacher preparation program and preservice teachers who have been prepared in a specific teacher preparation program? Does this perception differ before and after student teaching?

Results of the univariate test measuring differences in the attitudes about middle level teaching between preservice teachers who have been prepared in a general teacher preparation program and preservice teachers who have been prepared in a specific teacher preparation program show a significant difference between the two groups prior to beginning the student teaching experience ($t=14.03$; $p<.001$).

Repeated Measure Analysis

Results of the repeated measure ANOVA which looked at the univariate attitude change relative to student teaching indicated that there was no sign of changes in attitude for either the specifically prepared or the generally prepared preservice teachers following the student teaching experience ($F = 0.23$; $p > 0.63$). Results also showed that neither the attitudes of the specifically prepared preservice teachers nor the attitudes of the generally prepared preservice teachers were differentially effected by the student teaching experience (ie., no significant interaction: $F = 1.08$; $p > 0.30$). As shown from analyses, however, there were differences in attitude between the specifically prepared preservice teachers and the generally prepared preservice teachers.

The thirty four preservice teachers answered twelve questions about their perceptions of themselves as teachers prior to the student teaching experience but after they had received their student teaching placement. The thirty four student teachers answered these same twelve questions again during the last week of their student teaching experience.

The belief questionnaire was a self-report instrument to which the subjects responded by circling "strongly agree," "agree," "disagree," or "strongly disagree." Table 4 illustrates the responses to the attitude questionnaire.

Table 4

Frequency Table of Responses to Attitude Questionnaire at the End of the
Preservice Teacher Preparation Program

Question	Strongly Agree		Agree		Disagree		Strongly Disagree	
	n	%	n	%	n	%	n	%
I plan to teach at the middle level.								
Specific	12	86%	2	14%	0	0%	0	0%
General	1	5%	9	45%	10	50%	0	0%
While I would prefer to teach at the middle level, I will apply for any teaching position								
Specific	1	7%	12	86%	1	7%	0	0%
General	5	25%	5	25%	9	45%	1	5%
I will accept only a middle level position.								
Specific	14	100%	0	0%	0	0%	0	0%
General	0	0%	1	5%	8	40%	11	55%
I am prepared to teach at the middle level.								
Specific	14	100%	0	0%	0	0%	0	0%
General	6	30%	13	65%	1	5%	0	0%
My field experiences have prepared me to teach at the middle level.								
Specific	14	100%	0	0%	0	0%	0	0%
General	8	40%	12	60%	0	0%	0	0%

Table 4 (continued)

My college courses have prepared me to
teach at the middle level.

Specific	12	86%	2	14%	0	0%	0	0%
General	2	10%	4	20%	11	55%	3	15%

My teacher preparation has
prepared me for middle
level teaching.

Specific	12	86%	2	14%	0	0%	0	0%
General	2	10%	4	20%	14	70%	0	0%

I understand young
adolescents

Specific	11	79%	3	21%	0	0%	0	0%
General	5	25%	11	55%	4	20%	0	0%

I can implement teaching strategies
appropriate to middle level learners.

Specific	13	93%	1	7%	0	0%	0	0%
General	6	30%	13	65%	1	5%	0	0%

I understand the middle
school philosophy.

Specific	10	71%	4	29%	0	0%	0	0%
General	4	20%	2	10%	9	45%	5	25%

Teacher should be prepared,
specifically, to teach at the
middle school.

Specific	10	71%	4	29%	0	0%	0	0%
General	4	20%	13	65%	3	15%	0	0%

I am familiar with the literature and publications
produced by the National Middle School
Association.

Specific	9	64%	5	36%	0	0%	0	0%
General	0	0%	2	10%	10	50%	8	40%

This was the instrument in which the two groups showed the greatest differences. The questions were positively stated and the responses of the two groups varied a great deal in their positivism or negativism. What did not vary and, in fact, were strikingly consistent, were the answers before and after student teaching. There was almost no difference between the responses made before student teaching and in the last week of student teaching for each group of preservice teachers.

Responses that appeared most divergent between the two groups were: commitment to middle level teaching with 100% of the specifically prepared teachers saying they strongly agreed with this statement, and 100% of the generally prepared teachers either disagreeing or strongly disagreeing with this statement; and preparation of teacher education program with 100% of the specifically prepared teachers strongly agreeing that their teacher preparation program had prepared for middle level teaching while only 50 % of the generally prepared teachers agreed with this statement. The responses to the questions were most similar when the two groups responded that "teachers should be prepared to teach, specifically, at the middle level." One hundred percent of the specifically prepared preservice teachers responded positively to this statement; and 85% of the generally prepared preservice teachers responded positively to this statement.

Summary

Both the univariate analyses measuring the knowledge, planning, performance and attitudes of preservice teacher who have been specifically prepared for middle level teaching preservice teachers who have been generally prepared for teaching and the multivariate t- test measuring the dependent variables as a global construct were in agreement that there was a significant difference between the two preservice teaching groups. The greatest degree of difference appeared in the instrument which measured beliefs about middle level teaching.

Although there was a significant degree of difference between the two groups, the split plot repeated measures ANOVA revealed no difference in either of the two groups in their beliefs before and after student teaching.

CHAPTER V

Introduction

Early adolescence is a critical time in human development engendering misunderstandings and confusion for children and adults. These young people face unprecedented pressures in a society that fails to recognize the significance of events during this period in the life span. Ten to fourteen year olds are on the threshold of choosing a path that leads to a productive and fulfilling life or one with a diminished future (Turning Points, 1989). In today's society, this choice is made under extremely stressful circumstances. Consequently, substantial numbers (7-14 million) are at risk of reaching adulthood unable to meet adequately the requirements of the workplace, the commitments of relationships, and the responsibilities of participating in a democratic society. Societal problems such as teenage pregnancy, substance abuse, diminished academic performance, suicide and mental illness, violence and crime occur in significant proportions and are growing with this age group. Freed from the dependency of childhood but not yet able to find their own path to adulthood, many young people feel a desperate case of isolation (The College of Education Middle School Task Force, The Ohio State University, 1990; Turning Points, 1989).

The middle level learner is the most overlooked school age group in America (Lipsitz, 1984). Despite the importance of developmental changes occurring during this time period, the education community has not united its efforts to provide these learners with a developmentally appropriate education. Middle level students are at immediate risk because education has not provided them with the skills required for dealing with the decisions which they face. It is the misfortune of young adolescents that just at

the point in their lives when they are seeking definition, confusion and lack of knowledge block successful schools for young adolescents. There is confusion regarding the purposes of schooling for the young adolescent and lack of knowledge about early adolescence as a critical developmental stage (The College of Education Middle School Task Force, The Ohio State University, 1990).

The middle school movement has attempted to address this confusion and lack of knowledge but this movement is doomed to the same fate as its predecessor, the junior high school, unless institutions which prepare teachers are preparing teachers with the knowledge and skills to provide for the needs of the early adolescent. The Carnegie Council on Adolescence called middle level education "a powerful shaper of adolescents" (Rothman, 1989, p.1). Although potentially society's most powerful force to recapture millions of youth adrift, all too often a volatile mismatch exists between the organization, curriculum, and teachers of middle grade schools and the intellectual and emotional needs of young adolescents. (The College of Education Middle School Task Force, Ohio State University, 1990). This mismatch occurs, in part, because institutions which prepared teachers are not preparing teachers, specifically, for the middle years.

In the absence of properly prepared educators for these critical middle years, young adolescents are subjected to teaching approaches which are not developmentally appropriate for middle level learners. For many teachers prepared for secondary school, the emphasis on subject matter and passive learning creates an learning environment which is not responsive to the needs of the young adolescent. Many teachers prepared for elementary school are not equipped to deal with the need of the young adolescent to interact with his peers and to use the peer group rather than the teacher for direction and guidance. Adequate preparation of teachers for middle school has been called the most critical and long standing problem in American education (Alexander, 1991).

Many teachers of young adolescents dislike their work (Goodlad, 1984). Many teachers serving in the middle grades have not been

appropriately prepared for working with young adolescents. They do not understand what is involved in creating a responsive educational climate for young people at this turning point in their lives. Assignment to a middle grade school is, all too frequently, the last choice of teachers who are prepared for elementary and secondary education (Turning Points, 1989). The variable, transitional nature of the young adolescent is often challenging to adults whose interests and dispositions fit more comfortably with younger children or older adolescents. If teachers are to support the reconceptualizing of middle level education, they must understand the nature of the young adolescent and demonstrate exemplary responsive instructional practices for this age group.

The attempt to develop programs to prepare and certify teachers with this understanding and ability has been at the heart of the middle school movement. Leaders in the middle school movement believe that it is essential to develop a cadre of teachers wholeheartedly committed to the philosophy of middle level education and possessing both the theoretical and practical knowledge for working with this age group (McEwin & Clay, 1977; Rothman, 1989; Scales, 1992).

Teacher education's traditional elementary/secondary dichotomy ignores the education of the early adolescent, creating a void in teacher preparation. Teachers are less likely to choose to teach middle level learners than any other grade level (Sage, 1988). Teachers report difficulties with the age level or the desire to focus on subject matter as detractors to middle level teaching. Sixty one percent of middle school principals reported having not one teacher in their building with middle level preparation and when this preparation is reported, it is usually in the form of an inservice course (Epstein, 1988).

Historically, institutions which prepare teachers have been committed to the preparation of teachers for the schools of this country. A serious discrepancy exists between teacher preparation's commitment to education and teacher preparation's commitment to middle level education. Nationally, 33% of institutions which prepare teachers offer a middle level teacher preparation program (McEwin, 1990). The Ohio State University has been typical of most colleges of education in providing little in the way of middle level teacher

preparation. With a few isolated exceptions, when individuals within the college who are committed to middle level education have provided direction for preservice teachers who choose a specific middle level teaching preparation program rather than the more broad elementary or secondary teacher preparation programs, the college of education has provided no specific preparation program for those preservice teachers who choose middle level teaching.

This analysis took advantage of the opportunity to study one of these isolated exceptions. This study analyzed the differences between a group of preservice teacher who had been prepared in a specific middle level teacher preparation program with preservice teachers who had been prepared in traditional, general teacher preparation programs. Specifically, this comparative analysis sought to determine if there are differences between preservice teachers who have been prepared in a program designed specifically for middle level teaching and preservice teachers who have been prepared in a general teacher preparation program. The analysis, first, looked at middle level teaching as a global construct and, then, examined separate components of this construct. The separate components which were examined included; the preservice teacher's knowledge base about teaching young adolescents, the preservice teacher's ability to plan lessons which incorporate appropriate middle level teaching strategies, the preservice teacher's videotaped teaching performance, and the preservice teacher's attitudes about middle level teaching both before and after student teaching.

During the spring quarter at The Ohio State University, 11% of the preservice teachers who were student teaching taught at schools called middle schools (n=34). Twenty of these preservice teachers were prepared in general teacher preparation programs. Fourteen of these preservice teachers were prepared in a specific middle level teacher preparation program. The ten week student teaching term was used to analyze the two groups of preservice teachers. The specifically prepared group of preservice teachers was found to be significantly different in knowledge, planning, teaching performance, and attitudes toward middle level teaching than the twenty preservice teachers who

also student taught in middle schools but who had been generally prepared. In this chapter, teaching will be examined as a global construct and individual components of teaching will be considered. Each of the research questions concerning differences in the two groups will be addressed individually. Conclusions which can be determined as a result of the application of analysis will be discussed.

Were there overall differences in teaching ability between specifically prepared and generally prepared preservice middle level teachers?

This study demonstrated that there was a significant differences between preservice teachers prepared in a middle level teacher preparation program and those prepared in a general teacher preparation program. When middle school teaching was considered as a global construct , the middle school preservice teachers were significantly better teachers ($F=37.10$; $p,.001$). Before even considering specific teaching components, it was important to consider the overall teaching ability. If teacher educators can develop programs that better prepare preservice teachers for the middle school then all teachers who choose middle school teaching should be prepared in this way. All thirty four preservice teachers who agreed to student teach in a middle school deserved and the learners with whom they worked deserved and even the schools in which they were placed deserved a teacher preparation program that focused on middle level education.

Consensus has been established in the middle school literature on what should be included in a preparation program for middle level teachers (McEwin, 1984). Essentials of middle grades teacher education include:

- * thorough study of the nature and needs of early adolescence
- * middle level curriculum and instruction
- * broad academic background
- * specialized methods and reading courses
- * early and continuing experiences in good middle schools

This study demonstrated that when preservice teachers are prepared in a teacher preparation program which follows these guidelines, preservice teachers are more successful middle level student teachers than those teachers who have been more generally prepared.

In addition to examining teaching as a global construct, it was important to consider the separate components of teaching. The preservice teacher's knowledge base, lesson planning, teaching performance and attitude toward middle level teaching were considered separately in order to analyze how the two groups of teachers were different.

Were there differences in the knowledge base between specifically prepared and generally prepared middle level preservice teachers?

The preservice teacher's knowledge base was examined prior to the student teaching experience. A multiple choice test which utilized *This We Believe*, the cornerstone document of the National Middle School Association, to assess differences between the preservice teachers. The specifically prepared preservice teachers scored significantly higher on a knowledge test which included questions about adolescent development, about responsive middle school instructional practices and about the middle school organizational patterns ($t=9.15$; $p<.001$). It seemed reasonable to expect the specifically prepared students to know more about adolescent development because their courses were specifically designed to teach adolescent development. The preservice teachers who were prepared for the middle school took a course in young adolescent development that presented developmental theory about students between the ages of 10-14. The textbook used for this course (Dacey, 1984) focused on the physical, social-emotional and intellectual development of the young adolescent. The goal of this course was to increase the preservice teacher's awareness and understanding of the theory, research, and knowledge about the characteristics and developmental needs of the early adolescent child. Objectives of the course included the students ability to:

1. become familiar with the literature descriptive of competing theories that contribute to understanding early adolescence.
2. operationalize strategies for collecting information about the early adolescent.
3. develop an operational knowledge of the range of physical characteristics of the focus age group.
4. develop an operational knowledge of the range of cognitive characteristics of the focus age group.
5. understand the importance of and recognize the important changes that occur in self-concept/esteem during early adolescence.
6. clarify the important influence the peer group has on early adolescent behavior.
7. understand how moral judgment occurs by interpreting the major theories of moral development and relating them to observed changes in behavior of adolescents.
8. understand the significance of and the confusion associated with the changing role of the early adolescent in American society.
9. recognize the effects of multicultural diversity in a pluralistic society and its relationship to early adolescent development.
10. recognize the effects of individual variation in the development of the early adolescent.

A requirement of this course was that each student prepare and present a case study of a young adolescent whom they shadowed for an entire day and worked with in the school placement for a ten week period. The preservice teachers in this preparation program reported that getting to know a young adolescent and in some cases discussing that young adolescent with his parents and his teachers helped to understand the young adolescent. The opportunity to study young adolescent theory and to apply this theory to practice made the preservice teachers report themselves cognizant of adolescent development, as demonstrated on the belief survey. In addition to the developmental psychology text, each student was required to read *Turning Points*. This report informed the students about the current status of young adolescent education.

This specifically prepared preservice middle school teacher was not prepared for elementary school or secondary school. Each of these fourteen preservice teachers was eligible for 1-8 certification but each of these

preservice teachers was prepared for teaching specifically in the middle grades. If the teacher with the middle school preparation program had been called upon to teach at the elementary level, the teacher may well have lacked the knowledge base that those generalists possessed.

The generally prepared teachers took a course in learning theory which stressed child development. Child development for these preservice teachers included all children. The textbook used (Woolfolk, 1989) was geared toward learning and teaching theory for grades K-12. The class was composed of learners who intended to teach grades K-12. The goal of this course was to increase preservice teacher awareness and understanding of school aged learning development and its relation to individual diversity and teacher effectiveness. This broader look at development did not allow the preservice teacher to focus on the young adolescent.

According to the Scales' study, 89% of deans of education and 68% of middle school teachers believed that middle school teachers need a different knowledge base than elementary or secondary teachers. Middle grade teachers agreed that knowledge of adolescent social-emotional development, intellectual development stages, and physical development stages are prerequisites for middle grades teachers (Scales, 1991). These specifically prepared preservice teachers, then, had an unfair advantage over the generally prepared preservice teachers in that they had been prepared to answer the questions on the knowledge questionnaire while the generally prepared students had not. The scores of the generalist ranged from 13 to 22. The scores of the specialists ranged from 20 to 26. The highest general score (22) nearly matched the best specialist score (20). I had the opportunity to listen to students as they discussed the knowledge base questionnaire. The middle school preservice teachers were comparing answers and made comments like "I cannot believe I missed that one." This was familiar material to them. The generalists were uninformed about young adolescent terminology and wondered "where those terms came from." Terms like secular trend, personal fable and imaginary audience had been introduced to the specifically prepared teachers but were unfamiliar to the generally prepared preservice teachers. In

observing the differences in the way the two groups of preservice teachers responded to the items on the knowledge base questionnaire, it seemed significant that one group, the specifically prepared preservice teachers, was much more familiar with the content and with the terminology. Young adolescents should be taught by teachers who are comfortable with them and with their development.

I believe and the literature on the middle school and on the young adolescent indicates that teachers at the middle level need armed with this knowledge about the development of the young adolescent. It is imperative that teachers base instruction on what we know about young adolescents (Irvin, 1992). Perhaps if general knowledge about all school age learners had been compared for the two groups, the specifically prepared students would not have scored as well. But these students teachers were not teaching the general school population. They were teaching at the middle level.

Were there differences in planning between specifically prepared and generally prepared middle level preservice teacher

The specifically prepared preservice teachers studied teaching strategies which were recommended for middle level learners. They were required to take a general methods course which focused on these teaching strategies and utilized a textbook which was published by the National Middle School Association (Shur, 1989, *Dynamite in the Classroom*,). This course identified and required the preservice teacher to become familiar with teaching strategies which the research recommended as appropriate for middle level learners. The preservice teachers were then required to implement these strategies in their field experiences.

A middle school foundations course was also required of each specifically prepared preservice teacher. This course presented the structure of the middle school and introduced the match that needed to exist between the school, the teaching strategies which teachers employ and the learner's

developmental level. The students collaborated to prepare and present descriptions of a variety of middle school arrangements.

The specifically prepared preservice teachers spent all four terms of their teacher preparation program in middle school field placements. The advanced field placements were supervised by cooperating teachers who were committed to the middle level. The students were introduced to the National Middle School Association as a resource and as a support system. Each of the preservice teachers was required to become a member of NMSA in order that they would become familiar with the publications of this educational organization.

The generally prepared preservice teachers were required to take a general methods course which focused on teaching methods appropriate for all learners. The goal of this general methods course designed for all preservice teachers in any teacher preparation program was to increase the preservice teacher awareness and understanding of school aged learning development and its relation to individual diversity and teacher effectiveness. Teaching strategies were presented without a focus on a specific level, but with a general focus on kindergarten through twelfth grade teaching.

The generally prepared preservice teachers had a minimum of one field placement at a middle school. The majority of the generally prepared preservice teachers had one additional field placement at a middle school. This study shows that familiarity with middle level schools and recommended middle school practices leads to appropriate strategies and better understanding of the learner.

The specialists included more appropriate instructional practices in their lesson plans than did the generalists. Interdisciplinary teaching was utilized by 79% of the specialists and 30% of the generalists. Active participation was utilized by 100% of the specialists and 65% of the generalists. Varied instructional practices were utilized by 64% of the specialists and 20% of the generalists. Attention to affective development was utilized by 64% of the specialists and 15% of the generalists.

Some commonality existed between the two groups in their use of instructional practices. Both groups of preservice teachers included flexible

grouping in their lesson plans; 79% of the specialists and 70% of the generalists. The middle school literature talks about the students need to interact with a variety of learners and the vast continuum of abilities that exist among these learners and within a single learner. The middle school literature recommends that a variety of flexible grouping practices be implemented at the middle level. The myriad patterns and rates of early adolescent development suggest a great need for multiple approaches to grouping. Young adolescents should be grouped with different learners for different subjects to both learn from one another and to become accepting and appreciate of one another's strengths and weaknesses. Limiting the young adolescent to one group for instruction does not allow for the great diversity that exists among middle level learners.

Problem solving and decision making were among the most commonly included instructional practices. Seventy nine percent of the specialists and 70% of the generalists utilized this strategy. Critical thinking and problem solving are being stressed in K-12 education and in the middle school literature so it seemed likely that all preservice teachers would develop lesson plans which included these instructional strategies. The middle school literature has stressed this as the time when the young adolescent is making fateful choices which will carry into his adult years. Many youths today first experiment with tobacco, alcohol, and illicit drugs during early adolescence. For example, 92% of the high school class of 1987 had begun drinking before graduating; of those, 56% had begun drinking in the sixth to ninth grades and 36% in the tenth to twelfth grades. These data do not include those youth who dropped out before graduating high school, a population prone to early use of alcohol and drugs (Turning Points, 1989). Teachers familiar with the middle school literature would include problem solving in daily lessons to help the young adolescent make these fateful choices. Preservice teachers were not asked why they included particular strategies in their lesson plans. Whether they were following the current thinking in educational practices or whether they were aware of current thinking in middle school literature, it makes sense that preservice teachers included problem solving in their lesson plans.

The greatest difference between the two groups could be seen in their attention to affective development. The middle school concept has, from the beginning, been closely identified with the idea of affective education and the school's responsibility to assist in social and emotional growth as well as academic growth. Learning to accept and be accepted by others is a vital task in early adolescence. Early adolescents are searching for self-identity amid confused sex role models, a changing environment, and the impact of puberty (James, 1980). The seeming turmoil that often accompanies the physical, social, and emotional development requires teacher understanding and accommodation and teachers who are prepared to deal with these non-academic aspects of education.

The specifically prepared preservice teachers were required to take a course in classroom management. The goal of the course was to allow the preservice middle school teachers to examine their role as a teacher in facilitating student learning. The emphasis was on student problems in the classroom and how the classroom teacher could help the learner find answers to the problems. The course utilized simulations on student problems and allowed the preservice teachers to get practice in working with the affective development of the young adolescent. The preservice teachers opportunity to examine the non-academic aspects of the classroom provided preparation in affective development. The curriculum of the generally prepared preservice middle school teachers did not include a course which emphasized the non-academic aspects of the classroom.

When the field placement for student teaching included an advisory period in the curriculum, the specifically prepared preservice teacher was likely to ask to teach during this period. When the field placement school for student teaching did not include an advisory plan in the curriculum, the specifically prepared preservice teacher was likely to include attention to affective development in some other lesson. Examples of this were when one specifically prepared teacher used a story in language arts as a vehicle to discuss the pressures that the young adolescents could identify in their own lives or when a preservice teacher teaching science used a lesson in the food

chain to discuss the responsibilities that the learner had for his own physical and emotional well being. These strategies were not accidental but rather that affective development was an essential part of the lesson. The generally prepared preservice teachers were not familiar with the advisory period as this is unique to the middle school and thus were not prepared for this attention to affective development. For preservice teachers to include recommended middle school practices in their lesson plans is translating theory into practice. For those student who have not been introduced into theory, this translation is not a reasonable expectation.

The specialists included active participation in almost every lesson. Active participation helps the young adolescent to develop the capacity to interpret symbols and deal with verbal ideas and allows the role of the classroom teacher to be that of the diagnostician, resource person, facilitator, and evaluator rather than information giver. The generalists, particularly those preparing for 7-12 certification, were much more likely to include lecturing as an instructional strategy. The middle school literature maintains that the majority of middle level learners do not learn best through lecture and that it is to be used minimally.

Few of the student teachers from either group included cooperative learning in their lesson plans; 29% of the specialists and 10% of the generalists. This strategy is recommended in the literature and both the Woolfolk book and the Schur book give examples of cooperative learning strategies. I believe that preservice teachers may be reluctant to rely on this strategy because it requires expert classroom management skills. Beginning teachers do not have management experience and are more likely to rely on more traditional teaching strategies.

Examining the lesson plans of thirty- four preservice teachers provided the opportunity to examine those strategies that preservice teachers use to teach middle level learners.

Were there differences in teaching performance between specifically prepared and generally prepared preservice middle school teachers?

When a specifically prepared middle school student teacher was asked to provide the researcher with a date when a videotape might be made of their "best" teaching performance, the preservice teacher was likely to lament about how difficult it would be to prepare a lesson where the student would be involved in activities in a concrete manner. When a generally prepared middle school student teacher was asked to provide a date and time when a videotape might be made of their "best" teaching performance, the preservice teacher would be likely to think out loud about their best behaved students. In other words, the specially prepared students knew what worked, what the literature recommended without being reminded. They realized what successful middle level teaching entailed. The generally prepared teachers considered what would make them appear to be a teacher in control of the classroom and the subject matter. This demonstrated a lack of confidence on the part of the preservice teacher; the generally prepared preservice teachers seemed more concerned with their own survival and less concerned with the needs of the learners.

Most of the student teachers had some nervousness at the prospect of being videotaped. The generally prepared student teachers were much more likely to ask advice about the lesson which they were teaching. These preservice teachers did not know what was the "right" way to teach their middle level learners. Many intuitively or through bad experiences in trying to teach middle school learners using traditional teaching strategies made comments like; "they really don't learn by lecture" or "they really are much more interested in their peers than in learning." These observations were made rather tenuously and almost in question form. It seemed as though these preservice teachers were attempting to determine what was normal young adolescent behavior as they taught. It was difficult for the generally prepared preservice teachers to translate their recent observations and reflections into classroom behaviors. While their experiences told them that it was not a great lesson when they taught mixed numbers by using the overhead projector to lecture to their middle level learners, they did not have alternate instructional strategies

on which to rely. If these preservice teachers were knowledgeable about the developmental level of their learners, they would have gone in to student teaching with a greater ability to provide lessons with appropriate instructional strategies for their learners. Those preservice teachers who had been introduced to the theory concerning young adolescent developmental level and middle level teaching practices were better prepared for middle level teaching.

McEwin & Thomason (1989) state that an essential characteristic of middle grades teachers is a cognizance of and acceptance of young adolescent behavior. Teachers who are unaware of or unable to accommodate early adolescent behavior can create tremendous barriers to educational change in the middle school. Teachers who have a thorough knowledge of the normal and expected behavior of their cliental make sound educational decisions concerning the balance between teacher-directed and student initiated activities.

Specifically prepared preservice teachers were rated more highly than generally prepared preservice teachers in every behavior listed as critical to successful middle level teaching ($t=4.60$; $p,.001$). One rater explained that the teachers who were rated more highly in one area often received a higher rating in most other areas. "Some student teachers just seemed to enjoy what they were doing much more than other student teachers." After the rating of the tapes was completed, the two raters had a brief opportunity to discuss the teaching performances. They enjoyed discussing the teaching performances. The two evaluators agreed that a particular teacher was "great" or they remarked on a "great lesson." While the lessons were rated on individual characteristics, the better teaching performances had an overall higher quality about them according to the evaluators.

Both groups of preservice teachers were rated highly for knowledge of the subject; the generalists received a 2.6 out of a possible 3 and the specialists a 2.9. Since the preservice teachers knew they would be videotaped and, in fact, chose the lesson to have taped, it was not surprising that they were rated highly in subject knowledge. The preservice teachers had the opportunity to

choose subjects with which they were comfortable and to rehearse the material before being videotaped.

There was a wide difference between the specifically prepared teachers and the generally prepared teachers in their ability to listen to students and to accept students; the generalists received a 1.7 and the specialists a 2.8. The young adolescent's need for acceptance and for contacts with significant adults who listen to the student had been stressed to the specifically prepared teachers. This has been a foundation of the middle school movement. The emphasis on middle level field experiences gave the specifically prepared preservice teachers more opportunity to become familiar with young adolescent behaviors and competencies.

The specifically prepared student teachers were much more likely than the generally prepared student teachers to use concrete materials; a score of 2.5 as compared to a score of .7. In fact when the specifically prepared teachers were asked to prepare to be videotaped, their frequent response was to groan that they had to get one of those "hands-on" lessons ready.

Specifically prepared teachers used mirrors to teach angles, soda cups from a fast food to teach liquid measurement, and role plays to teach the food chain. Elementary prepared teachers were more likely than secondary teachers to utilize concrete materials such as a collage to illustrate the 1920's. It was clear from a review of the tapes that the secondary preservice teachers were much more likely to use the lecture method of teaching than any other student teacher.

Neither group of learners diagnosed individual learning needs; the specialists scored .9 out of 3 and the generalists scored a .7 out of 3. Perhaps having a lesson videotaped does not encourage this kind of individualized instruction. Perhaps the preservice student teachers were not prepared for diagnostic intervention.

The specifically prepared teachers were more likely to vary instruction than the generally prepared teachers; the specialists scored a 2.5 and the generalists a 1.6. *This We Believe* states that "a short attention span, difficulty in concentration, and the restlessness which accompanies changing physical

bodies precludes learning modules which extend much beyond 15-20 minutes" (p.18). The specifically prepared teachers were required to vary materials when they taught lessons in association with various methods courses and they continued to vary materials in their lesson plans.

The videotaped performances of preservice middle school teachers demonstrated that those teachers who had been specifically prepared for the middle school displayed behaviors and competencies more appropriate to middle level learners.

Were there differences in the beliefs of specifically prepared and generally prepared middle level preservice teachers?

The preservice teachers' attitudes toward middle level teaching were significantly different ($t = 16.11$; $p, .001$). These attitudes of the groups remained amazingly consistent before and after student teaching. Initially, I had expected to see a great deal of change relative to student teaching, especially among the generally prepared preservice teachers who had not experienced much time in the field with young adolescents prior to student teaching. Student teaching and field experiences have emerged as an entrenched and widely accepted component of teacher preparation. Noted educators such as Conant (1963) and Andrews (1964) have described field experiences as the most important element in professional development and student teaching as the most universally approved education course. These assertions are supported by teacher's consistently high ratings of student teaching as the single most beneficial segment of their teacher preparation program (Appleberry, 1976).

When investigating reasons that there had not been change in attitude and beliefs during the course of the student teaching experience, it was necessary to examine the research on teacher development. Those who select teaching as a career exhibit developmental stages. These stages and accompanying professional skills, knowledge, behaviors, attitudes and concerns impact how a teacher would respond to questions about the professional beliefs which the teacher possesses. Burden (1980) investigating

the theories of Francis Fuller and her associates (1969) proposed that there might be at least three developmental stages. The length of time that each teacher might spend in any one stage can vary greatly. Teachers in stage one, the survival stage, are mainly concerned about surviving, as they realize the discrepancy between their anticipated success and the realities of the classroom. During this initial stage, which occurs during student teaching and in the first year of teaching the teachers reported their limited knowledge of teaching activities and the teaching environment. They felt that they had little professional insight: they lacked confidence; and found themselves conforming to preconceived notions which they possessed. Their main concerns were classroom management and issues of control. In stage two, the adjustment stage, the teacher began to focus on individual children and differentiate specific tasks and skills to be mastered. This stage can occur during the second year and continue into the fourth year. The third stage, the mature stage, comprised the fifth and subsequent years of teaching. Teachers in this stage felt they had a command on teaching. They were more secure and more willing to try new teaching methods. It was in this mature stage that the teacher gradually abandoned their former image of "teacher" and considered new beliefs and philosophies.

The preservice teachers in this study were all in stage one of teaching. The beliefs and attitudes with which they entered teaching were unlikely to change over the ten week period of student teaching. The influence of their cooperating served more to provide emotional support and modeling of teaching skills rather than mold a belief system about teaching, generally, and middle level teaching, specifically.

The specifically prepared preservice teachers entered student teaching possessing strong beliefs about the middle school movement and teaching appropriate for middle level learners. One hundred percent of these preservice teachers agreed that they understood the middle school philosophy. These attitudes were developed throughout their teacher preparation program. This understanding and these beliefs in the middle school philosophy were reinforced by one another and their contact with the university supervisor who

was proponent of the middle school concept. The generally prepared preservice teachers entered student teaching unfamiliar with the middle schools concept. Only thirty percent of these preservice teachers agreed that they understood the middle school philosophy. The university supervisors of the generally prepared preservice teachers also supervised preservice teachers in elementary schools and secondary schools and had neither commitment to or knowledge of middle school philosophy. The supervisor in this case was not a model who presented the commitment to the education of the young adolescent.

The preservice teacher's reliance on the cohort group and association with a role model was an intentional component of the middle level preparation program. The structure of the preparation program modeled the recommendations for middle level education. In the literature relative to middle schools (Turning Points, 1989), smallness is next to godliness. It is considered essential that the middle school student is part of a small cohort group in the larger structure of the middle school. It is essential that the middle level student be supported by an adult role model who serves an advocate for the student and as a role model. The structure of the middle level program at Ohio State provided that the specifically prepared middle level teacher was placed within a smaller cohort group of preservice teachers whose goal was to teach at the middle level. These preservice teachers thought middle level learners were "cool." They worked with university instructors who were supportive of the middle school concept. Their university program coordinator served to provide consistent support and encouragement for their specific level of teaching. This support began upon their entrance in the program and continued throughout the student teaching experience. Their beliefs and attitudes toward middle level teaching developed over a two year period rather than a ten week period. This structure modeled the recommended structure for middle level learners and allowed them to know how a good middle school program would work.

Perhaps if these generally prepared preservice teachers had spent a longer time with middle level learners, they would have felt more strongly committed to this age level. The idea of commitment emerged most vividly from

an examination of the responses to the attitude survey. Those preservice teachers who were prepared specifically for middle level teaching were unanimous in their strong agreement that they would "accept only a middle level position." Not one of the generally prepared preservice teachers made this strong statement; and only one of this group even agreed with this statement. Joan Lipsitz, summarizing her study of four successful middle schools, offered, "One essential ingredient that is not always replicated but should be: teachers must want to be where they are" (1984, p.200). If one believes, as does Joan Lipsitz, that middle level teachers must be committed to middle level teaching and must want to be where they are, then this declaration of commitment assumes even greater importance.

Two recent studies support the importance of the middle level teacher's level of commitment. Connor spent the last year surveying, interviewing and shadowing 32 outstanding middle level teachers throughout the country. While each teacher demonstrated a unique style, each teacher attributed teaching success to "an attitude of commitment (Connor, 1992, p.48)." This characteristic emerged above all others in describing the outstanding teachers. When George and Stevenson (1989) solicited principals' views on what constituted the best teachers, the principals described these teachers as embodying "commitment, respect and understanding ... in their relationships with students (p.24).

Twenty five percent of the generally prepared preservice teachers and 79% of the specifically prepared preservice teachers "strongly agreed" with the statement "I understand young adolescents." Early in the middle school movement, William Alexander pointed out that "it is the nature of the student...which differentiates teaching at the middle level from any other level" (Alexander, 1968, p.83). One study of middle school and junior high teachers reported that teachers with the greatest understanding of adolescent development preferred teaching at the middle level, while teachers with the least understanding would prefer to teach at another level (Timmer, 1977). Teachers who understand young adolescent development are more likely to

least understanding would prefer to teach at another level (Timmer, 1977). Teachers who understand young adolescent development are more likely to accept them for who they are. This acceptance is essential to middle level learners.

All of the specifically prepared student teachers reported that they planned to teach at the middle level, while only fifty percent of the generally prepared preservice teachers planned to teach at the middle level. The generally prepared preservice teachers had other levels with whom they had worked and with whom they felt comfortable teaching. They did not demonstrate the commitment to this level of teaching as powerfully as did the specifically prepared preservice teachers. If seventh and eighth grades are chosen last among teachers and if even those who student teach at the middle grades do not plan to teach in the middle grades, the likelihood of getting teachers at the middle level who really want to be there seems remote, especially if teacher preparation programs continue to prepare teachers generally.

The specifically prepared preservice teachers were in complete agreement that their college courses, field placements and their teacher preparation program had prepared them for middle level teaching. One hundred percent of the specialists believed that their teacher preparation program had prepared them for middle level teaching while seventy percent of the generalists disagreed that their teacher preparation program had prepared them for middle level teaching. This belief that one is prepared to teach empower teachers to be successful. The lack of preparation, likewise, reduces the teachers sense of ableness, the confidence in the ability to teach. This is a time of doubt for many middle level learners; the teacher must be less concerned with power and the teacher's own ego and more secure in the ability to teach and relate to learners.

McEwin and Thomason (1989) believe that middle grades teachers should have a strong self-concept. The middle grade teachers' responses to the attitude questionnaire indicate a strong professional self concept. They believed that they were prepared to teach at the middle level (100%). They

the middle level(100%). They believed that their teacher preparation program had prepared them to teach at the middle level (100%). They believed that they understood young adolescents (100%). They believed that they could implement strategies appropriate to middle level learners (100%).

According to the Scales' study, 72% of the deans of colleges of education believed that middle grades teachers ought to be prepared differently than elementary or secondary teachers. Only 40% of middle grades teachers in the Scales' study agreed that middle grades teachers needed different preparation than elementary or secondary teachers. The thirty four preservice teachers in this study were in agreement, 100% of the specifically prepared "strongly agreed" and 85% of the generally prepared either "agreed" or "strongly agreed" that teachers should be prepared, specifically, to teach at the middle level.

Each of the specifically prepared preservice teachers reported themselves familiar with the literature and publications of the National Middle School Association, while only 10% of the generally prepared preservice teachers agreed that they were familiar with this organization and its literature. If one considers that each of these preservice teachers taught at a school called a middle school, and the influence that the National Middle School Association has had on the history of the development of the middle school, it appears that the teacher preparation program has not sufficiently prepared the teacher for the teaching assignment. On both the level of professional knowledge and the level of curriculum and materials support, every teacher who is eligible for middle school teaching should be familiar with this organization and its publications. Four of specifically prepared preservice teachers found themselves in a school which was trying to implement some of the organizational practices and instructional strategies recommended by the National Middle School Association. The teachers at this school seemed to lack curriculum support. The preservice teachers were able to make the Middle School Journal available to these teachers. The teachers in the middle school were appreciative of the resources that they then found available. Most of these teachers had been teaching before the middle school concept was defined or

empirically researched. It is the role of the university to provide preservice teachers and, indirectly, local education agencies the current knowledge in education. By providing the local education agencies with preservice teachers who are not current in the educational theories and findings such as the middle school concept and related studies, the university is not honoring its commitment to local education agencies.

In placing the autumn quarter preservice teachers at local educational agencies, two out of the three principals in middle schools where specifically prepared student teachers had been placed responded that they would prefer only student teachers who were specifically prepared for the middle school. This was an unsolicited request. Those educational leaders in the middle schools were impressed by the ability of preservice teachers who were specifically prepared for this level of teaching.

Conclusions;

The recent study by Peter Scales at the Center for Early Adolescence states that the first and second priorities for middle grade leaders is to make a more convincing empirical case for special preparation so that more preservice teachers want to enroll in special programs, and to help make a number of programs understand what it is that they must do to prepare teacher for the middle years (p. 9). Analyzing the differences between preservice teachers who have been enrolled in a special middle level teacher preparation program and preservice teachers who have been enrolled in a general teacher preparation program; examining the differences between what these teachers know, how they plan, how they teach and especially, what they believe; and, describing a manner in which this preparation can successfully be carried out makes a convincing argument for specific middle level teachers.

The middle school movement is not temporary. No other school curriculum change in the history of education has been as extensive or sustained as long as the middle school movement (The College of Education Middle School Task Force, The Ohio State University, 1990). This movement is

dependent on educators at the university and in the schools who are prepared for teaching at this level. This analysis demonstrates that colleges of education can prepare teachers who are prepared for teaching young adolescents and, most importantly, are committed to these learners.

State certification requirements can hasten middle level teacher preparation. For example, in 1981 only two of nine Kentucky teacher education institutions reported programs for middle level education. Following Kentucky's adoption of middle level certification in 1984, 13 out of 14 institutions reported having middle level teacher preparation programs (McEwin, 1988). I do not believe that middle level teacher certification should be the responsibility of the state, however. Institutions which prepare teachers must take leadership in preparing the best teachers for this nation's schools. This preparation must take into account what is known about learners and about instructional strategies. The middle school concept is not new. It is grounded on developmental theory and on descriptive studies of the components of effective middle schools and on the behaviors and competencies of effective middle school teachers. There are many unknowns in education but how to teach young adolescents is known. Institutions which prepare teachers cannot allow their own lethargy or adherence to tradition to prevent preservice teachers from learning appropriate middle level teaching practices. Institutions as formidable and as capable of providing leadership such as The Ohio State University must not take the path of least resistance and prepare middle level teachers under the guise of elementary certification. Those who study middle school literature and have spent time with young adolescents know that the middle years are separate and unique from the elementary and secondary years. The educational community at the university should not need the continual prodding of classroom teachers to address the middle years.

A separate middle level teacher preparation program should exist which prepares teachers to work with learners during this critical time. The elementary teacher preparation program must focus on the breadth of content. This fails the middle level teacher who is most often teaching one or two subject areas and must have more depth of content. It is unfair to expect an elementary prepared

preservice teacher to have the subject expertise that is required to teach middle level learners. While secondary prepared teachers have subject depth, their unwillingness and lack of preparation to deal with the non-academic needs of the young adolescent do not make them ideal for middle level teaching. It has been my experience that often secondary teachers have chosen this level of teaching because of their interest in the subject matter rather than the learner. The learner must be the primary consideration of the middle level teacher.

Institutions which prepare teachers must forge a new level of teacher preparation that is built on the unique qualities and needs of the young adolescent. If the agricultural community had researched a way to ease world hunger and was not utilizing this research in concrete and tangible ways, it would be a transgression of the research. The educational community knows through the research that there is a way to prepare teachers for working with young adolescents and yet institutions which prepare teachers are not utilizing this research to prepare teachers in the best way possible. It is the responsibility of institutions which prepare teachers to reconceptualize middle level education.

Leaders in teacher education must take the initiative in restructuring programs that prepare teachers to teach young adolescents. Teacher preparation programs must prepare preservice teachers who are responsive to the needs of young adolescents. Whether these programs would be directed toward a K-4, 5-8, and 9-12 configuration, a K-4, 5-9, 9-12 configuration or a similar configuration is not the critical issue. What is critical is that the organizational pattern would provide specific preparation for the middle level. The teacher preparation program would include a thorough understanding of middle level learners, appropriate instructional and organizational practices for these learners, a content depth in at least two areas, and field placements that represent the best in middle school practice. These components have been agreed upon by theorists and practitioners. This study has proven that these components enable a preservice teacher to appropriately teach middle level learners. These components teach the preservice middle school teacher how to teach at the middle level. If our middle level preservice teachers do not

understand young adolescent development, can not implement instructional strategies responsive to this development, do not possess a knowledge of the middle school concept and have not experienced middle level learners in their preservice teacher preparation program field experiences, they are not prepared to be a middle level teachers.

This study demonstrates that when teachers are specifically prepared for middle level teaching through their coursework, their field experiences, and their teaching models, they are better prepared for middle level teaching and more committed to working with young adolescents. Research on effective middle level schools indicates that teachers and administrators in these schools have a strong belief system that sets them apart from elementary and secondary teachers (Lipsitz, 1981). This analysis indicates that a specific teacher preparation program sets middle level preservice teachers apart from teachers generally prepared for the elementary or secondary school.

The middle years are a critical time in the development of the learner and it is equally critical that institutions which prepare teachers are providing these learners with teachers who understand them, want to teach them, and have been prepared to teach them. This is the duty of the teacher preparation program.

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APPENDIX A
Knowledge Base Questionnaire

PLEASE COMPLETE THIS QUESTIONNAIRE WHICH WILL HELP EVALUATE MIDDLE SCHOOL TEACHER PREPARATION.

Please circle your best answer.

1. The phase of life occurring between childhood and late adolescence warrants the label
 - a. transitional.
 - b. unique.
 - c. stressful.
 - d. innovational.
2. During the years from approximately 10 to 14, physical differences are
 - a. greater than at any other time of life.
 - b. greater than at any time of life with the exception of toddler years.
 - c. delayed because of so many body changes.
 - d. Within relatively similar boundaries of steady growth.
3. The middle school concept is primarily concerned with
 - a. grade level organization
 - b. subject matter organization
 - c. three tiered teacher preparation.
 - d. needs of learners.
4. In terms of present medical research, the vast majority of young adolescents are contained in
 - a. grades six through eight
 - b. grades seven through nine
 - c. grades five through seven
 - d. grades six through nine
5. The timing of development during early adolescence is likely to result in personality adjustments that continue into adult life. Of greatest concern are
 - a. late maturing males and early maturing females.
 - b. early maturing males and early maturing females.
 - c. late maturing males and late maturing females.
 - d. early maturing males and late maturing females.
6. The phrase "secular trend" describes the tendency of the young adolescent to
 - a. become involved in cults.
 - b. experiment with sex.
 - c. begin menarche earlier.
 - d. experience secondary sex characteristics.
7. Which of the following is NOT indicative of sexual maturation
 - a. uniformity of body measurements
 - b. growth of genitalia
 - c. continued breast development
 - d. appearance of pubic hair
8. Young adolescents desire to make personal choices but final authority resides in
 - a. the peer group.
 - b. family and other adult bases.
 - c. societal expectations.
 - d. the individual.
9. Individuality is often surrendered during early adolescence to
 - a. promote cooperation
 - b. demonstrate self confidence
 - c. assert independence
 - d. gain acceptance

10. Young adolescents vacillate between
 - a. the desire for regulation and for self direction.
 - b. the need for authority and for regulation.
 - c. the search for power and for attention.
 - d. the need for security and for standards.
11. During early adolescence, conventional moral thinking tends to dominate. In conventional morality
 - a. personal needs determine right or wrong.
 - b. good is determined by socially agreed upon standards of individual rights.
 - c. rules are obeyed to avoid punishment.
 - d. judgement is based on others' approval.
12. The following are NOT normal manifestations of adolescent adjustment to personal growth patterns and relationships to adults
 - a. shifts and variations of mood
 - b. emotional outbursts
 - c. rebellion towards adults
 - d. diminished responses to anything with sexual implications
13. The brain spurt and brain plateau research suggests that
 - a. periods of higher level thinking and periods of consolidation of previously learned information should be expected.
 - b. the young adolescent should not be presented with new information.
 - c. the young adolescent is capable of formal operations.
 - d. periods of preoperational thinking will alternate with periods of informal operations.
14. Young adolescents prefer
 - a. passive reciprocity.
 - b. predictable teaching strategies.
 - c. active involvement.
 - c. structured learning strategies.
15. Which of the following are aspects of the young adolescent's heightened egocentrism as identified by David Elkind?
 - a. the imaginary audience and the personal fable
 - b. the false bravado and the personal fable
 - c. the imaginary audience and the false self
 - d. the personal fable and the false bravado
16. Teachers should, generally, assume shorter rather than longer periods of focus because
 - a. young adolescents do not have long term memory.
 - b. young adolescents are unable to concentrate.
 - c. interests, attention span, and concentration alter during young adolescence.
 - d. slow rate and fast rate learners accelerate learning.
17. According to Erikson, the central task of the young adolescent is
 - a. the search for identity.
 - b. the achievement of formal operations
 - c. the development of career paths.
 - d. the unity of physical and emotional and social growth.

18. The middle school concept is an educational response to
 - a. the demographic patterns in the United States.
 - b. societal pressures to produce responsible citizens.
 - c. the failure of the junior high school.
 - d. the needs and characteristics of the young adolescent.
19. Which of the following is NOT an essential criterion of middle school teachers?
 - a. genuine desire to teach this age group
 - b. knowledge of what is normal for these learners
 - c. attention to affective aspects of education
 - d. ability to know one subject area exclusively
20. True middle school curriculum is based on
 - a. academic goals.
 - b. societal expectations.
 - c. needs and characteristics of young adolescents.
 - d. noncognitive objectives.
21. There are three basic types of team teaching. These include all EXCEPT
 - a. interdisciplinary teams.
 - b. core/combination teams.
 - c. self contained teams.
 - d. disciplinary teams.
22. The position of the middle school is uniquely important in the educational sequence because
 - a. middle school content contains basic skills.
 - b. middle school balances the humane and the academic.
 - c. the instructional process is central.
 - d. the climate for learning is positive.
23. What is the most appropriate organization at the middle school?
 - a. departmentalized homogeneous group
 - b. developmental age grouping.
 - c. heterogeneous grouping.
 - d. varied organizational arrangements.
24. Which of the following characteristics of early adolescence does NOT provide a foundation for instructional strategies in the middle school?
 - a. importance of peer relationships
 - b. need for individual attention
 - c. ability to assume responsibility
 - d. uniformly paced instruction
25. Exploratory courses support the need of the young adolescent to
 - a. experience career decisions.
 - b. learn about peers.
 - c. satisfy their rapid changing interests and curiosity.
 - d. meet the need for relevancy in education.
26. The advisor/advisee or home based programs support the idea that
 - a. schools should provide counseling services for young adolescents.
 - b. guidance counselors have too many students.
 - c. every student should know and be known by a significant adult.
 - d. affective education comes first.

27. Which of the following is NOT a purpose of advisement and counseling in the middle school?
- increased self awareness
 - more participation in activities
 - consideration of values
 - need to deal with various school or peer related problems
28. An evaluation procedures compatible with nature of young adolescents is
- responsive report cards.
 - criterion referenced grades.
 - norm referenced grades.
 - percentile grading.
29. Interdisciplinary team planning is an attempt by a team of teachers to
- make learning relevant
 - utilize flexible scheduling
 - implement innovations at the middle level
 - correlate organized knowledge, skills, and personal development topics in the curricula
30. A positive middle school climate
- varies from classroom to classroom within a school.
 - takes its lead from the building principal.
 - is secondary to instruction.
 - does not impact on school effectiveness

Name _____ Phone number _____

Please list your major _____

Please name your area(s) of concentration _____

Please name your advisor or strand coordinator _____

Please name your university supervisor _____

Please list any field experiences while enrolled in teacher preparation

Which grade was your first choice for student teaching? K 1 2 3 4 5 6 7 8 9 10 11 12

Which grade was your second choice for student teaching? K 1 2 3 4 5 6 7 8 9 10 11 12

Which grade was your third choice for student teaching? K 1 2 3 4 5 6 7 8 9 10 11 12

List your student teaching school and grade assignment. _____

APPENDIX B
Attitude Survey

Please answer the following questions by circling the most appropriate response.

1. I plan to teach at the middle level.

Strongly agree agree disagree strongly disagree

2. While I would prefer to teach at the middle level, I will apply for any teaching position.

Strongly agree agree disagree strongly disagree

3. I will accept only a middle level position.

Strongly agree agree disagree strongly disagree

4. I am prepared to teach at the middle level.

Strongly agree agree disagree strongly disagree

5. My field experiences have prepared me to teach at the middle level.

Strongly agree agree disagree strongly disagree

6. My college courses have prepared me to teach at the middle level.

Strongly agree agree disagree strongly disagree

7. My teacher preparation program has prepared me for middle level teaching.

Strongly agree agree disagree strongly disagree

8. I understand young adolescents.

Strongly agree agree disagree strongly disagree

9. I can implement teaching strategies appropriate to middle level learners.

Strongly agree agree disagree strongly disagree

10. I understand the middle school philosophy.

Strongly agree agree disagree strongly disagree

11. Teacher should be prepared, specifically, to teach at the middle school.

Strongly agree agree disagree strongly disagree

12. I am familiar with the literature and publications produced by the National Middle School Association.

Strongly agree agree disagree strongly disagree

APPENDIX C
Videotaped Evaluation Form

Criteria checklist for video from *What Research Says to the Middle Level Practitioner* (Johnston & Markle, 1988 pp.16-18)

Rate each characteristic from

3 Highly visible 2 Somewhat visible
1 Slightly visible 0 Not evident

1. Demonstrates warmth 3 2 1 0
Teachers who seek contact with students, use affectionate words, smile and look pleasant are generally regarded as more effective. Teacher displays of warmth are important because teachers who like students and show it tend to have students who like each other.
2. Is enthusiastic 3 2 1 0
Effective teachers are vigorous in their presentations and involved in the activities of the class. They tend to use gestures and avoid "reading" prepared lessons.
3. Is flexible 3 2 1 0
These teachers can change the focus in the middle of a lesson if the students become bored or disinterested; they adjust easily to changes in plans, time schedules, absence or student behavior.
4. Is spontaneous 3 2 1 0
Spontaneous teachers can capitalize on unexpected incidents that arise in class. They also tend to encourage student expression and do not avoid situations which deviate from planned activities.
5. Accepts students 3 2 1 0
Accepting teachers avoid criticism, not refusing to tell a student he is right or wrong, but by using sincere and frequent statements of approval. These teachers are disinclined to berate or belittle children in front of others or to display negative perceptions publicly.
6. Demonstrates awareness of developmental level 3 2 1 0
They assign tasks appropriate to a student's ability and adjust tasks when students become confused or uncertain. They show less tendency to push students into activities for which they are not ready, and they express less bewilderment over student inability to perform tasks.
7. Demonstrates knowledge of subject matter 3 2 1 0
Knowledgeable teachers are able to structure lessons and alter instruction on the basis of student needs. They are able to monitor learning and engage students in instructional activities related to significant concepts.
8. Uses a variety of instructional activities and materials 3 2 1 0
These teachers are able to vary instruction in accordance with individual student learning styles.
9. Structures instruction 3 2 1 0
Teachers who spend time discussing, explaining and stimulating cognitive processes in organized ways encourage greater pupil performance. They tend to review previous lessons, outlining main topics of planned lessons, signaling the beginning and endings of lessons, underscoring important points and summarizing. These teachers are less likely to begin lessons without organizing them, change activities abruptly, or begin new topics without summarizing previous ones.

10. Monitors learning

3 2 1 0

These teachers check test papers and student work in order to adjust instruction. They also move about the room observing students and making suggestions. In lieu of "busy work," they use extra time for creative, social, or interest-directed activities.

11. Uses concrete materials and focused learning strategies

3 2 1 0

These teachers use models, objects, and visual aids to provoke imagery; attend to the manipulation of concrete images before moving to formal operations; and focus student attention on problem-solving situations.

12. Asks varied questions

3 2 1 0

Using both higher order and lower order questions, in appropriate situations, produces improved student performance. Using a variety of question types for maximizing instructional effectiveness is preferable to relying on a single type of question.

13. Incorporates indirectness in teaching

3 2 1 0

Indirect teachers build on student statements, praise students, encourage student talk, and minimize criticism, lecture, and confusion.

14. Incorporates "success building" behavior in teaching

3 2 1 0

Success oriented teachers use positive reinforcers, encouragement, and praise of student work. They are disinclined to use sarcasm, shame, and harassment.

15. Diagnoses individual learning needs and prescribe individual instruction

3 2 1 0

More effective teachers monitor the completion of tasks, perceive various learning rates and allow adequate time for completion. They design interest-based learning tasks, define expectations on an individual basis, and allow for independent and small group activities. They also demonstrate less of a tendency to teach an entire class the same lesson and to grade on a group standard.

16. Listens

3 2 1 0

Teachers who listen to students, attend to and build upon student thoughts and expressions. They acknowledge student input by summarizing what was said and by avoiding the appearance of preoccupation.

APPENDIX D
Videotaped Shortened Form

Video Checklist: Rate each characteristic. Number_____

	3 Highly visible	2 Somewhat visible		
	1 Slightly visible	0 Not evident		
1. Demonstrates warmth	3	2	1	0
2. Is enthusiastic	3	2	1	0
3. Is flexible	3	2	1	0
4. Is spontaneous	3	2	1	0
5. Accepts students	3	2	1	0
6. Demonstrates awareness of developmental level	3	2	1	0
7. Demonstrates knowledge of subject matter	3	2	1	0
8. Uses a variety of instructional activities and materials	3	2	1	0
9. Structures instruction	3	2	1	0
10. Monitors learning	3	2	1	0
11. Uses concrete materials and focused learning strategies	3	2	1	0
12. Asks varied questions	3	2	1	0
13. Incorporates indirectness in teaching	3	2	1	0
14. Incorporates "success building" behavior in teaching	3	2	1	0
15. Diagnoses individual learning needs and prescribes individual instruction	3	2	1	0
16. Listens	3	2	1	0

APPENDIX E
Lesson Plan Checklist

CRITERIA FOR THE LESSON PLANS

Count how many teaching strategies which have been identified as "responsive to young adolescents" are evident in the ten lesson plans.

Student teacher preparation middle school_____ general_____

_____	1	Cooperative learning	
_____	2	Interdisciplinary or multidisciplinary teaching
reference to other subjects
relevancy to world issues considered
teaching across the curriculum such skills as
reading, listening, speaking and writing	
_____	3	Active participation
hands on activities and concrete activities	
_____	4	Varied instructional practices
no activity lasting more than twenty minutes
activity variation	
_____	5	Attention to affective development
issues that talk to the social/emotional
development of the young adolescent
opportunities for counseling and guidance
activities	
_____	6	Varied evaluative strategies
discussion games questioning
student writing quizzes other	
_____	7	Opportunities for problem solving, decision
making and leadership	
_____	8	Flexible grouping
works with small groups of learners
utilizes flexible grouping
uses heterogeneous grouping	

TOTAL NUMBER OF RESPONSIVE PRACTICES _____