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An analysis of the implementation of the essential elements in accredited Montana middle schools

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An Analysis of the Implementation of the Essential Elements

in Accredited Montana Middle Schools

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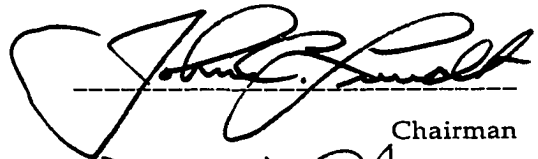
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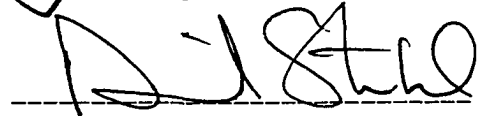
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An Analysis of the Implementation of the Essential Elements in Accredited Montana Middle Schools.

Adviser: Dr. John C. Lundt

This descriptive study, involving quantitative methodology, was conducted to determine administrative and teacher perceptions of the level of implementation and degree of importance of the essential elements of developmentally responsive middle schools, as defined by the National Middle School Association in their position paper, This We Believe. The principal and two faculty members of the 32 accredited middle schools in Montana were surveyed to provide data relative to the research questions. Respondents also provided their perceptions of the barriers which obstruct the implementation of these elements. Twenty-seven principals, or 84%, and 39, or 59% of the teachers responded. A composite response rate of 69% replied to items on the survey instrument.

Frequency distribution and independent sample t-tests established statistical significance ($p \leq .05$), of the relationships of respondent groups relative to the research questions. Non independent sample t-tests established statistical significance between respondents perceptions of implementation, importance, and barriers.

Quantitative data analysis led to these conclusions:

1. None of the twelve essential elements was implemented in Montana middle schools to the level described in the professional literature. All of the essential elements were implemented at a moderate level in Montana middle schools.

2. Eleven of the twelve essential elements were perceived as "very important" to the success of Montana middle schools. The remaining element was considered to be "important."

3. None of the twenty-six barriers listed on the survey instrument were perceived as "serious" barriers by respondents. A majority of the listed barriers were identified as "moderate." Approximately one-fourth of the barriers were considered "not a factor."

4. There was little statistical difference in the perceptions of administrators and faculty relative to any of the data collected on the survey instrument.

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CHAPTER 1

INTRODUCTION

Background of the Study

At the close of the 20th century, American education is on the precipice of dramatic change. The dawn of the information age and recent advances in technology radically alter the method and means of instructional delivery. A cacophony of voices emanating from every point of the compass clamors for a comprehensive analysis of current educational practices. Reform is the latest buzzword at educational conferences at all levels. It seems as though no segment of the educational community is immune from the critical eye of reform.

One of the leading reform activities is the current middle school movement, a reform idea that has been able to sustain itself "...in a period in which other educational innovations became increasingly less viable" (George & Shewey, 1994, p. 115). The middle school movement has emerged as a response to a number of significant studies related to the education of young adolescents (Carnegie Council, 1989; Epstein & Mac Iver, 1990; George & Shewey, 1994). At the core of these studies is an attendant philosophy of "...child centeredness and learning strategies that actively involve the student" (Wiles & Bondi, 1993, p. 2).

An educational program designed to meet the unique needs of the young adolescent has not consistently been the case in the development and implementation of middle level education. Early attempts at middle level education did not aim to serve "...distinctly different functions than the

grammar or high school" (George & Alexander, 1993, p. 24). These attempts, termed junior high schools, were frequently housed in old high school buildings and despite the good intentions of a student focused curriculum, were often indistinguishable from the high school and the traditional content-focused curriculum (Wiles & Bondi, 1993, p.7).

Concern about the perceived failure of the traditional school organizational configuration (kindergarten through eighth grade and ninth through 12th grade, often referred to as an 8-4 model) is regarded as the primary reason for the rapid expansion of the junior high school model (Clark & Clark, 1994, p. 7). A number of factors contributed to these concerns, criticism of the 8-4 model of education continued to mount, and served to promote the rapid acceptance of the junior high model (Briggs, 1920; as cited in Clark & Clark, 1994, pp 7-8). Conditions described by Briggs include the tremendous expansion of the number of high schools, changes in social and industrial life, an unparalleled increase in children continuing school beyond the elementary grades, the necessity of a more highly differentiated curriculum, demands for increased budget support programs, and the undefined function and purpose of schools (Briggs, 1920; as cited in Clark & Clark, 1994, pp 7-8). Additional conditions included economy of time, concerns for high school mortality (drop-out rates), wide variations in learners, and needs of young adolescents were forces responsible for the establishment of the junior high school (Koos, 1927; as cited in Clark & Clark, 1994, p. 8).

Junior high schools enjoyed a period of rapid growth from their early acceptance in the 1920's until the mid 1960's. George and Alexander (1993,

p. 25) reported that four out of every five high school graduates attended an 8-4 school organization in 1920. Forty years later, in 1960, the authors reported that four out of every five high school graduates attended a 6-3-3 educational system consisting of kindergarten through sixth grade, seventh through ninth grade, and 10th through 12th grade (George & Alexander, 1993. p. 25).

Despite the rapid growth and general acceptance of the junior high school model, the 6-3-3 organizational plan was itself facing increased criticism. Demands for reform of the junior high school model emerged following Russia's launch of Sputnik in 1957 and intensified with the onset of racial integration in the 1960's (Wiles & Bondi, 1993, p. 7). Curriculum developers like Alexander, Lounsbury, and Vars capitalized on the opportunity this criticism created and envisioned a different organizational pattern, one designed to achieve many of the original aims of middle level education. They envisioned an educational model less controlled by the high school and freer to adapt to the real needs of older children and young adolescents (George, Stevenson, Thomason, & Beane, 1992, p. 6).

Based on a pedagogical vision of an educational setting focused on the unique needs of the early adolescent learner, the reformed middle school began to emerge in the mid-1960's (George & Alexander, 1993, p. 8). Acceptance of the middle school concept quickly flourished. McEwin and Alexander revealed a five-fold increase in the number of middle schools from a total of 1,101 in 1968 to as many as 5,566 in 1986 (McEwin & Alexander, as cited in George & Alexander, 1993, p. 29).

A number of other societal factors contributed to the development of middle level education. Wiles and Bondi cite four factors which led to the

emergence of the middle school as a viable educational option (Wiles &
Bondi, 1993, p. 8). First, the late 1950's and early 1960's were filled with
commentary of American schools and the quality of U. S. education. This
criticism of the previously accepted junior high model focused on the belief
that the junior high had abandoned the original philosophy of a child-
focused curriculum and adopted the departmentalized, content-focused
curriculum which closely resembled that of the senior high school. The
proliferation of the junior high school model resulted in "...schools with the
name (junior high) and corresponding grade organization, but with little
implementation of the original programmatic goals" (George, et .al., 1992,
p. 7).

A second factor was a national effort to eliminate racial segregation. In
many school districts, educational leaders discovered that school
reorganization, to a middle school format, could significantly increase the
level of school desegregation (George, et. al., 1992, p. 7). Busing to achieve
racial balance and the subsequent expansion of suburban areas - what
Eichhorn termed "white flight" - resulted in the need to create new schools
and provided the middle school concept with a reason for change. (Eichhorn,
1991, p. 3)

A third factor contributing to the development of the reformed middle
level school was an increase in the number of school-age children which
resulted in more overcrowded classrooms. Many school districts opted for a
plan to construct new high schools and house the newly formed middle
school in the existing high school building. Such plans were generally
regarded as both politically and fiscally expedient.

The fourth factor, cited by Wiles and Bondi, was what became known as the "bandwagon effect" (Wiles & Bondi, 1993, p. 8). Many schools were reorganized around the reformed middle school concept because other schools in the region were adopting this organizational plan and as a result reformed middle schools became the thing to do (George & Alexander, 1993, p. 31).

In many instances, middle schools were established as a school district's response to population and/or infrastructure problems brought on by changing enrollment patterns or because "Other districts have middle schools and we should too" (Wiles & Bondi, 1993, p. 9). Whatever the rationale for the adoption of the middle school name, a number of educational leaders seized upon this reform effort to operationalize an educational setting designed to address the specific physical, cognitive, and psychosocial needs of the ten to fourteen year old learner.

The identification of these specific needs and their implications for middle level education resulted in a reform effort, grounded in the realities of adolescent growth and development (Lounsbury, 1969). The middle school concept was intended to bridge the gap between elementary and secondary education (Valentine, Clark, Irvin, Keefe, & Melton, 1993, p. 125). From this reform effort a set of "common elements," typical of exemplary middle level programs, gradually reached national consensus (Lounsbury, 1996, p.2). These "essential components" have evolved over the past three decades and currently represent an educational response to the needs and characteristics of youngsters during early adolescence (National Middle School Association, 1995).

Middle level education in Montana has paralleled the national trend for part of the past three decades. As has been typical in other regions of the nation, the middle school movement in Montana has often been the result of school district student population difficulties and school building dilemmas. The expansion of the middle school movement in Montana and the corresponding national consensus of "essential elements" of exemplary middle schools establishes a need to determine the level of implementation of these essential practices in Montana middle schools.

Statement of the Purpose

This study investigated the extent to which the essential elements of developmentally responsive middle schools, as identified in the literature, are regarded as important and are subsequently practiced in accredited Montana middle schools. Principal and teacher perceptions provided the data regarding the level of importance and degree of implementation of the essential elements. Further, this investigation sought to identify the barriers encountered by Montana middle school administrators and teachers in attempting to implement the essential elements of developmentally responsive middle schools.

Research Questions

The specific questions addressed in this study will be:

1. To what extent do middle school <u>administrators</u> believe the essential elements of developmentally responsive middle schools, as identified in the literature, are <u>important</u>?

2. To what extent do middle school <u>teachers</u> believe the essential elements of developmentally responsive middle schools, as identified by the literature, are <u>important</u>?

3. To what extent do middle school <u>administrators</u> believe the essential elements of developmentally responsive middle schools, as identified in the literature, are currently <u>implemented</u> in their middle school?

4. To what extent do middle school <u>teachers</u> believe the essential elements of developmentally responsive middle schools, as identified in the literature, are currently <u>implemented</u> in their middle school?

5. What do middle school <u>administrators</u> perceive as <u>barriers</u> to the implementation of essential elements of developmentally responsive middle schools in their school?

6. What do middle school <u>teachers</u> identify as <u>barriers</u> to the successful implementation of essential elements of developmentally responsive middle schools in their school?

Significance of the Study

The Carnegie Council on Adolescent Development's Task Force on Education of Young Adolescents estimated that one in four American youth between the ages of 10 and 17 were "extremely vulnerable to multiple high risk behaviors and school failure" and "another one fourth of them [were] at moderate risk" (Carnegie Council, 1989, p. 6). It is not unreasonable to consider that one forth of Montana youngsters between 10 and 17 are at similar risk. Finding a means of addressing this alarming statistic is of critical

importance to Montana, as well as the rest of the nation.

Middle level education is potentially society's most powerful force to recapture millions of "at-risk youth" and stave off the "...specter of a society divided on one hand into an affluent, well educated group and a poorer, ill-educated on the other" (Carnegie Council, 1989, p. 8). This study analyzed the degree to which accredited Montana middle schools were utilizing the essential elements of developmentally responsive middle schools to address this state and national concern. This information may assist educators in identifying areas of concern in Montana middle schools, lead to clearer understanding of what middle school practitioners regard as essential elements of developmentally responsive middle schools in Montana, highlight perceived and recognized obstacles to the implementation of theses essential elements, and ultimately provide direction for future improvements to middle level education in Montana.

Definition of Terms

In this study several terms were used which had specific or special meaning. For the purpose of this study the terms were defined as follows:

Montana middle school: This phrase was used to identify those schools included in the study and listed in the 1998 Montana Office of Public Instruction Directory Listing of Accredited Middle Schools. This identification was based solely on the criteria determined by the Montana Office of Public Instruction and no attempt was made on the part of the researcher to identify any specific commitment to a middle school philosophy or operation other than that required by the Montana Office of Public Instruction.

Essential elements of developmentally responsive middle schools: In this study, this phrase described those characteristics of middle school educational programs identified and selected from the literature, which distinguish middle level education from elementary, junior high school, and secondary education programs.

Transescent: This term identified those individuals in the study undergoing transescence, defined by Eichhorn as:

> ...the stage of development which begins prior to the onset of puberty and extends through the early stages of adolescence. Since puberty does not occur for all precisely at the same chronological age in human development, the transescent designation is based on the many physical, social, emotional, and intellectual changes in body chemistry that appear prior to the puberty cycle to the time in which the body gains a practical degree of stabilization over these complex pubescent changes (Eichhorn, 1987, p. 3).

Limitations of the Study

1. The results of this study were only applicable to accredited Montana middle schools. No attempt has been made to include schools which were not identified by the Montana Office of Public Instruction as accredited middle schools; therefore the results were not inferred to any other school designation such as K-8 schools, elementary schools, or traditional 7-9 junior high schools. The generalizability of the findings of the study to other educational levels and schools is limited.

2. The findings of the study applied only to those essential elements of

developmentally responsive middle schools as identified in the design of the study and were not generalized to other middle level features not specifically addressed in the study.

3. The findings of the study were based on the <u>perceptions</u> of the respondents relative to the identified essential elements of developmentally responsive middle schools and may not reflect the <u>actual practices</u> in the schools.

4. The degree of implementation of essential elements of developmentally responsive middle school was measured by Part A of the Middle School Questionnaire of Essential Elements (MSQE[2]). Perceived barriers to implementation of these practices were determined by Part B of the same instrument.

<u>Delimitations of the Study</u>

1. This study involved administrators and teaching faculty of those schools identified by the Montana Office of Public Instruction as accredited middle schools in the State of Montana. Findings of the study were based solely on their responses to items included in the survey questionnaire.

2. This study included only those schools identified by the Montana Office of Public Instruction as accredited public middle schools. No attempt was made to include other middle level designations or non-public schools.

3. The study relied upon the following definition of middle schools as provided by the Montana Office of Public Instruction:

Rule 10.55.902 Basic Education Program: Middle School

(1) A middle school, as defined in ARM 10.13.201 differs from a junior high school because middle school philosophy specifically addresses the unique nature of middle school children by focusing on their intellectual, social, emotional, and physical development. To put such philosophy into practice, a middle school must have flexibility to approach instruction and teaching in a variety of ways, to undertake interdisciplinary work, and to plan blocks of coursework deriving from the intellectual, social, emotional, and physical needs of middle school students.

(2) A middle school shall have an education program that gives students the opportunity to meet the learner goals as defined in ARM 10.55.602 in the program areas listed in subsection (5) at the appropriate levels.

(3) A middle school minimum curriculum shall include the subjects below and maintain them in balance. Critical and creative thinking, career awareness, lifelong learning, and safety will be incorporated in the school program.

(4) Schools using this standard to incorporate flexibility in quest of a quality program shall document the program with curriculum guides, class schedules, and other means to maintain balance among and within the disciplines outlined below. Such documentation shall be reviewed by the Office of Public Instruction and approved by the State Board of Public Education. The middle school curriculum must fall within the continuum of skills that are part of the K-12 program in

all disciplines.

(5) If the middle school program for grades 7 and 8 is funded at high school rates, the program shall include:

(a) visual arts, including, but not limited to, art history, art criticism, aesthetic perception, and production;

(b) English language arts: including, but not limited to, literature, language study, reading, writing, listening, speaking, and thinking;

(c) Health enhancement;

(d) Social studies;

(e) Mathematics: including, but not limited to, written and mental computation and problem solving;

(f) Music: including, but not limited to, general, instrumental, and vocal (emphasizing comprehensive music elements, music history, criticism, aesthetic perception, and musical production);

(g) Physical and life science;

(h) vocational/practical arts such as agriculture, business education, home economics, industrial arts, and marketing;

(i) exploratory courses such as creative writing, dance, drama, and photography;

(j) A second language (Montana Board of Public Education, 1999, Chapter 55-10).

Summary

The progress of the middle school movement has been an important and progressive attempt at organizational change in American schools over

part of the past three decades. Concerns linger regarding the level of implementation of middle school concepts which have been identified as essential elements in the professional literature.

This study was designed to determine the current perceptions of principals and teachers in accredited Montana middle schools relative to the level of importance and degree of implementation of the essential elements of developmentally responsive middle schools. This study, furthermore, sought to identify the barriers to implementation of these essential elements as perceived by those same principals and teachers.

CHAPTER TWO

REVIEW OF THE LITERATURE

The History of Middle Level Education

An understanding of middle level education requires an understanding of the multi-tiered system which has dominated American education for the better part of its contemporary existence. Early American schools set in a sparsely populated agrarian society were primarily family affairs requiring little formal internal grouping. A variety of educational models, many patterned after European schools, materialized in various regions of the emerging nation. With the dawning of the Industrial Age and the development of larger more populated communities, the need for a more diverse and responsive education system was born.

In the 19th century, American education had emerged as a single track from the elementary grades through college (Pulliam, 1991, p. 117). For unspecified reasons, two distinct levels of education (the 8-4 plan), began to evolve in the middle of the 19th century (George & Alexander, 1993, p. 24).

In 1892, the Committee of Ten of the National Education Committee (NEA), chaired by Harvard University President Charles W. Eliot, attempted to achieve standardization for high schools by advocating a curriculum that stressed mental discipline and a stronger program of college preparation. In its final report, the committee stated:

> In preparing these programmes, the Committee were perfectly aware
> that it is impossible of make a satisfactory secondary school
> programme, limited to a period of four years, and founded on the

present elementary school subjects and methods. In the opinion of the Committee, several subjects now reserved for high school, --such as a algebra, geometry, natural science, and foreign languages, --should be begun earlier than now, and therefore within the schools classified as elementary; or as an alternative, the secondary school period should be made to begin two years earlier than present, leaving six years instead of eight for the elementary school period. Under the present organization, elementary subjects and elementary methods are, in the judgment of the Committee, kept in use too long (NEA, 1893. p. 45).

The adoption of this curriculum intended to incorporate the content-focused curriculum of the high school into the final two grades of elementary school. One of the primary aims of this design was to better prepare students for the demands of post-secondary education. As a result, this curriculum outlined a program intended for a select group of primarily privileged, college bound students. The program was roundly criticized by educational leaders like G. Stanley Hall for its failure to address the needs of the majority of the high school population which was not college bound.

Following its inception in 1893, the National Education Association's Committee of Fifteen advocated an elementary or "grammar" school which stressed "...good English usage including literature, United States history, geography, writing, physical science, arithmetic, and music" (Pulliam, 1991, p. 117). These recommendations effectively standardized the curriculum of self-contained classrooms for all elementary schools throughout the nation. As a result of the recommendations of these two committees, a question began to emerge as to the best placement of the early adolescent learner in the

educational hierarchy.

In 1899, the Committee on College Entrance Requirements proposed a program which suggested six years of elementary education and a six year secondary program. This represented one of the earliest evidences of consideration of the needs of adolescent learner as a factor in the design and implementation of the curriculum. This committee also noted that:

> ...the seventh grade, rather than the ninth, is the natural turning-point in the pupil's life, as the age of adolescence demands new methods and wiser direction (NEA, 1899, p. 31).

The NEA Commission on the Reorganization of Secondary Education, meeting in 1911, developed the Cardinal Principles of Secondary Education (Pulliam, 1991, p. 122). These principals "...stressed guidance, a wide variety of subject offerings, adaption of content and methods to the ability and interests of the students, and flexibility of organization and administration" (Pulliam, 1991, p. 122). The Cardinal Principles of Secondary Education had the net effect of creating a more comprehensive approach to secondary education rather than the college preparatory program advocated in the recommendations of the Committee of Ten.

Comprehensive high schools - designed to meet the needs of a variety of students - regardless of their post-secondary interests - were quite different from the college preparatory, mental discipline model advocated by the Committee of Ten. Vocational programs, along with the more traditional college preparatory courses were developed as the demand for a more highly skilled and trained work force increased.

In 1913, the Committee of the National Council of Education on

Economy of Time in Education recommended the establishment of an intermediate school level within the secondary program. Interestingly, the first junior high schools were reported to have been established for the 1909-10 school year in Columbus, Ohio and Berkeley, California, two years prior to the recommendations of this group (Lounsbury, 1969, p. 3).

As a result of changes proposed by the educational community in the early part of the 20th century, education in America evolved from primarily a two-tiered design (the 8-4 plan) to a 6-3-3 model of education. With this format, the first six grades were regarded as elementary years, the middle three years were identified as junior high school, and the final three years termed high school. This model was one of the first attempts at a program designed specifically for middle level learner.

According to experts, "Contemporary educational programs in the United States are adaptations of historic forms and ideas" (Wiles & Bondi, 1993, p. 2). Teaching and learning strategies, more personal and active in nature, were the findings of enlightened European scholars like Rousseau, Pestalozzi, and Froebels; and teachers endeavored to take advantage of them. An educational approach designed to address the needs of the early adolescent learner required a greater understanding of the unique characteristics of the learner at this level. The work of G. Stanley Hall is regarded as a significant influence leading to the growth of the junior high school (Eichhorn, 1987). Hall was generally credited with the first major study of adolescent youth. His research provided scientific support to the child-centered approach emerging at the turn of the century. Hall's work _Adolescence_ (1904) convinced many educators of the need to understand the mental, physical, and emotional

development of adolescence when making decisions about curriculum content and pedagogical methods (Glatthorn, 1987).

Hall held the period of adolescence to be the most critical for the future of man and regarded the onset of adolescence as a "new birth" (Hall, 1904). As the leader of the child-study movement, Hall focused attention on the stressful period between childhood and adolescence. He noted that "...the beginning of the adolescent period marked an acceleration in the development of the intellect" (Hall, 1904) and suggested a special school environment which would focus on the years separating early from later adolescence.

The development of the child-focused approach to education began to take hold in the 1920's and was championed by John Dewey. This child-focused approach became known as the Progressive Movement. Dewey's child-centered approach to education required "...psychological insight into the child's capabilities, interests, and habits," thus the need for an educational program designed around the special needs and interests of the early adolescent was born (Wiles & Bondi, 1993, p. 3).

The earliest attempts at reorganization of adolescent education resulted in the development of the junior high model. Gruhn and Douglass, in the 1940's reported the historical functions of the junior high school as:

Integration:

Designed to help students use the skills, attitudes, and understandings previously acquired and integrate them into effective and wholesome behavior.

Exploration:

To lead pupils to discover and explore their specialized interests, aptitudes, and abilities as a basis for decisions regarding educational opportunities.

To lead pupils to discover and explore their specialized interests, aptitudes, and abilities as a basis for present and future vocational decisions.

To stimulate pupils and provide opportunities for them to develop a continually widening range of cultural, social, civic, avocational, and recreational interests.

To help pupils identify interests in school which will provide motivation for them to continue their formal education and to participate in educational activities that are appropriate for their individual growth and development.

Guidance:

To assist pupils to make intelligent decisions regarding present educational activities and opportunities and to prepare them to make future educational decisions.

To assist pupils to make intelligent decisions regarding present vocational opportunities and to prepare them to make future vocational decisions.

To assist pupils to make satisfactory mental, emotional, and social adjustments in their growth toward wholesome, well-adjusted personalities.

To stimulate and prepare pupils to participate as effectively as

possible in learning activities so that they may reach the fullest development of their individual interests and talents.

Differentiation:

To provide differentiated educational facilities and opportunities suited to their varying backgrounds, interests, aptitudes, abilities, personalities, and needs of pupils, in order that each pupil may realize most economically and completely the ultimate aims of education.

To provide learning activities in all areas of the educational program which will be challenging, satisfying, and at a level of achievement appropriate for pupils of different backgrounds, interests, abilities, and needs.

Socialization:

To provide increasingly for learning experiences which will prepare pupils to participate in and contribute to our present complex society and help them adjust to future developments in that society.

To provide learning experiences which will prepare pupils for effective and satisfying participation as responsible citizens in our democratic society, both at their present level of maturity and, later, as adult citizens.

To provide learning experiences which will prepare pupils for participation in an effective and mature manner in the activities of young adolescents and, later, as older adolescents and adults.

To help pupils appreciate, understand, and function effectively in a society in which there are individuals with different interests,

abilities, backgrounds, and educational and vocational goals.

<u>Articulation</u>:

To provide a gradual transition from preadolescent education to an educational program suited to the needs and interests of adolescent boys and girls.

To help pupils acquire backgrounds and skills which will prepare them to participate effectively in the educational activities and programs at their present school level and, later, in the upper secondary school and post-secondary schools, and adult life. (Gruhn & Douglass, 1971, pp. 75-76).

By the mid-1950's the junior high school, with its grade 7-9 organization and attendant statement of functions, had become a well recognized and accepted component of the educational structure. The content-based, departmentalized philosophy of the high school model strongly influenced the development of the junior high, and a school designed to meet the needs of a developmentally unique learner was slow to materialize. It has been suggested that a developmentally appropriate philosophy was rarely the basis for most educational decisions.

While an age-appropriate curriculum was a concern in the development of the junior high school, many educational scholars agreed that administrative urgency was the most likely rationale for its inception (George & Alexander, 1993; George, et. al., 1992; Wiles & Bondi, 1993). A dramatic increase in the number of school age children following World War I created overcrowded elementary and high schools (George & Alexander, 1993, p. 25). Nationally, many school districts responded to this burgeoning

school population by creating a new educational level, typically between the sixth and 10th grade years. The growth and popularity of the junior high model would continue to grow from approximately 400 of these schools in 1920 to nearly 6,500 by the mid-1950's (Wiles & Bondi, 1993, p. 5).

This seemingly rapid acceptance and growth of the junior high school concept was not without its critics. The transition from an 8-4 model of education to a 6-3-3 educational system served to ease the overcrowding many school districts were experiencing, however, in too many instances the design did little to address the specific needs of the early adolescent. Curriculum continued to be "...content based and academically oriented," rather than student-centered (Kilcrease & Jones, 1995, p. 2). More often than not the building which housed this unique age group student was an older, existing high school (George & Alexander, 1993, p. 25). These content driven courses were organized along the traditional Carnegie unit model of a six period day consisting of approximately 50 minutes per period. Little effort was made to design an age appropriate, middle level program. Critics frequently cited the resultant junior high model of middle level education as nothing more than a scaled down version of the traditional senior high program. Kindred (1968, pp 29-30) summarized a number of criticisms of the junior high school:

> 1. The junior high school tended to pattern itself after the senior high. Evidence of this can be seen in the extension of departmentalization downward to include grade seven, in the extracurricular fanfare associated with interscholastic athletics and marching band, and in class scheduling. In fact, it has become a high

school of junior pupils.

2. Pressures on the junior high school to place more emphasis upon academic subjects, such as mathematics, science, and foreign languages, has meant less time and energy for homemaking, industrial arts, dramatics, and fine arts--subjects which are equally important in a general education program.

3. Study assignments and homework loads have increased considerably due to the thrust downward of senior high school subjects, the amounts given are detrimental to the physical and mental health of junior high school pupils.

4. The traditional contention that the junior high school should get pupils ready for the senior high has meant mastery of content and skills in limited areas at the expense of a broad, exploratory program.

5. The complexity of the junior high school with its departmentalization, interscholastic contests, multiple rules and regulations, large student bodies, detailed schedules, stress on command of subject matter, and outmoded psychology of learning have made it difficult for pupils to adjust and find the necessary satisfactions wanted in a school situation. In consequence, this condition has multiplied and intensified problems connected with normal growth and development.

6. Junior high school programs today are badly out of line in many instances with the needs of the preadolescent and early adolescent youngster.

7. Quite often junior high school teachers are dissatisfied with

their assignment, preferring instead to be on the senior high school staff. They express this sense of dissatisfaction in their relationship with pupils and fail to exercise the patience and tact required for working successfully with them.

8. The junior high school is often housed in a former senior high school building or an old elementary building. Neither of these buildings are suitable for meeting the requirements of a modern junior high school program. Actually, the needs, interests, and abilities of pupils are sacrificed because of forced conformity to existing facilities.

9. Since the ninth grade is closely tied to the senior high school with reference to subject offerings and units of credit for college admission, the fundamental purposes and functions of the junior high school are divided as well as is its program; it is, in reality, two schools under one roof.

10. In six-year junior high schools (junior-senior high schools), it is common to administer the entire six years as a single unit. There is, however, some separation of activities for the junior and senior schools. But even where this is done, the danger persists that proportionately more attention may be given to pupils in the upper three grades and that the pupils in the lower three grades may have more difficulty in acquiring the use of facilities. Instances are legion where the better facilities and teachers are the prior claim of the senior high school.

11. Two year junior high schools leave much to be desired. They are not only difficult for teachers to know pupils when half of the

pupils are new each year but also require that the pupils grow from the position of follower to that of leader in a brief period of time.

Criticism of the junior high model continued to mount and a "second generation" of intermediate level educators began to formulate plans for a middle level program designed to address the unique concerns of the age group (Wiles & Bondi, 1993 p. 8). In the 1960's, under the leadership of William Alexander, the framework of a middle level education program, designed to address the unique needs of the early adolescent, encompassing the grades five through eight or six through eight, was advanced as an alternative to the seventh through ninth grade junior high school (Lounsbury, 1996, p. 2). The middle school model envisioned not only a "...reorganization of the physical aspects of middle grade education, but also at recapturing the original educational goals that had fostered the development of the junior high in the early 1900's" (Kilcrease & Jones, 1995, p. 2).

Utilizing an organizational plan (typically fifth or sixth through eighth grades) which eliminated the ninth grade, the reformed middle school "...would be less controlled by the high school and freer to adapt to the needs of older children and young adolescents" (Alexander & Williams, 1965; as cited in George, et al, 1992, p. 6). While grade reorganization has been a key player in middle level reform, it is less important than program development (Eichhorn, 1991). To this end middle level education has sought to identify the physical, intellectual, and psychosocial characteristics and needs of the transescent.

Manning (1993) summarized developmental research on young adolescents with the following list of characteristics of transescents:

Physical Characteristics

      1. Young adolescents experience a growth spurt marked by a rapid increase in body size, as well as readily apparent skeletal and structural changes.

      2. Young adolescents experience the same developmental sequence, but rates and growth spurts vary among individuals.

      3. With the onset of puberty, young adolescents experience physiological changes that include development of the reproductive system.

Cognitive development

      1. Young adolescent's development progresses from Piaget's concrete operations stage to the formal operations stage.

      2. Young adolescents experience gradual changes in thinking that result in considerable diversity in their development.

      3. Young adolescents begin to think hypothetically, abstractly, reflectively, and critically.

      4. Young adolescents begin to develop the ability to make reasoned moral and ethical choices.

Psychosocial development

      1. Young adolescents make friends and interact socially, a characteristic crucial to psychosocial development.

      2. Young adolescents shift their allegiance and affiliation from parents and teachers toward the peer group, which becomes the prime source for standards and models of behavior (Thornburg, 1983).

      3. Young adolescents' preoccupation with themselves leads to

an examination of all aspects of their development and overall "self."

    4. Young adolescents increasingly seek freedom and independence from adult authority.

    5. Young adolescents experience changing self-esteem, which is influenced by all aspects of their lives - both at home and at school.

These characteristics became the center of the design and implementation of the middle school movement. Early advocates of the middle school philosophy recognized these characteristics as the basis for the design, development, and implementation of middle school curriculum. DeMedio identified the following implications for middle level schools relevant to these physical, intellectual, and psychosocial characteristics:

<u>Physical development</u>

Curricular and organizational practices for young adolescents should:

* Adapt to the constantly changing physical needs of 10 to 14-year old.

* Avoid undue physical and psychological stress on students.

* Emphasize self-understanding and self-acceptance about physical changes.

* Emphasis hands-on activities and experiences, allowing students to move around the classroom to avoid long periods of passive work.

* Stress physical education programs that address fundamentals of movement, physical fitness and lifetime sports.

* Stress physical activities designed to meet individual differences.

* Promote physical activities and daily exercise for all students.

* Emphasize intramural programs for all students and de-emphasize intense competitive interscholastic sports.

* Provide developmentally appropriate sex education programs for all students.

* Provide health programs designed to stress physical development, sound nutrition, proper exercise and personal hygiene.

<u>Cognitive development</u>

Curricular and organizational practices for young adolescents should:

* Adapt to the wide range of cognitive capabilities of students.

* Provide a wide variety of cognitive learning experiences, both concrete and abstract.

* Adapt to the constantly changing interests and limited attention spans of students.

* Stress individualized, cognitively appropriate materials and activities.

* Emphasize the development of problem-solving skills and reflective thinking processes.

* Enable students to explore their interests and talents and to learn how to study.

* Provide social studies experiences that emphasize logic, reasoning and cause-and-effect relationships and de-emphasize mastery of isolated facts and events in chronological order.

* Provide reading experiences that adapt to a number of reading levels and stress holistic rather than skills approaches.

* Provide mathematics and science experiences that emphasize understanding of major concepts and mastery of essential processes and that de-emphasize information acquisition.

* Provide art, music, home arts, and industrial technology experiences that emphasize exploratory, hands-on experiences designed to foster creativity and stimulate interest.

Psychosocial development

Curricular and organizational practices for young adolescents should:

* Adapt to the constantly changing social needs of 10 to 14 year-old.

* Promote social interactions among students of different sexes, cultural, and socioeconomic backgrounds.

* Enable students to interact with their peers in formal and informal situations.

* Provide opportunities for students to be autonomous and accepting of responsibility.

* Provide language arts curriculum that emphasizes social as well as individual aspects of language and usage.

* Provide a social studies curriculum that emphasizes social customs and traditions of various cultures.

* Provide an art, music, home arts, and industrial technology curriculum that emphasizes the social aspects of contemporary 10 to 14- year-old.

* Provide a physical education curriculum that emphasizes both group and individual sports activities on a noncompetitive basis.

* Provide a health curriculum that emphasizes developmentally appropriate materials related to dating and peer relationships.

* Provide a science curriculum that emphasizes the relationship of science to the social progress of human beings (DeMedio, 1991; as

cited in Manning, 1993).

The implementations of these curricular and organizational practices provide a checklist of characteristics of middle level education. The evolution of the key characteristics of middle level education has been deliberate. A number of middle school scholars and significant reports on middle level education have, however, slowly emerged with an increasingly clear and firm national consensus of the essential elements of the most effective middle level schools (George, et al., 1992, p. 9).

Components of Effective Middle Schools (Previous studies)

The middle level education movement was born from the belief that the physical, emotional, social, and mental characteristics of the child caught in a stage of transition between childhood and adulthood (transescents) were unique in the educational continuum (Schurr, 1992). Educators have long recognized this fact and have attempted to address these differences through an educational program which sought to provide a learning opportunity specific to these characteristics and needs. The earliest junior high schools were designed with this fact in mind, though they were largely unresponsive to this need (George, et al, 1992, p. 3).

In the early 1960's the current paradigm of middle level education began to emerge. The guiding premise of this concept was once again to create a curriculum and an educational setting which addressed the unique characteristics of the early adolescent learner (Wiles & Bondi, 1993, p. 9). An educational program designed to respond more readily to the physical, intellectual, social-emotional, and moral needs of early adolescents was

developed (Clark & Clark, 1992). The essential characteristics of middle level education have evolved in an effort to address the changing needs of the early adolescent and often to reflect the shifting demands of society.

Much of the research into middle level education over the past twenty years has focused on identifying the characteristics of effective middle level schools. An accumulated body of knowledge in this area has led to an increasing consensus of these key elements. A number of middle school scholars have addressed the issue of key characteristics of middle level education (Clark & Clark, 1994; George & Alexander, 1993; George & Shewey, 1994; Irvin, Valentine, & Clark, 1994; Lounsbury, 1996; Scales, 1996; and Wiles & Bondi, 1993).

The Unified School District of Montebello, California identified the following list of desirable characteristics of intermediate levels schools in a 1969 report titled, The Golden Age of Education:

1. Team Teaching
2. Non-Gradedness
3. Flexible Scheduling
4. Transition Pattern (from single disciplines to interdisciplinary approaches)
5. School Structure (school within a school possibility)
6. Measurable Objectives
7. Instructional Learning Center (student)
8. Instructional Resource Center (teacher)
9. Individualized Instruction
10. Exploration

11. Pupil Personnel Services Center

12. Innovation

13. Administrative Team

14. Auxiliary Personnel (Unified School District, 1969. pp. 16-17).

Gatewood and Dilg (1970, pp. 2-3) complied a consensus list of 10 desirable middle level characteristics for an Association for Supervision and Curriculum Development (ASCD) report which included the following:

1. A unique program adapted to the needs of the preadolescent and early adolescent learner.

2. The widest possible range of intellectual, social, and physical experiences.

3. Opportunities for exploration and development of fundamental skills needed by all while making allowances for individual learning patterns. It should maintain an atmosphere of basic respect for individual differences.

4. A climate that enables students to develop abilities, find facts, weigh evidence, draw conclusions, determine values, and that keeps their minds open to the new facts.

5. Staff members who recognize and understand the student's needs, interests, backgrounds, motivations, goals, as well as stresses, strains, frustration, and fears.

6. A smooth educational transition between the elementary school and the high school while allowing for the physical and emotional changes taking place due to transescence.

7. An environment where the child, not the program, is most

important and where the opportunity to succeed is ensured for all students.

8. Guidance in the development of mental processes and attitudes needed for constructive citizenship and the development of lifelong competencies and appreciations needed for effective use of leisure.

9. Competent instructional personnel who will strive to understand the students whom they serve and develop professional competencies which are both unique and applicable to the transescent learner.

10. Facilities and time which allow students and teachers an opportunity to achieve the goals of the program to their fullest capabilities.

Riegle (1971, pp. 77-79) identified 18 middle level characteristics which included:

1. Continuous progress

2. Multi-material approach

3. Flexible schedules

4. Appropriate social experiences

5. Appropriate physical activities

6. Intramural activities

7. Team teaching

8. Planned gradualism

9. Exploratory and enrichment studies

10. Guidance services

11. Independent study

12. Basic skill repair and extension

13. Creative experiences

14. Security factor

15. Evaluation

16. Community relations

17. Student services

18. Auxiliary staffing.

Moss (1971, pp. 72-74) observed a number of middle schools and compiled a list of 15 characteristics of effective middle schools:

1. Commitment to the age group (10-14) is evidenced by teachers and administrators.

2. A clearly defined statement of purpose for the middle school has been cooperatively developed.

3. Continual review of the middle school objectives and operation of the curriculum is carried out by teachers, administrators, and students.

4. The guidance program is a total school concern.

5. A block of time or core program is provided for at least two, but preferably for all, years of the middle school.

6. Flexibility is built into the middle school.

7. Personalized learning is a major part of the curriculum.

8. In-depth units are planned for varying ability levels in science, mathematics, the language arts, and social studies.

9. A strong health education program is a major feature of the middle school curriculum.

10. An evaluation program includes student and parent conferences,

letters, and checklists.

11. The arts are given a greater prominence in the curriculum.

12. Physical education activities are related to the developmental characteristics of the middle school students.

13. A wide variety of interest electives, open to all students, are featured in the curriculum.

14. Modern language instruction is provided for all students.

15. Outdoor education programs are the concern of all teachers.

Following an extensive review of the literature, Georgiady and Romano (1973, pp. 238-241) proposed the following 16 questions as definitive of the characteristics of effective middle level schools:

1. Is continuous progress provided for?

2. Is a multi-material approach used?

3. Are class schedules flexible?

4. Are appropriate experiences provided for?

5. Is there an appropriate program of physical education experiences and intramural activities?

6. Is team teaching used?

7. Is planned gradualism provided for?

8. Are exploratory and enrichment studies provided for?

9. Are there adequate and appropriate guidance services?

10. Is there provision for independent study?

11. Is there provision for basic skill repair and extension?

12. Are there activities for creative experiences?

13. Is there full provision for evaluations?

14. Does the program emphasize community relations?

15. Are there adequate provisions for student services?

16. Is there sufficient attention to auxiliary staffing?

Brown (1981, pp. 18-19) compiled a list of 21 characteristics of effective middle level schools from research into effective middle school practices. The following list was subsequently validated by a team of 15 middle school experts:

1. Grade organization

2. Team teaching

3. Instructional planning

4. Student groupings

5. Flexible scheduling

6. Continuous progress

7. Individualized instructions

8. Independent study

9. Instructional materials

10. Basic skills

11. The exploratory strand

12. Creative experiences

13. Reading skill development

14. Social development

15. Intramural sports

16. Focus on growth and development

17. Individualized guidance services

18. Home base programs

19. Values clarification

20. Student evaluation

21. Transition from elementary to high school.

Munsell (1984, pp. 49-50) enlisted the assistance of a panel of recognized experts in the field of middle level education to validate the following list of 18 characteristics of effective middle schools:

1. Continuous progress

2. Variety of instructional strategies and materials

3. Flexible scheduling of time and groups

4. Appropriate social experiences

5. Appropriate physical experiences

6. Intramural activities

7. Interdisciplinary team organization

8. Vertical planning

9. Exploratory studies

10. Guidance services

11. Independent study

12. Basic skill repair and extension

13. Creative experiences

14. Student evaluation practices

15. Community relations programs

16. Student services

17. Auxiliary staffing

18. A staff of educators knowledgeable and committed to transescents.

The National Association of Secondary School Principals (NASSP)

developed the following list of essential elements of middle level education:

    1. Core values

    2. Culture and climate

    3. Student development

    4. Curriculum

    5. Learning and Instruction

    6. School organization

    7. Technology

    8. Teachers

    9. Transition

    10. Principals

    11. Connections

    12. Client centeredness (NASSP, 1985, pp. 2-20).

Binko and Lawlor (1986, p. 83) identified 24 characteristics of effective middle level schools as:

    A. <u>School Climate</u>

        1. Encourage creative ideas by students.

        2. Teachers assume the role of counselors.

        3. Learning activities tailored to the physical needs of adolescents.

        4. Learning activities tailored to the emotional needs of adolescents.

        5. Development of moral values.

        6. Encourage innovative ideas by teacher.

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B. <u>Curriculum</u>

    7. Opportunities for gifted students.

    8. Curriculum emphasizing exploratory study.

    9. Provisions for special interest groups.

    10. Emphasis on basic academic skills.

    11. Emphasis on personal interests.

    12. Differentiate objectives according to ability.

C. <u>Teaching Methods</u>

    13. Emphasis on inquiry, problem solving, and higher level
        cognitive skills.

    14. Opportunities to work in laboratory settings.

    15. Emphasis on multi-media approach.

    16. Balance between small and large group instruction.

    17. Differentiate methods according to ability.

    18. Progress according to student ability.

D. <u>Organization</u>

    19. Written statement of school philosophy.

    20. Emphasis on close working relationships between teachers
        and counselors.

    21. Utilize interdisciplinary team teaching.

    22. Utilize single discipline team teaching.

    23. Utilize non-graded approach.

    24. Provide an adequate transition between elementary and high
        school.

George and Alexander (1993) identify nine common elements of

exemplary middle schools:

1. Classroom-based guidance efforts, often in the form of what have been come to be called advisory programs;

2. Interdisciplinary team organization;

3. Common planning time for the team of teachers,

4. Flexible scheduling, often in a block format,

5. A curriculum emphasizing balanced exploration and solid academics; arrangements which permit the development of longer-term relationships between teachers and the students they teach,

6. Heterogeneous grouping whenever appropriate,

7. Instructional strategies that consider the characteristics of the learner,

8. A wide range of special interest experiences keyed to the development of middle school youth, and

9. Collaboration between and among teachers and administrators as they work to improve middle school programs (as cited in George & Shewey, 1994, p.5).

Wiles and Bondi (1993, pp. 81-82) list the following characteristics of a responsive middle school:

1. A student-centered focus that enhances academic progress.

2. An environment that ensures smooth transitions from elementary to middle school and from middle school to high school.

3. A curriculum focused on students' personal development and on skills for continued learning.

4. Opportunities to develop constructive, meaningful relationships with peers and adults.

5. A focus on students' increasing levels of independence, responsibility, self-discipline, and citizenship through effective decision making.

6. Teachers and administrators who are committed to the education of the emerging adolescent.

7. A variety of evaluation criteria to assess student progress while maintaining academic excellence.

8. An emphasis on developing a safe and caring environment that fosters a genuine interest in learning.

9. Meaningful articulation with parents that encourages their involvement in their children's education.

10. Teachers who are organized into interdisciplinary teams with common planning times and responsibility for the same student population.

11. Teacher-based adviser-advisee programs facilitated by guidance counselors.

12. Flexible scheduling based on blocks of time rather on fixed-length periods.

13. Opportunities for individualized learning that lead to the refinement of existing cognitive and psychomotor skills.

14. A structured exploratory program that includes enrichment, independent study, art, music, career education, foreign language, intramural activities, team activities, and peer-

group activities.

      15. Emphasis on basic skills in reading, writing, mathematics,

      and critical thinking through an integrated curriculum.

Current middle level literature is replete with the contributions of scholars, who have identified key elements of effective middle level education.

Merenbloom (1988) notes the exemplary middle school program intends to

    ...use a block of time to best deliver the educational program to the students, emphasize a guidance and counseling program manned by staff members with a homebase program which stresses the importance of self-concept framed by a positive climate. Middle schools intend to employ teachers who focus on the learning needs of pupils by using appropriate teaching strategies (pp 11-15).

Schurr (1992) has identified "Educators knowledgeable about and committed to teaching the early adolescent" as a key component of exemplary middle schools.

George and Shewey (1994) list;

    ...interdisciplinary team organization, advisory programs, flexible scheduling and grouping, enriched curriculum experiences, more active instruction and learning, articulation to schools above and below, shared decision making, and parent and community involvement as the most central feature of effective schools for early adolescents (p. 62).

Scales (1996, p. 4) lists the characteristics of a developmentally responsive middle school as one in which:

...educators are committed to young adolescents, which has a shared vision, maintains high expectations for all, which has an adult advocate for every student, which cultivates family and community partnerships ,and which creates and maintains a positive school climate.

Clark and Clark (1994, p. 4) define middle level education from five different perspectives:

Purpose: To be developmentally responsive to the special needs of young adolescents.

Uniqueness: A unique, autonomous unit, separate from the elementary school that precedes it and the high school that follows it.

Organization: The inclusion of the grade levels with the largest number of students who are beginning the process of becoming adolescents (any combination of grades five through nine).

Curriculum and Instruction: Content that connects with the everyday lives of students and instruction that involves them in the learning process.

Program: Programs that are developmentally appropriate and include, but are not limited to interdisciplinary teaming, teacher advisories, co-curricular activities, and youth services.

Each of these middle level researchers has contributed to the list of key characteristics of middle level education. The composite body of knowledge in this area ultimately converged into the development of two national

reports. The release of these two national reports has generally been regarded as having had the greatest impact on the identification of the "essential elements" of effective middle level education (Lounsbury, 1996, p. 2). These two national reports, This We Believe, a publication of the National Middle School Association, originally released in 1982, again in 1992 and a subsequent issuance in 1995, presented twelve essential elements of developmentally responsive middle level education; and Turning Points: Preparing American Youth for the 21st Century (Carnegie Council, 1989) which identified eight major recommendations needed to improve middle level education. These two publications played signature roles in the identification of these "essential elements." A number of middle level scholars (Clark & Clark, 1994; George & Alexander, 1993; Irvin, Valentine, & Clark, 1994; Lounsbury (1996), Manning, 1993; Scales, 1996; and Wiles & Bondi, 1993) cited portions of these two works as the definitive bodies of literature regarding this topic.

Turning Points: Preparing American Youth for the 21st Century (Carnegie Council on Adolescent Development, 1989, pp. 10-23) advanced the following eight major recommendations which influence middle level education:

1. Create small communities for learning by forming "schools-within-schools" consisting of teams of teachers and 200-300 students which provided that every student will be well known by at least one adult (p. 10).

2. Teach a core academic program which teaches young adolescents to think critically, develop healthy lifestyles, and function as active citizens (p. 12).

3. Ensure success for all students by designing educational programs which group students for learning, provide flexible schedules which accommodate an integrated curriculum and joint planning for teachers, and expand opportunities for learning by extending the school day, offer summer and Saturday programs, provide specialized daily instruction, or encourage greater involvement of the home in learning activities (p. 14).

4. Empower teachers and administrators to make decisions about the experiences of middle grade students including giving teachers greater influence in the classroom, creative control over how to reach curricular goals, and a common planning time; establish building governance committees involving all the stakeholders of the learning community; and establish new roles for principals and team leaders (p. 16).

5. Staff middle grade schools with teachers who are expert at teaching young adolescents; who understand adolescent development; learn how to work as members of a team; and are sensitive to cultural diversity (p. 19).

6. Improve academic performance through better health and fitness of young adolescents by ensuring access to a variety of health services for young adolescents and establishing schools which are health-promoting environments and model healthy lifestyles (p. 20).

7. Reengage families in the education of young adolescents by offering parents meaningful roles in school governance, establishing and maintaining communication links to keep parents informed, and

offering families opportunities to support learning at home and at school (p. 22).

8. Connect schools with communities by providing opportunities: for youth to serve their communities, for access to health and social services, for communities to support middle grade education programs, to augment teacher and student resources, and for expansion of career guidance for students (p. 23).

The National Middle School Association's (NMSA, 1995)) release of This We Believe: Developmentally Responsive Middle Level Schools presented these six characteristics of developmentally responsive middle schools:

1. Educators committed to young adolescents including a genuine desire to teach this age group and a thorough understanding of the human growth and development of this age learner.

2. A shared vision supported by all stakeholders which reflect the best of all the elements of schooling, including student achievement, student-teacher relationships, and community participation.

3. High expectations for all which resultantly empowers students to learn, to become intellectually engaged, and to behave as responsible citizens.

4. An adult advocate for every student who knows, cares for, and supports that student's academic and personal development.

5. Family and community partnerships are recognized and supported as significant participants in middle level education.

6. A positive school climate which is safe, inviting, and caring, promotes a sense of community, and encourages learning.

This We Believe (1995) also identified six major programmatic areas characteristic of developmentally responsive middle schools:

1. A curriculum which is challenging, integrative, and exploratory; designed to advance academic skills and knowledge as well as school-wide services such as guidance, club and interest groups, music and drama productions, student government, and sports.

A challenging curriculum is one which actively engages young adolescents, marshaling their sustained interest and effort, addresses substantive issues and skills that are relevant or made relevant to students; geared to their levels of understanding, and enable them increasingly to assume control of their own learning.

An integrative curriculum designed to help students make connections and sense of their life experiences.

An exploratory curriculum which enables students to discover their particular abilities, talents, interests, values, and preferences. Exploratory curriculum is taught in such a way as to reveal opportunities for making contributions to society and acquaints students with enriching, healthy leisure-time pursuits, such as lifetime physical activities, involvement in the arts, and social service which result in well-rounded adults.

2. Use of varied teaching and learning approaches designed to enhance and accommodate the distinctive developmental and learning characteristics of young adolescents of diverse skills, abilities, learning

styles, and mental maturation.

3. Utilization of continuous, authentic, and appropriate assessment and evaluation procedures that promote learning and measure student progress toward goals and objectives, as well as judgments regarding the quality of the progress. These approaches are less competitive and more informative, and involve students in self-evaluation.

4. Incorporate flexible organizational structures which reflect the school's attempt to accommodate student's diversity, create smaller "schools-within-a-school" settings, and provide enrichment programs, cooperative learning groups, and independent study opportunities utilizing a variety of scheduling, staffing, and facility usage patterns.

5. Institute programs and policies that foster health, wellness, and safety by providing abundant opportunities for students to achieve and maintain healthy minds and bodies.

6. Provide for comprehensive guidance and support services designed to help students successfully negotiate early adolescence through the use of peer discussion groups, personal attention by professionals, or referral services to specialists as needed.

Adoption of the middle school concept became widespread. Alexander and McEwin reported the number of schools organized in a grade 6-8 configuration grew from 1,663 in 1970-71 to 4,329 in 1986-87 (Alexander & McEwin, as cited in Eichhorn, 1991). Kilcrease and Jones (1995, p. 4) reported that figure grew to 6155 in 1993. The dramatic increase in schools adopting the middle school name "...makes it essential that evaluations of middle schools

coincide with the national consensus of the fundamental elements of the exemplary middle school" (George & Alexander, 1993, p.39).

Middle level education emerged near the turn of the 20th Century in response to a growing concern regarding a developmentally appropriate curriculum for this age level learner. Research has indicated that the rise in junior high schools was often the result of more pragmatic reasons such as to ease overcrowded conditions, to facilitate integration, or fiscal efficiency rather than to provide an age appropriate curriculum designed to address the unique needs of the preadolescent learner. The current middle school approach resulted in a philosophy which put the needs and interests of the preadolescent learner at the core of curriculum development.

Summary:

A number of studies outlined in this review of related literature have identified the essential elements of schools which are responsive to the developmental needs of the emerging adolescent. Two definitive works, Turning Points and This We Believe, were significant in the identification of these essential elements. This We Believe identified six primary characteristics as well as six major programmatic areas of developmentally responsive middle schools. The characteristics identified in this document have led to a national consensus regarding the essential elements of developmentally responsive middle schools. A careful analysis of previous studies of middle schools provided support for each of these characteristics and programmatic areas and provided the framework for this study of the perceived level of implementation of these elements in Montana.

CHAPTER THREE

METHODOLOGY

<u>Design</u>

This descriptive study, involving quantitative methodology, was conducted to determine administrative and teacher perceptions of the importance and current level of implementation of the essential elements of developmentally responsive middle schools in accredited Montana middle schools. In addition, the study examined administrative and teacher perceptions of the obstacles to the successful implementation of these essential elements in accredited Montana middle schools.

The essential elements of developmentally responsive middle schools have been determined by an analysis of the National Middle School Association's publication, <u>This We Believe: Developmentally Responsive Middle Level Schools</u> (1995). Each of these essential elements is supported by the research of previous middle level scholars, gleaned from a comprehensive review of the related literature. Support for each survey item was reported in Appendix A. Survey items for the identification of the perceived barriers portion of the study have been developed by Valentine, et. al., 1993). A final piece of the instrument collected demographic data of the respondents.

Procedure for the study included the following components:

1. A survey instrument, <u>developed by the researcher</u> and included in Appendix B, was designed to address the research questions of the study. The first part of the instrument assessed principal and teacher perceptions of the importance of the characteristics of developmentally responsive middle

school to success at the respondent's school and the current level of implementation of these characteristics in their buildings. Individual survey items, hypotheses related to each of these items, and documentation of support from the literature for each item is provided in Appendix A.

A second part of the instrument identified middle school principal and teacher perceptions regarding barriers to the successful implementation of these essential elements. A third component of the instrument collected demographic information.

2. A pilot test of the instrument was conducted to determine internal reliability.

3. Inter-item reliability has been assessed to determine the degree of consistency among the responses for each of the elements incorporated into the instrument. This was developed from an analysis of This We Believe and supported by researchers in the field of middle level education. This analysis is reported in Appendix A. A matrix of the relationship between the characteristics identified in This We Believe (1995) and the research reported in Chapter Two of this document is included in Appendix C.

4. A field test of the instrument was conducted to determine reliability and content validity.

5. The population for this study consisted of each of the principals and two principal-selected members of the middle school faculty from each of the 32 accredited Montana middle schools.

6. Conclusions were drawn from the survey data relative to the level of importance and current level of implementation of each of the essential elements of developmentally responsive middle schools.

Population

The Montana Office of Public Education identified 32 accredited middle schools in Montana public school districts for the 1998-99 school year (Montana OPI, 1998). The population for this study included all of the principals and two principal-selected members of the middle school faculty from each of the 32 accredited middle schools.

Identification of Essential Elements of Middle Level Education

A consensus of key middle school characteristics emerged following the release of two definitive publications; <u>Turning Points: Preparing American Youth for the 21st Century</u>, released in 1989, by the Council on Adolescent Development of the Carnegie Corporation of New York and <u>This We Believe: Developmentally Responsive Middle Level Schools</u>, released in November, 1995, by the National Middle School Association (Lounsbury, 1996, p. 2). For purposes of this study, the National Middle School Association's position paper, <u>This We Believe</u>, provided the framework for the development of the research instrument, the Middle School Questionnaire of Essential Elements (MSQE^2). A copy of the instrument is provided in Appendix B. It was determined that each of the six characteristics and six programmatic areas outlined in <u>This We Believe</u>, was sufficiently broad enough to require several survey items to adequately address the variety of interpretations of the respondents. As a result, several survey items were developed to address each of the characteristics and programmatic areas outlined in <u>This We Believe</u>. Each of the items included on the MSQE^2 was reviewed in the contemporary middle school literature and subsequent

support for each item was provided. Survey statements, accompanied by hypotheses for both the level of importance (Hi) and current level of implementation (Hcli), have been developed to reflect each of the essential elements identified in This We Believe. The elements, survey items, hypotheses, and supporting research is reported in Appendix A.

Part A of the MSQE[2] was developed to measure the perceived level of "importance of the characteristic to success" and "current level of implementation" of the essential elements of developmentally responsive middle schools in accredited Montana middle schools. Respondent perceptions, relative to each of the following six characteristics and six programmatic areas highlighted in This We Believe were measured:

1. Educators Committed to Young Adolescents: This element of developmentally responsive middle level education identified the need for educators to understand the developmental uniqueness of young adolescents and make pedagogical decisions based on the developmental needs, interests, and abilities of those learners. Included in this characteristic was the desire for middle school educators to serve as role models for middle school students. MSQE2 items one through three were designed to evaluate this characteristic's components (p. 13).

2. A Shared Vision: Middle school educators should possess a vision that is "...idealistic and uplifting" and reflects the "...very best we can imagine about all the elements of schooling including student achievement, student-teacher relationships, and community participation" (Lounsbury, 1996, p. 3). The key to this characteristic was the involvement of all stakeholders in the middle school in the development and subsequent operationalization of the

mission statement. This characteristic was typical of all levels of education, including middle schools. MSQE[2] items four and five addressed the characteristic of a shared vision in the middle school (p. 14) .

3. High Expectations for All: High expectations was interpreted to mean, "empowering students to become intellectually engaged and behave in keeping with responsible citizenship" (Lounsbury, 1996, p. 3). Included in this characteristic was the development of appropriate learning opportunities designed to effectively engage students in their own learning, development of responsible citizenship skills, and the utilization of a variety of educational methods, approaches, and grouping strategies. MSQE[2] items six through nine addressed the components of this characteristic (p. 15).

4. An Adult Advocate for Every Student: The developmentally responsive middle school provided each student with one adult who knew and cared for that individual and supports the student's academic and personal development. This "adult advocate/advisor" served as a link between the school and the home. The middle school used a variety of organizational arrangements to augment guidance and support services. MSQE[2] items 10-12 addressed this characteristic of developmentally responsive middle schools (p. 16).

5. Family and Community Partnerships: The developmentally responsive middle school recognized and supported families and communities as participants in the educational process. This process included assisting families in creating and sustaining positive learning environments at home, providing for two-way communication between school and home,

and developing appropriate partnerships with businesses, social service agencies, and other organizations. Items 13-16 of the survey instrument elicited responses related to this characteristic (p.17).

6. _A Positive School Climate:_ The developmentally responsive middle school climate was a safe, inviting, and caring environment; one which promoted a sense of community and encouraged learning while respecting individual differences. A positive school climate included one which is free of violence, substance abuse, and threatening behaviors. Survey items 17-19 addressed this characteristic of middle schools (p. 18).

7. _A Curriculum that is Challenging, Integrative, and Exploratory:_ The curriculum is more than a collection of individual courses; it reflects the nature and needs of the young adolescent. The middle school curriculum should be articulated with the elementary and secondary programs and engage the learner in a manner which allows them to take control of their own learning, is relevant, and provides opportunities for discovery. Survey items 20 through 25 addressed the components of this characteristic (p. 20).

8. Varied Teaching and Learning Approaches: The developmentally responsive middle school utilized a variety of teaching and learning approaches and techniques to enhance and accommodate the diverse skills, abilities, knowledge, intelligences, and learning styles of young adolescents. These methods provided appropriate challenges for all types of middle level learners. Survey items 26-30 addressed these elements of this programmatic area of developmentally responsive middle schools (p. 24).

9. Assessment and Evaluation that Promotes Learning: Continuous, authentic, and appropriate assessment and evaluation procedures which

provided information that students, teachers, and family members needed to enhance learning and reflected the characteristics and uniqueness of young adolescents was an essential element of the developmentally responsive middle school. Assessment and evaluation methods should have emphasized individual progress, minimized student comparison, and rewarded reasonable effort. Survey items 31 and 32 addressed this programmatic area of developmentally responsive middle schools (p. 26).

10. Flexible Organizational Structures: The effective middle school attempted to accommodate student diversity and peer identification, and also sought to break the rigidity of the traditional uniform schedule through the use of flexible organizational structures. Common planning time, space, core of students, and teacher responsibility for the design and implement the educational program for these students were components of this programmatic area. The development of teams or houses within the school was also a component of this characteristic. Survey items 33-36 related to the elements of this characteristic of developmentally responsive middle schools (p.28).

11. Programs and Policies that Foster Health, Wellness, and Safety: The developmentally responsive middle school provided opportunities for students to achieve and maintain healthy minds and bodies and to understand their own growth. Such a program embraced a comprehensive program of physical education with emphasis on lifelong activities. Questionnaire items 37 and 38 addressed this component of developmentally responsive middle schools (p. 30).

12. Comprehensive Guidance and Support Services: Effective middle

level programs provided teachers and specialized professionals who were available to offer assistance to middle school students. Middle level counselors coordinated support services and acted as a resource to teams and teachers. Survey items 39 and 40 related to these features of this characteristic of developmentally responsive middle schools (p.31).

These 12 characteristics were highlighted in the National Middle School Association's publication, This We Believe. The researcher analyzed this document and extracted the elements identified as essential to each characteristic. Each of these characteristics was supported by the writings of the middle level scholars previously cited. A comparative matrix of the characteristics identified in, This We Believe and the studies cited in Chapter Two of this document is provided in Appendix C.

Instrumentation

The instrument used in this study was designed by the researcher to collect data relative to the perceived level of importance of the characteristic to success and current level of implementation at school of the essential elements of developmentally responsive middle schools in accredited Montana middle schools. Part A of the Middle School Questionnaire of Essential Elements (MSQE^2) was developed from analysis of the National Middle School Association's publication This We Believe . The instrument measured respondent perceptions of the importance and level of implementation of each of the six characteristics and programmatic areas identified in this publication.

Part A of the MSQE^2 consisted of survey items one through 40 and was

designed to assess the respondent's perceptions of the <u>importance to success</u> and <u>extent of implementation</u> of the essential elements of developmentally responsive middle schools. Response scales of: <u>not important, somewhat important, important,</u> and <u>very important</u> allowed respondents to indicate perceptions of the <u>importance of characteristic to success at my school</u>. Numerical values of one to four were assigned for each response, with the smallest number representative of the the lowest perception of the <u>level of importance of the characteristic to success at my school</u>. Each successive number indicated a greater perception of the <u>level of importance</u>.

Guidelines for completing this section of the MSQE[2] were described as follows:

1. <u>Not important</u>: this characteristic is not considered to have any connection with the success of the respondent's middle school.

2. <u>Not very important</u>: this characteristic is considered to be of minor importance to the success of the respondent's middle school.

3. <u>Important</u>: this characteristic is considered to be important to the success of the respondent's middle school.

4. <u>Very Important</u>: this characteristic is considered to be essential to the success of the respondent's middle school.

Responses of <u>not implemented, partially implemented, moderately implemented,</u> and <u>majorly implemented</u> allowed respondents to indicate perceptions of the <u>current level of implementation</u> of the essential elements of developmentally responsive middle schools in the respondent's accredited Montana middle school. Numerical values of one through four were similarly assigned for each response to this piece of Part A of the MSQE[2].

Guidelines for assessing the <u>current level of implementation at my</u> <u>school</u> were describes as follows:

1. <u>Not implemented</u>: the characteristic is not implemented in the respondent's school.

2. <u>Partially implemented</u>: the characteristic is implemented less than one-third of the time in the respondent's school.

3. <u>Moderately implemented</u>: the characteristic is implemented more than one-third of the time, but less than two-thirds of the time in the respondent's school.

4. <u>Majorly implemented</u>: the characteristic is implemented more than two-thirds of the time.

Part B of the Middle School Questionnaire of Essential Elements (MSQE^2) was developed by Valentine, et. al., (1993, p. 125) to determine administrative and teacher perceptions of obstacles to the implementation of the essential elements developmentally responsive middle schools and was used with the permission of the National Association of Secondary School Principals. Survey items 41-67 addressed this component of the study. Responses of <u>not a factor</u>, <u>moderate factor</u>, and <u>serious factor</u> were included in Part B and allowed respondents to identify the degree to which they perceived the identified components as obstacles to the successful implementation of essential elements of developmentally responsive middle schools in the respondent's middle school.

For the purpose of analysis, numerical values of one through three were assigned to assess respondent's perceptions of the barriers which limited the successful implementation of the characteristics of developmentally

responsive middle schools. The smaller value represented the lesser level of obstruction. Guidelines for assessing the perceived barriers to successful implementation of the essential elements of developmentally responsive middle schools were described as follows:

1. Not a factor: the respondent does not consider this factor to be a barrier to the successful implementation of the essential elements of developmentally responsive middle schools in the respondent's middle school.

2. Moderate factor: the respondent considers this factor to be an obstacle to the successful implementation of the essential elements of developmentally responsive middle schools in the respondent's middle school.

3. Serious factor: the respondent considers this factor to be a serious obstacle to the successful implementation of the essential elements of developmentally responsive middle schools in the respondent's middle school.

Demographic items that identified the respondent's current position, grade level, endorsement level, years of middle school experience, size of the middle school, and desire to teach at the middle level were included in Part C, items 68-73, of the survey instrument.

Mail procedures

A packet addressed to each middle school principal in the population was mailed including:

1. A cover letter explaining the purpose and nature of the study and

the need for a prompt response. Included in this letter was a request to share the survey with two members of the principal's current faculty along with a letter regarding the purpose and nature of the study to be shared with these faculty members.

2. The Middle School Questionnaire of Essential Elements (MSQE[2]) along with instructions for both principal and faculty to successfully understand, complete, and return the survey.

3. A stamped and addressed return envelope was provided for each respondent.

A reminder postcard was sent to those middle schools which failed to respond to the initial inquiry. These institutions were encouraged to participate in the study and reminded of the nature and purpose of the study. Copies of the letters mailed to respondents are included in Appendix D. Additionally, phone calls were placed to the principals of those school which failed to respond to the initial request.

An accurate record of the instruments returned was maintained for the purpose of follow-up mailings to initial non-respondents. A second packet was mailed to non-respondents containing a cover letter again explaining the importance of their participation in the study, another copy of the instrument, and a return envelope.

Results of the study will be shared promptly with those respondent institutions as well as made available to educational agencies in Montana, including universities, the Montana Office of Public Instruction, Montana Association of Secondary School Principals, Montana School Boards Association, and the Montana Association of Elementary and Middle School

Principals. Respondents were able to indicate on the return post-card if they desire an abstract of the findings of the study.

Data Analysis

Data analysis consisted frequency distribution and appropriate t-tests. Descriptive statistics were used to analyze demographic data and quantitative responses to questionnaire items.

The research questions of this study and the strategies for their analysis were as follows:

Research Question 1 and 2: To what extent are the essential elements of developmentally responsive middle schools implemented in accredited Montana middle schools as perceived by middle school administrators and teachers?

Method of Analysis: Frequencies distribution and related means were determined for each component of the essential elements relative to the perceived importance of characteristic. Component means were used to calculate the composite mean for the element. A two-sample t-test of separate independent groups was used to compare administrative and faculty perceptions of the degree of importance of the element.

Research Question 3 and 4: To what extent are the essential elements of developmentally responsive middle schools perceived as important by accredited Montana middle school administrators and teaching faculty?

Method of Analysis: Frequency distribution and related means were determined for each component of the essential elements relative to the perceived level of implementation. Component means were used to calculate

the composite mean for the element. A two-sample t-test of separate independent groups was used to compare administrative and faculty perceptions of the level of implementation of the element.

Research Questions 5 and 6: What are the barriers to successful implementation of the essential elements of developmentally responsive middle schools as perceived by accredited Montana middle school administrators and teachers?

Method of Analysis: Frequencies distribution and accompanying means were used to identify the most and least common perceived barriers to successful implementation of the essential elements of developmentally responsive middle school in accredited Montana middle schools.

CHAPTER FOUR

RESULTS OF THE QUANTITATIVE INVESTIGATION

To what extent do teachers and administrators in accredited Montana middle schools perceive the level of implementation of the essential elements of developmentally responsive middle schools? One administrator and two teachers teachers from each of the 32 accredited Montana middle schools were requested to provide data in the form of survey responses in an attempt to answer that question.

This group of middle school practitioners also provided survey responses on the Middle School Questionnaire of Essential Elements (MSQE[2]) regarding their perceptions of the degree of importance of each of these elements as well as their perceptions of the barriers which obstruct the successful implementation of the elements. A total of 66 respondents provided data for the final quantitative analysis, a response rate of 68.75%. Thirty-nine of 64 teachers, or 60.9%, responded. Twenty-seven of 32 middle school administrators responded, a response rate of 84.3%. This chapter describes the population and qualitative analysis of the data collected in this study.

Characteristics of the Sample

Responses in Part C of the MSQE[2] provided a profile of the population's demographics, specifically the grade level taught, the respondent's current level of endorsement, the number of years of middle school experience, the student enrollment at their middle school, whether or

not the respondent applied for the position in the middle school, as well as the current position (teacher or administrator) of the respondent.

Responses to Section A provided data relative to the respondent's perception of the importance and level of implementation of the essential elements. Responses to Part B of the instrument provided respondent perceptions of the barriers which influenced the successful implementation of these elements.

Demographic Profile

As indicated by responses to question 68, thirty-nine, or 60.9%, of the respondents identified themselves as teachers and 27, or 84.3% of the respondents identified themselves as administrators. To adequately address the research questions of the study, two groups were formed. One group consisted of middle school administrators, while the other group was formed of respondents identified as teachers. These two categories were formed to frame perceptions of each group.

Administrator Profile

Endorsement Level

Responses to item 70 provided information about endorsement levels. Three of the respondents, or 12%, were K-8 endorsed. Thirteen administrative respondents, 50%, were 5-12 endorsed, three, 11.5%, were endorsed for grades 7-12, and seven respondents, or 27%, were endorsed K-12.

Table 4.1

Administrative Endorsements

Endorsement Level	Number	Percentage
Not responding	1	0.0
K - 8	3	11.5
5 - 12	13	50.0
7 - 12	3	11.5
K -12	7	27.0
Total:	27	100.0

Table 4.1 outlines the endorsement levels of the administrators responding to Question 70 of the survey.

Experience

Experience of administrators ranged from two years to 30 years. Four of the administrators, or 14.8% of them, had four or fewer years of experience. Three administrators, 11.1%, had five to nine years of experience. Eight respondents, 29.7%, had 10 to 14 years of administrative experience. Four respondents, 14.8%, reported 15 to 19 years of experience. Three respondents, 11.1% reported 20 to 24 years of experience, while another three, 11.1%, had 25 to 29 years of experience. Two administrators, 7.4%, had 30 or more years.

Table 4.2

Administrative Experience

Experience (Years)	Number	Percentage
0 - 4	4	14.8
5 - 9	3	11.1
10 - 14	8	29.7
15 - 19	4	14.8
20 - 24	3	11.1
25 - 29	3	11.1
> 30	2	7.4
Total:	27	100.0

Table 4.2 summarizes data relative to administrator experience.

School Enrollment

Seven of the administrators, 25.9%, worked in schools of fewer than 250 students. Eight respondents, 29.7%, worked in schools with student enrollments of 250 to 499 students. Six administrators, 22.7%, worked in schools with student populations of 500 to 749. Three principals, 11.1%, worked in schools of 750 to 999 students, and three administrators, 11.1%, worked in middle schools of more than 1000 students.

Table 4.3

<u>Administrative Student Enrollment</u>

Enrollment	Number	Percentage
0 - 249	7	30.0
250 - 499	8	29.7
500 - 749	6	22.2
750 - 999	3	11.1
> 1000	3	11.1
Total:	27	100.0

Table 4.3 provides administrator data relative to student enrollment.

<u>Assignment</u>

Based on the respondent's data to question 73, twenty-five, 92.6%, of the administrators applied for administrative assignment to the middle school. Only two of the principals, 7.4%, reported that they had not sought the middle school assignment. Table 4.4 summarizes administrator desire for assignment to the middle school.

Table 4.4

Administrative Responses to: Applied for Current Assignment?

Applied for Current Assignment	Number	Percentage
Yes	25	92.6
No	2	7.4
Total:	27	100.0

Table 4.4 summarizes administrator desire for assignment to the middle school.

Faculty Profile

Grade Level

A total of 39 teachers, 60.9%, submitted survey data. Eleven of the respondent's, 29%, were assigned to teach at the seventh grade level. Nine respondents, 23.7%, identified themselves as specialists. Seven respondents, 18.4%, taught both seventh and eighth grade students. Five respondents, 13.2%, described their teaching assignment explicitly as the sixth grade. Four respondents, 10.5%, taught at the eight grade level, and two respondents, 5.3%, reported they were assigned to teach both sixth and seventh graders. There were no responses, 0%, received from respondents assigned to teach fifth grade or a combination of fifth and sixth grade classes.

Table 4.5

<u>Faculty Grade Level Assignment</u>

Grade Level	Number	Percentage
Not responding	1	0.0
Fifth	0	0.0
Sixth	5	13.2
5 - 6 Combo	0	0.0
Seventh	11	28.9
6 -7 Combo	2	5.3
Eighth	4	10.5
7 - 8 Combo	7	18.4
Specialist	9	23.6
Total :	39	100.0

Table 4.5 presents a summary of respondent's teaching assignment.

Endorsement Level

A majority of faculty respondent's, 51.3%, held a K-8 endorsement. Fourteen, 35.9%, of the respondents were endorsed K-12. Three respondents, 7.7%, reported 5-12 certification and two respondent's, 5.1%, were endorsed at the 7-12 level.

Table 4.6

<u>Faculty Endorsement Level</u>

Endorsement Level	Number	Percentage
K - 8	20	51.3
5 - 12	3	7.7
7 - 12	2	5.1
K - 12	14	35.9
Total :	39	100.0

Table 4.6 presents teacher data relative to certification levels.

<u>Experience</u>

Experience distribution among teacher respondents summarized as follows: five, or 12.9%, had taught less than four years, eleven, 28.2%, had five to nine years of experience, fourteen, 35.9%, had taught between 10 and 14 years. Four respondents, 10.3%, reported 15 to 19 years of experience. Two respondents, 5.1%, reported teaching experience of 20 to 24 years. Two other respondents, 5.1%, stated 25 to 29 years of experience, and one, or 2.5%, reported more than 30 years of experience.

Table 4.7

<u>Faculty Experience</u>

Experience (Years)	Number	Percentage
0 - 4	5	12.9
5 - 9	11	28.2
10 - 14	14	35.9
15 - 19	4	10.3
20 - 24	2	5.1
25 - 29	2	5.1
> 30	1	2.5
Total :	39	100.0

Table 4.7 presents data regarding the teaching experience of faculty.

Enrollment

Ten of the faculty respondents, 26.3%, reported school enrollments of fewer than 250 students. Twelve respondents, 31.6%, worked in schools with an enrollment of 250 to 499 students. Eight teachers, 21%, were employed in school with student populations of 500 to 749. Three respondents, 7.9%, reported student enrollments of 750 to 999. Five of the faculty respondents, 13.2%, held jobs in a middle school of more than 1000 students.

Table 4.8

Faculty Student Enrollments

Enrollment	Number	Percentage
Not responding	1	0.0
0 - 249	10	26.3
250 - 499	12	31.6
500 - 749	8	21.0
750 - 999	3	7.9
> 1000	5	13.2
Total :	39	100.0

Table 4.8 identifies faculty data relative to student enrollments in their school.

Assignment

Thirty-two respondents, 84.2%, reported they had applied for their current teaching assignment in the middle school. Six respondents, 15.8%, reported they did not apply for their current middle school assignment. One respondent failed to provide data relative to this survey item. Table 4.9 outlines data related to this survey item.

Table 4.9

Faculty Responses to: Applied for Current Assignment

Applied for Current Assignment	Number	Percentage
Not responding	1	0.0
Yes	32	84.2
No	6	15.8
Total :	39	100.0

Perceptions of All Respondents Regarding the

Level of "Implementation" of the Essential Elements

Most Often "Implemented" Components as Identified by All Respondents

Mean distribution of respondent's perceptions of the level of implementation provided a basis for identifying the level of implementation in Montana middle schools. Values of 3.50 or greater were regarded as major implementation. Values of 2.50 to 3.49 were considered to be examples of moderate implementation. Mean values of 1.50 to 2.49 were considered to be examples of partial implementation, while values of 1.49 or less were regarded as no implementation. Respondents identified the following elements as the five most frequently implemented components in accredited Montana middle schools:

1. Survey item 25, "the curriculum provides students with exploratory experiences, which are enriching and healthy, and which contribute to adolescent development," had a mean of 3.62, and was identified as the most frequently implemented element in Montana middle schools. A mean of 3.62 places the level of practice of this component as major implementation.

2. Survey item 11, "middle schools provide every student with the opportunity to be well know by at least one adult in the school," reported a mean of 3.55 and was the second most often implemented component. A mean of 3.55 places the level of implementation at the major implementation level.

3. Survey item 6, "the middle school program provides appropriate learning opportunities which permit students to become intellectually engaged," had a mean of 3.52. This component was included in the list of top five components implemented in Montana middle schools. This mean qualified as major implementation.

4. Survey item 15, "the middle school supports family involvement by providing for two-way communication," reported a mean of 3.42, an implementation designation of moderate.

5. Survey item 26, "the middle school utilizes a variety of teaching and learning approaches designed around the developmental and learning characteristics of young adolescents" was identified as one of the five most frequently implemented components. This item had a mean of 3.42 and was identified as an example of moderate implementation.

Table 4.10

<u>All Respondents: Most Often Implemented Components</u>

Survey Item Number	Mean
25 (exploratory experiences)	3.62
11 (student well known by adults)	3.55
6 (intellectually engaged students)	3.52
15 (two-way communication)	3.42
26 (varied teaching & learning approaches)	3.42

Table 4.10 identifies the mean of respondent's perceptions of the most often implemented components of developmentally responsive middle schools in Montana.

<u>Least Often "Implemented" Components as Identified by All Respondents</u>

The process used to identify the <u>most often implemented</u> components was used to evaluate the <u>least often implemented</u> components as were applied to the <u>most often implemented</u> characteristics. Mean values of 3.50 or greater were consider to be cases of <u>major implementation</u>. A mean of 2.50 to 3.49 were regarded as examples of <u>moderate implementation</u>. Mean responses of 1.50 to 2.49 were considered as <u>partial implementation</u>, and mean values of less than 1.49 are considered to be <u>not implemented</u>. The following survey items were identified as the <u>least frequently implemented</u> elements of developmentally responsive middle schools in Montana middle schools:

1. Survey item 14, "the middle school assists families in creating and

sustaining a positive learning environment at home," had a mean of 2.46, and was identified as the least frequently implemented element in Montana middle schools. This mean identified a component that is partially implemented.

2. Survey item 23, "a curriculum which provides opportunity for students to reflect on experiences as a part of self-evaluation," was identified by respondents as another element which is least often implemented. This item reported a mean of 2.68 and was considered to be moderately implemented.

3. Survey item 33, "the middle school incorporates a flexible program of student scheduling," recorded a mean of 2.74. This mean identified a component that was moderately implemented.

4. Survey item 16, "the middle school seeks appropriate partnerships with business, social service agencies, and other organizations" was also cited as an element least often implemented in Montana middle schools. The mean for this item was 2.76 and was regarded as moderately implemented.

5. Survey item 4, "the middle school involves all stakeholders - students, faculty, administrators, families, board of education members, and community members - in the development of a shared mission statement," was another of the least frequently implemented components in Montana middle schools. The mean for this item was 2.85. This component was considered to be moderately implemented.

Table 4.11

<u>All Respondents: Least Often Implemented Components</u>

Survey Item Number	Mean
14 (positive home learning environ.)	2.46
23 (student reflect on learning)	2.69
33 (common planning time, etc.)	2.74
16 (school partnerships)	2.76
4 (stakeholder involvement)	2.85

Table 4.11 identifies the item and the mean for each of the survey items identified as least frequently implemented in Montana middle schools.

Perceptions of All Respondents Regarding the
Level of "Importance" of the Essential Elements

Most "Important" Components as Identified by All Respondents

The mean values developed for the **level of importance** provided information regarding respondent's perceptions of the <u>most</u> and <u>least</u> important components of developmentally responsive middle schools. Mean values of 3.50 or greater identified components considered to be <u>very important</u>. Mean values of 2.50 to 3.49 were consider to be <u>important</u>. A mean, in the range of 1.50 to 2.49, were regarded as <u>somewhat important</u>.

Mean values of less than 1.49 were considered to be <u>not important</u>.
Respondents identified the following five components as <u>most important</u> in
accredited Montana middle schools.

1. Survey item 19, "the middle schools provides a safe environment,
free of violence, substance abuse, and threatening behaviors." had a mean of
3.94 and was identified as the most important component of developmentally
responsive middle schools. This mean describes an element that was regarded
as <u>very important</u> to the success of Montana middle schools.

2. Survey item 7, "a middle school utilizes a variety of educational
methods and approaches to address the individual learning styles of the
learner," was cited as another of the "most important" components. The
mean for this item was 3.88, also a component considered to be <u>very
important</u>.

3. Survey item 6, "the middle school provides appropriate learning
opportunities which permit students to become intellectually engaged," had a
mean of 3.86, and was regarded as <u>very important</u>.

4. Survey item 26, "the middle school utilizes a variety of teaching and
learning approaches designed around the developmental and learning
characteristics of young adolescents," had a mean of 3.86 and was regarded as
<u>very important</u> to the success of the middle school.

5. Survey item 17, "the middle school environment is positive and
promotes a sense of community," had a mean of 3.86. This value identified
this component as very important.

Table 4.12

All Respondents: Most Important Components

Survey Item Number	Mean
19 (safe environment)	3.94
7 (varied educational methods)	3.88
6 (students intellectually engaged)	3.86
26 (varied teaching & learning approaches)	3.86
17 (positive school environment)	3.86

Table 4.12 lists respondent's perceptions of the most important components.

"Least Important" Components as Identified by All Respondents

The criteria used to determine the most important components was used to determine the least important components. Mean values of 3.50 or greater were considered to be very important. A mean value of 2.50 to 3.49 was considered to be important. Mean values of 1.50 to 2.49 were regarded as somewhat important and values of less than 1.49 were regarded as not important. Respondents identified the following five components as least important:

1. Survey item 14, "the middle school assists families in creating and sustaining positive learning environments at home," had a mean of 3.17 and was perceive as an important component.

2. Survey item 16, "the middle school seeks appropriate partnerships with business, social service agencies, and other organizations" recorded a mean of 3.20 and was identified as important by respondents.

3. Survey item 8, "the middle school organizes students into small, heterogeneous groups," had a mean of 3.36 and was perceived as important.

4. Survey item 23, "the middle school curriculum provides opportunities for students to reflect on experiences as a part of self-evaluation," had a mean of 3.37 and was considered to be important to the success of Montana middle school.

5. Survey Item 12, "the middle school uses organizational arrangements to augment guidance and support services," had a mean of 3.38. This value represents a component considered to be important to the success of the Montana middle school.

Table 4.13

All Respondents: **Least Important Components**

Survey Item Number	Mean
14 (positive home learning environment)	3.17
16 (school partnerships)	3.20
8 (small, heterogeneous groups)	3.36
23 (student reflection)	3.37
12 (organizational arrangements)	3.38

Table 4.13 identifies the least important items and mean for each.

Perceptions of All Respondents Regarding the

"Barriers" to Successful Implementation of the Essential Elements

"Barriers" Most Often Identified by All Respondents

Mean values provided a baseline for establishing the most serious and least serious barriers influencing the implementation of the essential elements. Mean values of 2.50 or greater were considered to be serious factors influencing the implementation of essential elements. A mean of 1.5 to 2.49 were regarded as moderate factors and mean values of less than 1.49 were considered to be not a factor. Respondents identified the following five factors as the most serious barriers to the successful implementation of the essential elements:

1. Survey item 43, "the inability to obtain funding" was cited as the most serious barrier. The mean for this factor was 2.29; a moderate barrier.

2. Survey item 54, "parents apathetic or irresponsible about their children," had a mean of 2.27 and was identified a moderate barrier.

3. Survey item 56, "problem students (apathetic, hostile, etc.)," was cited as another of the factors obstructing the implementation of the essential elements. The mean for this survey item was 2.14 and was regarded as a moderate barrier.

4. Survey item 52, "a lack of time for myself," was reported by respondents to be another barrier. This factor had a mean of 1.91 and is considered to be a moderate barrier.

5. Survey item 58, "resistance to change by staff" had a mean of 1.91 was

identified as a <u>moderate factor</u>.

Table 4.14

<u>All Respondents: Most Often Cited Barriers</u>

Survey Item Number	Mean
43 (inability to obtain funds)	2.29
54 (apathetic parents)	2.27
56 (problem students)	2.14
52 (lack of time of self)	1.91
58 (staff resistant to change)	1.91

Table 4.14 identifies respondent's perception's of the <u>barriers</u> to the successful implementation of the essential elements of developmentally responsive middle schools.

<u>"Barriers" Least Often Identified by All Respondents</u>

The criteria used to identify the most serious barriers was used to determine the <u>least serious barriers</u>. Mean values of 2.50, or greater, were considered to be <u>serious</u> factors. Mean values of 1.50 to 2.49 were regarded as <u>moderate</u> factors. A mean of less than 1.49 was considered to be <u>not a factor</u>. The following five factors were identified by respondents as having the least influence on the implementation of the essential elements:

1. Survey item 65, "too small of a student body," was identified as the

least restrictive factor. This item had a mean of 1.11, which implied it was <u>not</u> <u>a factor</u>.

2. Survey item 47, "a lack of competent office help," was reported to have little impact on the implementation of the essential elements. This factor had a mean of 1.15 and was regarded by respondents as <u>not a factor</u>.

3. Survey item 61, "teacher turnover" reported a mean of 1.27 and was regarded as <u>not a factor</u>.

4. Survey item 59, "resistance of the Superintendent or other central office staff," had a mean of 1.29 and was considered to <u>not a factor</u> influencing successful implementation.

5. Survey item 46, "time required to administer or supervise extracurricular activities," had a mean of 1.32 and was regarded as <u>not a factor</u>.

Table 4.15

<u>All Respondents: Least Often Cited Barriers</u>

Survey Item Number	Mean
65 (student body too small)	1.11
47 (incompetent office help)	1.15
61 (teacher turnover)	1.27
59 (Superintendent resistant to change)	1.29
46 (incompetent administrative assistance)	1.32

Table 4.15 identifies respondent's <u>least often cited barriers</u>.

Comparison of Administrative and Faculty Perceptions
of the Level of "Implementation" of the Essential Elements

Administrative - Faculty Comparison:
Most Frequently "Implemented" Components

Mean values for faculty and administrative groups were used to compare the five most frequently implemented components. Three of the five most frequently implemented components were cited by both groups of respondents. Item 25, "the curriculum provides students with exploratory experiences," recorded mean of 3.63 from administrators and 3.62 from faculty. Both of these values implied the component was implemented more than two-thirds of the time.

Administrative respondents identified item 11, "middle schools provide every student with the opportunity to be well known by at least one adult in the school," as the second "most frequently implemented component. A mean of 3.63, indicating major implementation, was reported for this item. Faculty identified this item as the third most frequently implemented component of the essential elements. A mean of 3.49 was reported by faculty for this item. Both values implied a moderate level of implementation for this component.

Administrative respondents listed item 40, "counselors coordinate support services and serve as a resource to teams, teachers, and for classroom activities," as the third most frequently implemented component. A mean of 3.59, (major implementation), was reported for this item.

Item 6, "the middle school provides appropriate learning opportunities which permit students to become intellectually engaged," had a mean of 3.49 (moderate implementation) and was the second most frequently implemented component of faculty respondents.

Administrative respondents cited item 6, "the middle school provides opportunities for students to become intellectually engaged," as the fourth most frequently implemented component. This item had a mean of 3.56 and was perceived by administrators as an example of major implementation.

Item 39, "the middle school program provides teachers and specialized professionals who are readily available to offer assistance to middle school students," had a mean of 3.52 and was administrators fifth most frequently implemented component. This item was perceived to be implemented more than two-thirds of the time (major implementation).

Items 17 and 15 were faculty respondents fourth and fifth most frequently implemented components respectively. Item 17 addressed "a positive middle school environment," and had a mean of 3.44, or moderate implementation. Item 15, "the middle school supports family involvement by providing for two-way communication," had a mean of 3.41, also moderate implementation.

Table 4.16

Administrative - Faculty Comparison:

Most Frequently "Implemented Components

Rank	Administrators		Faculty	
	Survey Item	Mean	Survey Item	Mean
1	25 (1)	3.63	25 (1)	3.62
2	11 (3)	3.63	6 (4)	3.49
3	40 (24)	3.59	11 (2)	3.49
4	6 (2)	3.56	17 (12)	3.44

* Number in parenthesis identifies the ranking of the other group.

Table 4.16 identifies administrative and faculty respondent's perception of the components of developmentally responsive middle schools which are most frequently implemented in Montana middle schools.

Administrative - Faculty Comparison:

Least Frequently "Implemented" Components

Mean values were used to identify the least frequently implemented components of developmentally responsive middle schools in Montana middle schools. Administrative and faculty respondents identified many of the same components as the least frequently implemented components. Item 16, "the middle school seeks appropriate partnerships with business, social service agencies, and other organizations," was cited as the least often

implemented component by administrators and was the fifth least often implemented component according to faculty. This item had a mean of 2.63 (moderate implementation) for administrators and 2.85 (moderate implementation) from faculty.

Administrators identified item 33, "a flexible program of student scheduling," a mean of 2.63, item 14, "the middle school assists families in creating and sustaining positive learning environments," a mean of 2.65, item 4, "the middle school involves all stakeholders in the development of a shared mission statement," a mean of 2.70, and item 23, "the middle school curriculum provides opportunity for students to reflect on experiences as part of self-evaluation," a mean of 2.70 as the second through fifth least often implemented components in Montana middle schools. Each of the mean values for these components was considered to be a case of moderate implementation.

Faculty respondents identified item 14, "the middle school assists families in creating and sustaining positive learning environments," with mean of 2.36, as one of the least frequently implemented components. This element was regarded as partially implemented.

Item 23, "the middle school curriculum provides opportunity for students to reflect on experiences as part of self-evaluation," a mean of 2.67, item 8, "the middle school organizes students into small, heterogeneous groups," a mean of 2.74, and item 33, "a flexible program of student scheduling," a mean of 2.82, and item 16, "the middle school seeks appropriate partnerships with business, social service agencies, and other organizations," were identified by faculty as the least frequently implemented

components. The mean for each of these components implied a <u>moderate</u>
level of implementation.

Table 4.17

<u>Administrative - Faculty Comparison:</u>

Least Frequently Implemented Components

Rank	Administrators		Faculty	
	Survey Item	Mean	Survey Item	Mean
1	16 (5)	2.63	14 (3)	2.33
2	33 (4)	2.63	23 (5)	2.67
3	14 (1)	2.65	8 (18)	2.74
4	4 (12)	2.70	33 (2)	2.82
5	23 (2)	2.70	16 (1)	2.85

* <u>Number in parenthesis identifies the ranking of the other group.</u>

Table 4.17 lists administrative and faculty perceptions of the least
frequently implemented components of developmentally responsive middle
schools in Montana.

Comparison of Administrative and Faculty Perceptions
of the Level of "Importance" of the Essential Elements

Administrative - Faculty Comparison:
Most Important Components

The means developed for administrators and faculty for each of the items included on the MSQE[2] provided the basis for a comparison of the "most important" components identified by the two groups. Administrative and faculty respondents recognized different components u. Administrative respondents cited survey item 7," a middle school utilizes a variety of educational methods and approaches to address the individual learning styles of the learner," as the most important component. This item had a mean of 3.93 and was identified as a <u>very important</u> component. Faculty respondents identified survey item 19, "the middle school provides a safe environment free of violence, substance abuse, and threatening behaviors," as the most important component. The mean for this item from faculty was 3.97, also regarded as <u>very important</u>.

Administrative respondents identified survey item 1, "middle school educators generally understand the developmental uniqueness of the young adolescent," as the second most important component of the essential elements. This item had a mean of 3.89 (<u>very important</u>). Faculty cited item 6, "the middle school provides appropriate learning opportunities which permit students to become intellectually engaged," as the second most important component. This item reported a mean of 3.92 (<u>very important</u>).

Each of the following elements from administrative respondent's recorded a mean of 3.89 and was regarded as <u>very important</u> to the success of the middle school: Item 1, "middle school educators generally understand the developmental uniqueness of the young adolescent," item 18, "the middle school environment is inviting and caring," item 19, "the middle school environment is safe," and item 26, "the middle school utilizes a variety of teaching and learning approaches designed around the developmental and learning characteristics of young adolescent."

Faculty respondents identified item 25, "the curriculum provides students with exploratory experiences," as the third most important component. The mean for this item was 3.90, identified as <u>very important</u>. Item 17, "the school environment is positive and promotes a sense of community in which individual differences are recognized and accepted with respect and dignity," had a mean of 3.89 and was regarded by faculty as <u>very important</u>.

Item 22, "the curriculum addresses issues and skills that are relevant to the middle level learner," was a component considered to be <u>very important</u>, based on a mean of 3.87.

Table 4.18

Administrator and Faculty: Most Important Components

Rank	Administrators		Faculty	
	Survey Item	Mean	Survey Item	Mean
1	7 (6)	3.93	19 (4)	3.97
2	1 (13)	3.89	6 (13)	3.92
3	18 (10)	3.89	25 (15)	3.90
4	19 (1)	3.89	17 (9)	3.89
5	26 (7)	3.89	22 (22)	3.87

* Number in parenthesis identifies the ranking of the other group.

Table 4·18 provides a comparison of administrative and faculty perceptions of the most important components of developmentally responsive middle schools in Montana middle schools.

Administrative - Faculty Comparison:
Least "Important" Components

Administrative and faculty responses produced a mean value for each of the components of developmentally responsive middle schools identified on the MSQE[2]. The means for each group provided the basis for a comparison of the least important components. Administrative and faculty

respondents cited different components as least important.

Administrative respondents identified item 16, "the middle school seeks appropriate partnerships with business, social service agencies, and other organizations," as the least important component. A mean of 3.26 was reported for this item and was interpreted as important to the success of the middle school. Faculty identified item 14, "the middle school assists families in creating and sustaining positive learning environments at home," as the least important component of the essential elements. This item reported a mean of 3.05 and was identified as important.

Administrative respondents cited item 14, "the middle school assists families in creating and sustaining positive learning environments at home," and item 23, "the curriculum provides opportunity for students to reflect on experiences as part of self-evaluation," as the second and third least important components. A mean of 3.33 was reported for each of these items. This value was interpreted as important.

Faculty identified item 16, "middle school partnerships with business, social service agencies, and other organizations," as the second least important component. A mean of 3.15, a designation of important was recorded for this item. Faculty identified item 8, "the middle school organizes students into small heterogeneous groups," as the third least important component. This item had a mean of 3.26 and was considered to be an important component.

Administrative respondents identified item 12, "the middle school uses organizational arrangements to augment guidance and support services," as the fourth least important component. This item had a mean of

3.41, regarded as <u>important</u>. Item 20, "the school principal is recognized as the instructional leader in the building," had a mean of 3.30 (<u>important</u>) and was the fourth least important component of faculty respondents.

Survey items 32, "middle school assessment and evaluation methods emphasize individual progress, minimize comparisons, and reward reasonable efforts," was the fifth least important component cited by administrators. This item had a mean of 3.44, also interpreted as <u>important</u>. Item 33, "the middle school incorporates a flexible program of student scheduling," recorded a mean of 3.33, or <u>important</u> designation, and was faculty respondent's fifth least important component.

Table 4.19

<u>Administrator and Faculty: **Least Important Components**</u>

Rank	Administrators		Faculty	
	Survey Item	Mean	Survey Item	Mean
1	16 (2)	3.26	14 (2)	3.05
2	14 (1)	3.33	16 (1)	3.15
3	23 (9)	3.33	8 (18)	3.26
4	12 (8)	3.41	20 (22)	3.30
5	32 (14)	3.44	33 (6)	3.33

* <u>Number in parenthesis identifies the ranking of the other group.</u>

Table 4.19 identifies respondent's least important components.

Comparison of Administrative and Faculty Perceptions
of the "Barriers" to Implementation of the Essential Elements

Administrative - Faculty Comparison: Most Serious "Barriers"

Mean values developed for administrative and faculty groups provided the baseline for a comparison of the most serious barriers perceived by these two groups. Perceptions of teachers varied from that of administrators with respect to the most frequently cited barriers to the successful implementation of the essential elements of developmentally responsive middle schools. The mean responses from each group identified several common barriers.

Administrators identified survey item 43, "an inability to obtain funding for middle level programs," as the most significant barrier to the implementation of the essential elements. Middle school administrators produced a mean of 2.33 for this survey item. This value was interpreted as a moderate barrier." Teachers also identified this item as an important barrier to the implementation of the essential elements. Faculty reported a mean of 2.26 for this survey item, a moderate barrier. This item recorded the second highest mean among teachers.

"Parents apathetic or irresponsible about their children," survey item 54, recorded a mean of 2.11 from administrators and a mean of 2.38 from teachers. Both groups considered the factor to be a moderate barrier. This barrier recorded the highest mean from faculty and the second highest from administrators.

Both administrative and faculty groups identified survey item 56, "problematic students (apathetic, hostile, etc.)," as the third most important obstacle to the successful implementation of the essential elements. The administrative mean for this item was 2.07 and the faculty mean was 2.18. Both responses were regarded as moderate barriers to the successful implementation of the essential elements.

Item 52, "lack of time for myself," was cited by administrators as the fourth greatest barrier. This item had a mean of 1.96 and was considered to be a moderate barrier. Faculty identified item 58, "resistance to change by staff," which had a mean of 2.00, a "moderate" factor, as the fourth most frequently cited barrier.

Administrators reported item 63, "time taken by administrative detail at the expense of more important matters," which had a mean of 1.85, also a moderate barrier, as the fifth greatest barrier. Faculty data identify item 52, "lack of time for myself," as the fifth most frequently cited barrier to the implementation of the essential elements of developmentally responsive middle schools. Faculty respondents reported a mean for this item of 1.87 and it was recognized as a moderate barrier.

Table 4.20

Administrators and Faculty: Most Frequent Barriers

Rank	Administrators		Faculty	
	Survey Item	Mean	Survey Item	Mean
1	43 (2)	2.33	54 (2)	2.38
2	54 (1)	2.11	43 (1)	2.26
3	56 (3)	2.07	56 (3)	2.18
4	52 (5)	1.96	58 (8)	2.00
5	63 (12)	1.85	52 (4)	1.88

* Number in parenthesis identifies the ranking of the other group.

Table 4.20 compares the most frequently cited barriers to the successful implementation of the essential elements of developmentally responsive middle schools as perceived by Montana administrative and faculty respondents.

Administrative and Faculty Comparison:

Least Frequently Cited "Barriers "

Mean values of each of the barriers listed on the MSQE^2 provided the basis for a comparison of administrative and faculty perceptions of the least serious barriers influencing the successful implementation of the essential elements. Administrative and faculty respondents identified similar survey

items as least important, though they were not similarly ranked.

Administrators identified item 47, "lack of competent office help," as the least important barrier. Faculty identified item 65, "too small of a student body," as the least important barrier. The administrative mean for item 47 was 1.11. The faculty mean for item 65 was 1.05. Both items were interpreted as not a factor.

Administrative and faculty respondents reversed the order of these responses in identifying the second least important barrier. Administrative respondents identified item 65, "too small of a student body,"and faculty cited item 47, "lack of competent office help." The administrative mean for item 65 was 1.19 while the faculty mean for item 47 was 1.18. Both items were interpreted as not a factor.

Administrative respondents identified item 46, "lack of competent administrative assistance," as the third least important barrier. Faculty respondent's mean indicated this item was the fifth least often cited barrier. The administrative mean for this item was 1.22 and the faculty mean was 1.38. The mean for both items identified a barrier that was not a factor.

Administrative respondents identified item 48, "lack of data about student skills and styles," as the fourth least important barrier. This item had a mean of 1.30; the same as item 59, "resistance of the superintendent or central office staff." A mean of 1.30 was considered not a factor.

Faculty respondents identified item 59, "resistance of the superintendent or central office staff," as the fourth least important barrier. The mean reported by faculty for this item was 1.28, a value regarded as not a factor.

Faculty respondents identified survey item 46, "lack of competent administrative assistance," as the fifth least important barrier. This item had a mean of 1.38 and was regarded as not a factor.

Table 4.21

Administrators and Faculty: Least Frequent Barriers

Rank	Administrators		Faculty	
	Survey Item	Mean	Survey Item	Mean
1	47 (2)	1.11	65 (2)	1.05
2	65 (1)	1.19	47 (1)	1.18
3	46 (5)	1.22	61 (20)	1.23
4	48 (17)	1.30	59 (5)	1.28
5	59 (4)	1.30	46 (3)	1.38

* Number in parenthesis identifies the ranking of the other group.

Table 4.21 compares administrative and faculty perceptions of the least important barriers to the successful implementation of the essential elements of developmentally responsive middle schools in Montana.

Frequency Distribution of Survey Items

Each of the essential elements of developmentally responsive middle schools was identified by a series of items on the survey instrument. The

distribution of responses from all respondents is summarized in the following section. Instrument questions have been grouped relative to the essential element.

Tables 4.22 through 4.33 provide data relative to the frequency distribution of the respondent's perceptions of the level of implementation and the degree of importance of each item. Each of the essential elements is listed as well as the survey items related to the element. The mean for each item is also provided in the accompanying table.

Element 1:

Element one, "educators committed to young adolescents," was determined by survey items one through three. Ninety-one percent of the respondent's identified the first component of this element, "educators generally understand the development uniqueness of young adolescents," as moderately implemented. Fifty percent of the respondents report a score of three, or moderate implementation on the second survey item, "educators form learning partnerships with students." Twenty-three percent scored this item a four, or a source of major implementation, from their perspective. Eighty-three percent of the respondents scored item 3, "educators serve as role models for students," as either a 3 (moderate implementation) or 4 (major implementation) on the implementation scale.

All of the respondents identified item one, "understanding the developmental uniqueness, on the importance scale as either important or very important to the success of their middle school. More than 82% of the respondents recorded scores of important (3), or very important (4) for survey

item two, "learning partnerships." All of the respondents identified component three of this element, "teachers as role models," as either important or very important.

Table 4.22

Element 1: Educators committed to young adolescents. (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 1: (developmental uniqueness)	3.33	0	6	32	28
Item 2: (learning partnerships	2.94	1	17	33	15
Item 3: (role models)	3.30	1	10	23	32
Importance Responses:					
Item 1: (developmental uniqueness)	3.83	0	0	11	55
Item 2: (learning partnerships)	3.48	0	5	24	37
Item 3: (role models)	3.80	0	0	10	53

Table 4.22 relates the frequency distribution of responses to the survey items related to element one, "educators committed to young adolescents." The data showed most respondent's perceived the three components of this element to moderately implemented. The data also reports respondent's perceive the components of this characteristic to be very important.

Element 2:

Element two, "a shared vision," was addressed by survey items four and five. Sixty-five percent of the respondents recorded a score of three, moderate implementation, or a four, major implementation, on item four, "the middle school involves all stakeholders in the mission process." About 71% of the respondents reported a score of three, moderate, or four, major implementation on component five, "the mission allows educators to pursue a challenging academic program," in their middle school. Eighty-four of the respondents reported item four, "involving stakeholders" as either important or very important to the success of their middle school. Approximately 94% of the respondents claimed item five, "pursuit of a challenging academic program" was important or very important to the success of their middle school.

Table 4.23

Element 2: A shared vision. (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 4: (involving all stakeholders)	2.85	4	19	26	17
Item 5: (pursuit of challenging academics)	3.03	3	9	37	17
Importance Responses:					
Item 4: (involving all stakeholders)	3.52	0	9	14	43
Item 5: (pursuit of challenging academics)	3.53	1	3	23	39

Table 4.23 reports the frequency distribution of responses to items related to element two, "a shard vision." The data revealed most elements were <u>moderately</u> implemented" in Montana middle schools, though the characteristics were considered to be <u>very important</u>.

Element 3:

Element three, "high expectations for all," was surveyed by instrument items six, seven, eight, and nine. Respondents noted that item six of the instrument, "the middle school provides opportunities to become intellectually engaged," was implement more than 67% of the time (<u>major implementation</u>). Item seven, "the middle school utilizes a variety of educational methods," was <u>moderately</u> implemented. Seventy-three percent of the respondents identified component eight, "the middle school organizes students into small, heterogeneous groups," as <u>moderately implemented</u> in their middle school. In response to item nine, "the middle school provides students with the opportunity to develop responsible citizenship skills," 78% of the respondents reported this component was <u>moderately implemented</u>.

All of the respondents reported item six, "opportunity for students to become intellectually engaged," as an <u>important</u> or <u>very important</u> component to the success of their school. More than 98% of the respondents identified survey item seven, "utilizing a variety of educational methods," as <u>important</u> or <u>very important</u> to the success of their middle school. Approximately 88% of the respondents believed item eight, "small, heterogeneous groups," was either <u>important</u> or <u>very important</u>. Ninety-six percent of the respondents identified item nine, "responsible citizenship

skills," as either _important_ or _very important_ to the success of their middle school.

Table 4.24

Element 3: High expectations for all. (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 6: (intellectually engaged students)	3.52	0	4	24	38
Item 7: (variety of educational methods)	3.27	1	12	21	32
Item 8: (small, heterogeneous groups)	2.91	5	13	31	17
Item 9: (citizenship skills)	3.03	2	2	33	18
Importance Responses:					
Item 6: (intellectually engaged students)	3.86	0	0	9	57
Item 7: (variety of educational methods)	3.88	0	1	6	59
Item 8: (small, heterogeneous groups)	3.36	2	7	22	35
Item 9: (citizenship skills)	3.73	0	2	14	50

Table 4.24 reports the frequency distribution for responses to the items related to element three, "high expectations for all." The data revealed most respondent's identified components to be _moderately_ implemented. Respondent's perceive most of the components of this element to be _very important_ to the success of their middle school.

Element 4:

Element four, "an adult advocate for every student," was addressed by questionnaire items 10, 11, and 12. Frequency distribution for each item was concentrated in responses three and four. Most respondents, 71%, believed item 10, "adult advisors serve as a link between school and home," was moderately implemented. Eighty-nine percent of the respondents identified item 11, "every student is well known by at least one adult in the school," as moderately implemented. Approximately two-thirds of the respondents believed item 12, "the middle school uses organizational arrangements to augment guidance and support services," was moderately implemented.

More than 92% of respondents identified survey item 10, "adult advisors link school and home," as important or very important. Item 11, "students well known by an adult," was reported to be very important on 82% of the responses and 86% of the respondents believed item 12, "organizational arrangement to augment guidance and support services." was important or very important to the success of their middle school.

Table 4.25

Element 4: An adult advocate for every student. (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 10: (advisors link home & school)	2.94	4	15	28	19
Item 11: (students well known by adult)	3.54	3	4	13	46
Item 12: (organizational arrangement)	2.94	8	14	17	26
Importance Responses:					
Item 10: (advisors link home & school)	3.44	3	2	24	37
Item 11: (students well known by adult)	3.77	0	3	9	54
Item 12: (organizational arrangements)	3.38	1	8	21	35

Table 4.25 reports the frequency distribution for the survey items related to element four, "an adult advocate for every student." The data revealed most respondent's perceived the components as moderately implemented, though most of the components were considered to be very important to the success of their school.

Element 5:

Questionnaire items 13 through 16 were related to element five, "family and community partnerships." Responses were fairly evenly distributed with respect to the level of implementation of component 13, "the middle school recognizes families as active participants in the school program." Thirty-one percent of the respondents reported this component as

partially implemented, 30% believed this component was moderately implemented, and 34% of the respondents described this elements as implemented more than two-thirds of the time. Responses to item 14, "the middle school assists families in creating and sustaining positive learning environments at home," were distributed across each of the available responses. Approximately 50% of the respondents believed this component was moderately implemented. Ninety-two percent of the respondents believed item 15, "the middle school supports family involvement by providing for two-way communication," was moderately implemented. More than 57% of the respondents reported item 16, "the middle school seeks partnerships with business, social service agencies, and other organizations," as moderately implemented.

Ninety-two percent of the respondents believed item 13, "families as active participants," was an important or very important component to the success of their middle school. Eighty-three percent of the respondents identified item 14, "assisting families to create and sustain positive learning environments at home," as important or very important. Approximately 95% of the respondents reported item 15, "two-way communication between school and home," as important or very important, while 72% believed item 16, "partnerships with business, social service agencies, and other organizations," was either important or very important.

Table 4.26

Element 5: Family and community partnerships. (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 13: (families as participants)	2.97	2	21	20	23
Item 14: (positive home environment)	2.46	10	22	26	7
Item 15: (two-way communication)	3.42	2	3	26	35
Item 16: (partnerships with business, etc.)	2.76	3	25	23	15
Importance Responses:					
Item 13: (families as participants)	3.58	0	5	18	43
Item 14: (positive home environment)	3.17	2	9	31	24
Item 15: (two-way communication)	3.67	1	2	15	48
Item 16: (partnerships with business, etc.)	3.20	1	11	28	26

Table 4.26 describes item responses to element five, "family and community partnerships." The implementation of these elements is moderate, though most of them are regarded as important by the respondents in this study.

Element 6:

Element six, "a positive school climate," was measured by survey items 17, 18, and 19. Most respondents, 90%, believed item 17 of this element, "a positive environment," was practiced in their middle school more than a

third of the time, moderate implementation. Ninety-four percent of the respondents reported item 18, "the middle school environment is inviting and caring," was moderately implemented in their school. Ninety-one percent of the respondents believed item 19, "the middle school is a safe environment," was moderately implemented. Survey items 17 (positive), 18 (inviting and caring), and 19 (safe) were identified by all of the respondents as either important or very important to the success of their middle school.

Table 4.27

Element 6: A positive school climate. (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 17: (environment is positive)	3.41	1	5	26	34
Item 18: (environment is inviting & caring)	3.38	1	2	33	28
Item 19: (environment is safe)	3.39	1	5	27	33
Importance Responses:					
Item 17: (environment is positive)	3.86	0	0	9	56
Item 18: (environment is inviting & caring)	3.85	0	0	10	55
Item 19: (environment is safe)	3.94	0	0	4	61

Table 4.27 reports the frequency distribution of responses to the survey items related to element six, "a positive school climate." Items for this element were moderately implemented in Montana middle schools, though

they were overwhelmingly perceived as very important.

Element 7:

Element seven, "a curriculum that is challenging, integrative, and exploratory," was measured by survey items, 20 through 25. Twenty-one percent of the respondents reported item 20, "the principal is recognized as the instructional leader in the school," was partially implemented in their middle school. Thirty-two percent reported the component was moderately implemented, while 44% identified this component as implemented more than two-thirds of the time.

Distribution of responses for item 21, "the middle school curriculum and procedures are articulated with the elementary and high school," was reported as follows: approximately 23% believed this component was implemented less than a third of the time in their middle school (partial), 44% felt it was implemented more than a third of the time (moderate), and 30% believed this component was implemented more than two-thirds of the time (major).

Nearly 20% of the respondents believed item 22, "the curriculum addresses issues that are relevant to the middle level learner," was implemented less than a third of the time (partial), 41% perceived it to be practiced more than a third of the time (moderate), and 39% identified this component as implemented more than two-thirds of the time (major).

Six percent of the respondents reported that survey item 23, "students are provided with the opportunity to reflect on experiences as a part of self-evaluation," was not practiced in their middle school, 35% reported it was

implemented less than a third of the time (partial), 44% responded that the component was implemented more than a third of the time (moderate), and 15% related the component was practiced more than 67% of the time in their middle school (major).

Seventeen percent of the respondents believed item 24, "the curriculum provides students with the opportunity to discover abilities, talents, values, and preferences." was implemented less than 33% of the time, 39% reported this component was implemented more than a third of the time (moderate), and 44% stated the survey item was practiced more than two-thirds of the time (major implementation) in their middle school. Approximately 70% of the respondents believed item 25, "the curriculum provides students with exploratory experiences," was implemented more than two-thirds of the time (major implementation).

More than 87% of the respondents believed item 20, "principal as the instructional leader," was an important or very important component. Ninety-five percent of the respondents reported they believed item 21, "articulation of curriculum and programs with elementary and high schools," was either an important or very important component. Eighty-one percent of the respondents believed item 22, "relevant curriculum," was very important to the success of their school. Approximately 91% of the respondents identified item 23, "the opportunity for students to reflect on experiences as a part of self-evaluation," as important or very important.

All of the respondents identified item 24, "the curriculum provides students with the opportunity to discover abilities, talents, values, and preferences," as important or very important. Ninety-eight percent identified

item 25, "the curriculum provides students with exploratory experiences," as important or very important.

Table 4.28

Element 7: A curriculum that is challenging, integrative and exploratory. (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 20: (principal as instructional leader)	3.20	1	14	21	29
Item 21: (articulated curriculum & program)	3.02	2	15	29	20
Item 22: (relevant curriculum)	3.20	0	13	27	26
Item 23: (reflective self-evaluation)	2.68	4	23	29	10
Item 24: (opportunity for discovery)	3.27	0	11	26	29
Item 25: (exploratory experiences)	3.62	0	5	15	46

Importance Responses:					
Item 20: (principal as instructional leader)	3.48	1	7	16	40
Item 21: (articulated curriculum & program)	3.57	1	2	21	41
Item 22: (relevant curriculum)	3.80	0	1	11	53
Item 23: (reflective self-evaluation)	3.37	0	6	29	30
Item 24: (opportunity for discovery)	3.80	0	0	13	53
Item 25: (exploratory experience)	3.83	0	1	9	56

Data table 4.28 provides frequency distributions for survey items related to element seven, "a curriculum that is challenging, integrative, and

exploratory." Components of this element are moderately implemented in Montana middle schools. Respondents identified this element as very important to the success of their middle school.

Element 8:

Items 26 through 30 provides data related to element eight, "varied teaching and learning approaches." The frequency distribution of responses for item 26, was distributed as follows: 12% believed item 26, "the middle school uses a variety of teaching and learning approaches," was implemented less than a third of the time (partial), 33% of them reported this item was moderately implemented, and 55% believed the component was implemented more than two-thirds of the time (major). Most of the respondents, 62%, identified component 27, "teaching techniques which enhance the abilities of young adolescents," as moderately implemented.

Forty-eight percent of the respondents believed item 28, "the middle school curriculum actively engages students in hands-on learning experiences," was moderately implemented, while approximately 38% believed this component was practiced more than two-thirds of the time (major implementation). Responses to item 29, "the middle school teacher designs learning activities that provide appropriate challenges for all types of students," revealed 62% of the respondents believed this component was practiced more than a third of the time (moderate implementation) and 27% felt it was implemented more than two-thirds of the time (major) in their middle school.

Implementation of item 30, "middle school technological resources

enhance and advance instruction for students," was distributed among responses 2 (partial), 3 (moderate), and 4 (major) implementation. Twenty-nine percent of the respondents reported this component was partially implemented, 35% reported it was moderately implemented, and 36% believed it was implemented more than two-thirds of the time (major implementation).

All of the respondents indicated items 26, "variety of teaching and learning approaches", 27, "techniques enhance styles of middle level learner," and 28, "hands-on learning experiences," were either important or very important to the success of the respondent's middle school. Approximately 98% of the respondents believed item 29, "appropriate learning challenges for all students," was an important or very important component. Ninety-seven percent of respondents identified item 30, "use of technological resources," as important or very important.

Table 4.29

Element 8: Varied teaching and learning approaches. (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 26: (variety of approaches)	3.42	0	8	22	36
Item 27: (techniques address student skills)	3.17	0	7	41	18
Item 28: (hand-on experiences)	3.23	1	8	32	25
Item 29: (challenge all types of students)	3.17	0	7	41	18
Item 30: (technological resources)	3.08	0	19	23	24

Importance Responses:					
Item 26: (variety of approaches)	3.86	0	0	9	57
Item 27: (techniques address student skills)	3.76	0	0	16	50
Item 28: (hands-on experiences)	3.82	0	0	12	54
Item 29: (challenge all types of students)	3.79	0	1	12	53
Item 30: (technological resources)	3.65	0	2	19	45

Table 4.29 presents the frequency distribution responses to survey items related to element eight, "varied teaching and learning approaches." Respondents identified most of these components as moderately implemented in Montana middle schools. This element was considered very important to the success of their middle school.

Element 9:

Survey items 31 and 32 addressed element nine, "assessment and evaluation that promote learning." One half of the respondents believed item 31, "the middle school utilizes continuous, authentic, and appropriate forms of attention," was moderately implemented in their middle school. Approximately 78% believed item 32, "middle level assessment and evaluation emphasizes individual progress, minimizes student comparisons, and rewards reasonable efforts," was moderately implemented.

Ninety-five percent of the respondents believed item 31, "continuous, authentic, and appropriate assessment," was important or very important to the success of their middle school. Item 32, "assessment of individual progress," reported that 91% of the respondents believed this component was important or very important to the success of their middle school.

Table 4.30

Element 9: Assessment and evaluation that promote learning. (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 31: (authentic assessment)	2.89	2	17	33	14
Item 32: (evaluation of individual progress)	2.97	2	12	35	14
Importance Responses:					
Item 31: (authentic assessment)	3.58	0	3	22	41
Item 32: (evaluation of individual progress)	3.48	0	6	22	37

Table 4.30 presents the frequency distribution for responses to the survey items related to element nine, "assessment and evaluation that promote learning." Respondents identified these components as moderately implemented in Montana middle schools. The components were regarded as very important to the success of the middle school.

Element 10:

Element 10, "flexible organizational structures," was measured by survey items 33 through 36. Approximately 27% of the respondents believed item 33, " a flexible program of student scheduling," was partially implemented, 48% believed it was moderately implemented, and 17% reported this component was implemented more than two-thirds of the time (major implementation). Respondents reported item 34, "teachers are provided with a common planning time, space, and group of students," was implemented more than two-thirds of the time (major implementation).

Responses to item 35, "middle schools create smaller learning environments," were distributed as follows: 15% reported this item was not implemented, 17% reported it was partially implemented, 21% reported it was moderately implemented, and 47% reported it was implemented more than two-thirds of the time (major implementation).

Distribution of responses to item 36, the middle school program provides opportunities for staff to meet regularly with their students," were: 5% reported the component was not implemented, 18% believed it was partially implemented, 20% identified the component as moderately implemented, and 57% perceived the component as implemented more than two-thirds of the time (major implementation).

Ninety-two percent of the respondents believed item 33, "flexible program of student scheduling," was either <u>important</u> or <u>very important</u> to the success of their school. Ninety-seven percent believe item 34, "providing teachers with a common planning time, space, and core of students," was <u>important</u> or <u>very important</u>.

Approximately two-thirds of the respondents believe item 35, "smaller learning environments," was <u>very important</u> to the success of their middle school. Relative to item 36, "staff meets regularly with their students," 94% of the respondents perceived this component as either <u>important</u> or <u>very important</u> to the success of their middle school.

Table 3.31

<u>Element 10: Flexible organization structures</u>. (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 33: (flexible student scheduling)	2.74	5	18	32	11
Item 34: (common time, space, students)	3.35	5	6	16	39
Item 35: (smaller learning environments)	3.00	10	11	14	31
Item 36: (regular meetings with students)	3.29	3	12	13	37

Importance Responses:					
Item 33: (flexible student scheduling)	3.39	1	4	29	32
Item 34: (common time, space, students)	3.77	0	2	11	53
Item 35: (smaller learning environment)	3.43	4	7	11	43
Item 36: (regular meetings with students)	3.55	1	2	22	40

Table 3.31 provides frequency distributions for responses to the survey items related to element 10, "flexible organizational structures." Respondents identified the components of this element as <u>moderately</u> implemented. The components of this element were identified as <u>very important</u> to the success of the middle school.

Element 11:

Element eleven, "programs and policies that foster health, wellness, and safety," was addressed by survey items 37 and 38. Respondents believed item 37, "the program advocates a comprehensive program of physical education," was implement more than 33% of the time (<u>moderate implementation</u>). Fifty-nine percent of the respondents believed item 37 was implemented more than two-thirds of the time (<u>major implementation</u>).

Fifty-three percent of the respondents recorded a response of 4, implying <u>major implementation</u>, for item 38, "the middle school physical education program emphasizes lifelong physical activities."

All of the respondents identified item 37, "comprehensive physical education program," as either <u>important</u> or <u>very important</u> to the success of their middle school. Ninety-seven percent noted the same response for item 38, "a physical education program which emphasizes lifelong activities."

Table 4.32

<u>Element 11</u>: <u>Program and policies for health, wellness, and safety.</u> (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 37: (comprehensive phys. ed. program)	3.41	3	6	18	39
Item 38: (lifelong activities)	3.27	2	13	16	35
Importance Responses:					
Item 37: (comprehensive phys. ed. program)	3.76	0	0	16	50
Item 38: (lifelong activities)	3.64	0	2	20	44

Data in Table 4.32 presents the frequency distribution for the survey items related to element 11, "a program and policies that foster health, wellness, and safety." Respondent's identified the components of this element as <u>moderately implemented</u> and <u>very important</u> to the success of their middle school.

Element 12:

Survey items 39 and 40 addressed the components of element 12, "comprehensive guidance and support services." Most respondents, 54%, noted that item 39, "teachers and specialized professionals offer assistance to middle school student," was implemented more than two-thirds of the time (<u>major implementation</u>) and an additional 31% reported it was <u>moderately</u> implemented in their middle school. Similar responses were reported for

item 40, "counselors coordinate support services and serve as a resource." Forty-eight percent of the respondents identified item 40 as implemented more than two-thirds of the time (major implementation) in their middle school, while an additional 33% of them stated the component was practiced more than a third of the time (moderate implementation).

Ninety-five percent of the respondents identified item 39, "teachers and specialized professionals offer assistance to students," as important or very important. Ninety-six percent of respondents described item 40, "counselors coordinate support services," as either important or very important.

Table 4.33

Element 12: Comprehensive guidance and support services. (N=66)

Implementation Responses:	Mean	1	2	3	4
Item 39: (special assistance)	3.35	2	8	20	35
Item 40: (counselors coordinate support)	3.26	3	9	22	32
Importance Responses:					
Item 39: (special assistance)	3.65	0	3	17	45
Item 40: (counselors coordinate support)	3.67	1	1	16	47

Table 4.33 presents the frequency distribution for the responses to the survey items related to element 12, "comprehensive guidance and support

service." Respondents identified the components of this element as moderately implemented. The components of this element were identified by respondents as very important to the success of their middle school.

Frequency Distribution of the Barriers to Implementation

Respondents identified each of the barriers to the successful implementation of essential elements of developmentally responsive middle schools on the MSQE[2] according to the following scale:

1. Not a factor,

2. Moderate factor,

3. Serious factor.

None of the factors listed on part B of the MSQE[2] were reported to be a serious factor which obstructed the implementation of the essential elements. Respondents did, however, perceived items 54, 43, 56, and 64 as the most serious factors to successful implementation. Eighteen of survey items were identified as moderate barriers and the remaining eight items were regarded as not a factor.

Table 4.34

All Respondents: Distribution of Barrier Responses: (N=66)

	Response			
Item	1	2	3	Mean
41 (Collective bargaining)	30	26	10	1.70
42 (Poor admin. communication)	34	23	9	1.62
43 (Lack of funding)	9	29	28	2.29
44 (Lack of profession. development)	34	22	10	1.64
45 (Lack of space)	28	27	11	1.74
46 (Poor administrative help)	49	13	4	1.32
47 (Poor office help)	57	8	1	1.15
48 (Lack of data about student skills)	40	22	4	1.45
49 (No program data)	32	27	7	1.62
50 (District inflexibility)	41	16	9	1.52
51 (Lack of M.S. knowledge)	36	27	3	1.50
52 (Lack of time for self)	20	32	14	1.91
53 (District tradition)	34	25	7	1.60
54 (Apathetic parents)	11	26	29	2.27
55 (Community pressure)	32	26	8	1.64
56 (Problem students)	10	37	19	2.14
57 (State mandates)	28	29	9	1.71
58 (Resistance to change by staff)	21	29	15	1.91
59 (Resistance by Superintendent)	50	13	3	1.29
60 (Teacher tenure)	43	11	12	1.53
61 (Teacher turnover)	51	12	3	1.27
62 (Extracurricular time demands)	38	24	4	1.48
63 (Time for administrative duties)	27	32	7	1.70
64 (Student body too large)	43	10	13	1.55
65 (Student body too small)	60	3	2	1.11
66 (Ability/dedication of staff)	24	27	11	1.79

Table 4.34 identifies the barrier distribution and means. Respondents identified 19 of the barriers as moderate factors. None of the items were identified as serious factors. The remaining seven barriers were identified as not a factor.

Comparison of Administrative and Faculty Perceptions
of the Level of "Implementation" of the Essential Elements

A mean for each of element was computed for both the administrative and faculty respondent's perceptions of the level of implementation of the essential elements of developmentally responsive middle schools. Based on the relatively small population of respondents and the variance in population size of the two groups, it was determined that an independent sample t-test involving separate variance estimates would be conducted to compare perceptions of each group relative to each of the 12 essential elements. A t-test for independent samples is used to determine whether there is probably a significant difference between the two means of two independent samples (Gay, 1992, p. 437). Table 3.35 lists the mean of each element or both of the groups involved in this study. The table also reports the t-value, which was calculated to compare the group means. The probability for each item is also included.

Table 4.35

<u>Comparison of Administrator and Faculty Responses to</u>

<u>Level of Implementation</u> (Administrators: N=27, Faculty: N=39)

Element	Mean			
	Administrator	Faculty	t-value	p
1 (committed educators)	3.15	3.26	0.8231	0.42
2 (a shared vision)	3.00	2.85	0.8287	0.42
3 (high expectations for all)	3.10	3.31	-1.7451	0.09
4 (adult advocates)	3.14	3.15	-0.0389	0.97
5 (partnerships)	2.91	2.89	0.1201	0.90
6 (positive climate)	3.38	3.41	-0.1654	0.87
7 (curriculum)	3.14	3.20	-0.4430	0.66
8 (varied approaches)	3.20	3.23	-0.2326	0.82
9 (assessment & evaluation)	2.96	2.89	0.4743	0.64
10 (flexible structures)	3.08	3.12	-0.2146	0.83
11 (health programs)	3.29	3.41	-0.6092	0.55
12 (guidance services)	3.14	3.56	-2.6159	0.01

Table 4.35 compares administrative and faculty responses to the perceived level of implementation of the essential elements identified on the MSQE[2]. The results of the t-test indicated <u>no significant difference</u> between group responses on the first 11 elements. The data indicated faculty perceived a greater degree of implementation for element 12 than did administrators.

Comparison of Administrative and Faculty Perceptions

of the Level of "Importance" of the Essential Elements

A mean for each item, involving data from each respondent, was calculated for each of the essential elements relative to the perceived degree of importance of the two groups. Based on the relatively small population of respondents and the variance in population size of the two groups, it was determined that an independent sample t-test involving separate variance estimates would be conducted to compare perceptions of each group. A t-test for independent samples is used to determine whether there is probably a significant difference between the means of two independent samples (Gay, 1992, p. 437). Table 4.36 lists the mean for each element for the groups involved in this study. The table reports the t-value, which was calculated to compare the group means. The probability level for each item is also reported.

Table 4.36

<u>Comparison of Administrator and Faculty Responses to</u>

<u>Level of Importance</u> (Administrators: N=27, Faculty: N=39)

Element	Mean			
	Administrator	Faculty	t-value	p
1 (committed educators)	3.68	3.74	-0.7298	0.47
2 (shared vision)	3.47	3.59	-0.8625	0.40
3 (high expectations)	3.68	3.76	-0.8234	0.42
4 (adult advocates)	3.48	3.60	-0.8645	0.39
5 (partnerships)	3.35	3.47	-0.8684	0.40
6 (positive climate)	3.79	3.86	-0.5937	0.56
7 (curriculum)	3.64	3.66	-0.2997	0.77
8 (varied approaches)	3.78	3.77	-0.1107	0.91
9 (assessment & evaluation)	3.55	3.50	0.3935	0.70
10 (flexible structures)	3.49	3.60	-0.8930	0.38
11 (health programs)	3.74	3.63	1.0780	0.29
12 (guidance services)	3.60	3.74	-1.1900	0.24

Table 4.36 compares administrative and faculty responses to the perceived degree of importance of the essential elements. The results of the t-test indicated <u>no significant differences</u> between administrative and faculty perceptions of the degree of importance on any of the elements.

Composite Data of All Respondent's Perceptions
of the Level of "Implementation" of the Essential Elements

Composite data for each of the essential elements was computed to include all responses. The mean for each of the components of the essential elements was weighted to account for the variance in population size of the two groups involved in the study. This data was calculated for both the perceived level of implementation and perceived degree of importance. Table 4.37 lists the composite mean for each of the 12 essential elements relative to respondent's perceptions of the level of implementation and degree of importance. The standard deviation (S. D.) is also reported for each item.

Table 4.37

Composite Mean and Standard Deviation (S. D.)

for Implementation and Importance.

Element	Implementation		Importance	
	Mean	S. D.	Mean	S. D.
1 (committed educators)	3.19	0.57	3.71	0.32
2 (shared vision)	2.94	0.32	3.52	0.55
3 (high expectations)	3.19	0.70	3.71	0.36
4 (adult advocates)	3.14	0.49	3.53	0.56
5 (partnerships)	2.90	0.76	3.40	0.55
6 (positive climate)	3.39	0.61	3.82	0.53
7 (curriculum)	3.16	0.56	3.65	0.31
8 (varied approaches)	3.21	0.52	3.78	0.32
9 (assessment & evaluation)	2.93	0.65	3.53	0.52
10 (flexible structures)	3.10	0.74	3.54	0.50
11 (health programs)	3.34	0.78	3.70	0.42
12 (guidance services)	3.31	0.69	3.66	0.48

Table 4.37 describes the composite mean and standard deviation for two of phases of the study. Data described in this table allows the reader to compare the mean scores for each of the elements identified on the MSQE[2] relative to the level of implementation and the degree of importance perceived by the respondents.

Comparison of All Respondent's Perceptions of
Level of "Implementation" and Degree of "Importance"

A correlated t-test of pair samples was conducted to determine statistical significance of respondent's perceived level of implementation of the components of the essential elements and the perceived degree of importance. A t-test is used to determine whether two means are significantly different at a selected probability level (Gay, 1992, p. 436). The design for this comparison suggests a t-test of nonindependent samples, since the level of implementation and the degree of importance for the same survey item are being compared. The t-test for nonindependent samples is used to determine whether there is probably a significant difference between the means of two matched samples (Gay, 1992, p. 437). Table 4.38 presents data developed from this t-test of nonindependent samples for each of the components listed on the MSQE[2].

Table 4.38

<u>Comparison of Level of Implementation and Degree of Importance</u>

Component	Mean Implementation	Importance	t-value	probability
1 (understanding adolescents)	3.33	3.83	6.13	<0.0001
2 (learning partnerships)	2.94	3.48	5.92	<0.0001
3 (role models)	3.30	3.80	4.80	<0.0001
4 (stakeholder involvement)	2.85	3.52	5.80	<0.0001
5 (mission = challenging academics)	3.03	3.53	4.44	<0.0001
6 (intellectually engaged students)	3.52	3.86	4.57	<0.0001
7 (variety of educational methods)	3.27	3.88	6.64	<0.0001
8 (heterogeneous groups)	2.91	3.36	4.11	<0.0001
9 (citizenship skills)	3.03	3.73	7.07	<0.0001
10 (advisors link home & school)	2.94	3.44	4.52	<0.0001
11 (students well known by adult)	3.54	3.77	2.37	0.0210
12 (organizational arrangements)	2.94	3.38	4.07	0.0001
13 (families are participants)	2.97	3.58	5.22	<0.0001
14 (school assists families)	2.46	3.17	5.82	<0.0001
15 (two-way communication)	3.42	3.67	2.80	0.0067
16 (partnerships)	2.76	3.20	3.98	0.0002
17 (positive school environment)	3.41	3.86	5.09	<0.0001
18 (environment inviting & caring)	3.38	3.85	5.28	<0.0001
19 (safe environment)	3.39	3.94	6.52	<0.0001
20 (principal as instructional leader)	3.20	3.48	2.86	0.0057
21 (articulated procedures)	3.02	3.57	5.67	<0.0001
22 (relevant curriculum)	3.20	3.80	6.67	<0.0001
23 (reflective self-evaluation)	2.68	3.37	5.92	<0.0001
24 (student discovery)	3.27	3.80	5.75	<0.0001
25 (exploratory experiences)	3.62	3.83	2.67	0.0095
26 (variety of teaching approaches)	3.42	3.86	4.91	<0.0001
27 (teaching techniques)	3.17	3.76	7.07	<0.0001
28 (hands-on curriculum)	3.23	3.82	6.64	<0.0001
29 (appropriate challenges)	3.17	3.79	7.25	<0.0001
30 (technological resources)	3.08	3.65	5.44	<0.0001
31 (assessment)	2.89	3.58	7.21	<0.0001
32 (evaluation)	2.97	3.48	4.59	<0.0001
33 (student scheduling)	2.74	3.39	6.23	<0.0001
34 (common planning, space, etc.)	3.35	3.77	3.60	0.0006
35 ("teams" "houses")	3.00	3.43	3.93	0.0002
36 (regular meeting)	3.29	3.55	2.53	0.0140
37 (comprehensive p.e. program)	3.41	3.76	3.20	0.0021
38 (lifelong activities)	3.27	3.64	3.54	0.0007
39 (assistance to students)	3.35	3.65	2.74	0.0080
40 (counselors coordinate services)	3.26	3.67	4.14	0.0001

Table 4.38 summarizes the comparison of implementation and importance of each of the components listed on the MSQE^2. The data from this statistical analysis suggested a real difference between the perceptions of the respondents relative to implementation and importance of each of the components. Probability values (p) revealed there was a statistically significant difference in the perceptions relative to these two conditions. As a result, the null hypothesis, which suggested there was no difference between the perceived level of implementation and the perceived degree of importance was rejected. This analysis revealed that all of the respondent's perceptions of the level of implementation were significantly different from their perceptions of the degree of importance.

Comparison of Administrative and Faculty Perceptions of the "Barriers" to Implementation of the Essential Elements

A mean for each of the survey items for each factor listed on the MSQE^2 was computed relative to each of the barriers for both groups. Based on the relatively small population of respondents and the variance in population size of the groups, it was determined that an independent sample t-test involving separate variance estimates would be conducted to compare the means of the two groups on each of the factors. A t-test for independent samples is used to determine whether there is probably a significant difference between the two means of two independent samples (Gay, 1992, p. 437).

Table 4.39 lists the means for both groups and the results of this statistical test.

Table 4.39

<u>Administrative and Faculty Perceptions of the Barriers</u>

Item	Mean Administrative	Faculty	t-test	p-value
41 (Collective bargaining)	1.67	1.72	0.2873	0.78
42 (Poor admin. communication)	1.78	1.52	-1.4293	0.16
43 (Lack of funding)	2.22	2.33	0.6198	0.54
44 (Lack of profession. development)	1.56	1.69	0.7517	0.46
45 (Lack of space)	1.70	1.77	0.3578	0.73
46 (Poor administrative help)	1.33	1.31	-0.1767	0.86
47 (Poor office help)	1.07	1.21	1.4404	0.16
48 (Lack of data about student skills)	1.56	1.38	-1.0679	0.29
49 (No program data)	1.67	1.59	-0.4415	0.66
50 (District inflexibility)	1.59	1.46	-0.6959	0.50
51 (Lack of M.S. knowledge)	1.41	1.56	1.0376	0.31
52 (Lack of time for self)	1.85	1.95	0.5251	0.61
53 (District tradition)	1.63	1.56	-0.3924	0.70
54 (Apathetic parents)	2.52	2.11	-2.4068	0.02
55 (Community pressure)	1.67	1.62	-0.2886	0.78
56 (Problem students)	2.22	2.08	-0.8924	0.38
57 (State mandates)	1.74	1.69	-0.2887	0.77
58 (Resistance to change by staff)	1.88	1.92	0.2021	0.84
59 (Resistance by Superintendent)	1.22	1.33	0.8272	0.42
60 (Teacher tenure)	1.41	1.62	1.0710	0.29
61 (Teacher turnover)	1.19	1.33	1.1296	0.27
62 (Extracurricular time demands)	1.41	1.54	0.8694	0.39
63 (Time for administrative duties)	1.56	1.79	1.5217	0.14
64 (Student body too large)	1.41	1.64	1.2083	0.24
65 (Student body too small)	1.07	1.13	0.5751	0.57
66 (Ability/dedication of staff)	1.78	1.80	0.1196	0.91

Table 4.39 compares the means of administrative and faculty responses to the barrier items. Administrative respondents identified one of the barriers as a <u>serious factor</u>, 16 of the barriers as <u>moderate</u>, and nine of them as <u>not a</u>

factor. Faculty respondents perceived 19 of the barriers as moderate factors, seven as not a factor, none as serious factors.

The t-test of independent samples identified only one barrier in which administrative and faculty respondent significantly differed in their perceptions. Administrators perceived item 54, "apathetic parents" as a more serious barrier than did faculty.

Summary

A summary of the data produced in this study includes the following:

1. There is a significant difference between respondent's perception of the level of implementation and the degree of importance. Respondents believe the elements are important to the success of middle level education, but few of the components are implemented to a satisfactorily level.

2. Administrative respondents identified each of the twelve essential elements of developmentally responsive middle schools as moderately implemented in Montana middle schools. These same respondents identified all of the elements as important to the success of their middle school. Eleven of the 12 elements were identified as very important.

3. Faculty respondents identified each of the 12 essential elements on the MSQE[2] as moderately implemented in their Montana middle school. These same respondents perceived all but one of the elements to be very important to the success of their middle school. The one element not identified as very important was described as important by faculty respondents.

4. Administrative and faculty respondents identified none of the

barriers listed on the MSQE^2, as serious barriers to the successful implementation of the essential elements. These respondents did identify nineteen of the barriers as moderate obstructions to successful implementation.

5. There were few significant differences in the perceptions of administrative respondents when compared with the perceptions of faculty respondents on either the level of implementation or on the degree of importance scales. There was no difference in the perceptions of administrators and faculty on any of the elements with respect to the perceived degree of importance. The only statistically significant difference between the two groups was identified on the level of implementation of item 12, "comprehensive guidance and support services." Faculty perceived this element as implemented more frequently than did administrators. Faculty saw this element as an example of major implementation, while administrators perceived this element as moderately implemented.

6. There was a significant degree of congruence between administrative and faculty groups relative to their perception of the barriers to successful implementation of the essential elements. Both groups identified many of the same barriers as the most significant obstacles middle schools face. Only one of the barriers was identified as a serious factor. Administrative respondents identified item 54, "apathetic parents" as a serious factor. Faculty perceived this barrier as a moderate factor.

Interpretation and implications of these results to middle level education in Montana will be discussed in Chapter 5. Suggestions for additional study will also be reviewed.

CHAPTER FIVE

CONCLUSIONS, IMPLICATIONS, AND SUGGESTIONS

FOR FUTURE RESEARCH

Introduction

The Carnegie Council on Adolescent Development's Task Force on Education of Young Adolescents (1989, p. 6) identified middle level education as "...potentially societies' most powerful force to recapture the one-fourth of American youth, between ages ten and seventeen, who are extremely vulnerable to multiple high risk behaviors and school failure and another one-fourth who are at moderate risk." The need for a solution to a society, potentially divided on one hand into an affluent, well educated group and a poorer, ill-educated group on the other, is a very real possibility based on Carnegie projections.

Middle level education, which has emerged in response to this concern, is intent on designing and delivering a curriculum which is developmentally appropriate for the early adolescent learner (Wiles and Bondi, 1993, p. 2). The composite body of knowledge regarding such a curriculum has converged into a national consensus of the "essential elements" of effective middle level education (Lounsbury, 1996, p. 2). The National Middle School Association provided a summary of these elements in a position paper titled <u>This We Believe</u> (1995). This document outlined six characteristics and six major programmatic areas representative of developmentally responsive middle schools.

These characteristics and programmatic areas provided the framework for this study in accredited Montana middle schools. The study examined administrative and faculty perceptions of the level of implementation, degree of importance, and barriers to implementation. The final chapter of this study presents a summary of the findings of the research conducted, implications, and suggestions for future research.

Summary of Research Findings

Analysis of the data collected relative to the research questions described in this study are summarized in this chapter. The research questions posed in this study were:

1. To what extent do middle school administrators and teachers believe the essential elements of developmentally responsive middle schools are implemented?

2. To what extent do middle school administrators and teachers believe the essential elements of developmentally responsive middle schools are important?

3. What do middle school administrators and teachers perceive as the barriers to the successful implementation of the essential elements of developmentally responsive middle schools?

Conclusions

"Implementation" of the Essential Elements

This study revealed that Montana middle schools are successfully implementing none of the essential elements of developmentally responsive middle schools. An analysis of the composite means for each element noted that none of the essential elements was implemented at a major level. If there is any good news from the data, indications are that all of the elements were perceived by respondents as "moderately" implemented.

Data related to implementation indicated most of the elements were implemented at similar moderate levels. Respondents believed they were most successful at implementing the characteristics related to "a positive climate" and the elements of a physical education program which incorporates "programs and policies which foster health, wellness, and safety." These result appear to be consistent with the priorities and attitudes of most Montanans. The rural nature of the state, and the emphasis many of it's residents place on physical activities, support the importance middle school educators in Montana have placed on the implementation of these two elements.

Analysis revealed the three elements which ranked the lowest on the implementation scale. "Family and community partnerships" was identified as the least implemented component on the MSQE[2]. The data indicated Montana middle schools are also not utilizing "alternative forms of assessment and evaluation." Educators are opting, instead, for more traditional forms of assessment. The assessment movement, currently

discussed in many educational forums, is apparently not progressing very well in Montana middle schools.

Another educational movement frequently mentioned in the professional literature, but not implemented in Montana middle schools, is the concept of a shared vision. Respondents indicated only limited involvement of all of the stakeholders in the design and implementation of the school's mission statement. Educators in Montana middle schools seem to be, either, intent on going it alone, or uncertain if how to proceed with the process of involving other constituencies.

The data revealed little difference in the perceptions of administrators and faculty regarding the level of implementation elements. Both groups identified similar elements as the most and least frequently implemented components; though they were ranked differently. Statistical analysis identified only one significant difference in the perceptions of administrators and faculty relative to the essential elements. Teachers perceived the level of implementation of element twelve, "comprehensive guidance and support services," as greater than that of their administrative counterparts. Administrators perceived this as a moderately implemented element, while faculty saw this element as the only example on the entire survey of major implementation .

Analysis of the level of implementation in Montana middle schools indicated no elements were implemented to the level prescribed in the professional literature. The implications of these results will be discussed later in this chapter.

"Importance" of the Essential Elements

The data developed in this study indicated respondents perceived eleven of the twelve elements described in the MSQE^2 as <u>very important</u>. Only perceptions for element five, "family and community partnerships," were identified as <u>less than very important</u> to the success of Montana middle schools.

Administrative respondents believed eight of the essential elements were <u>very important</u> to the success of their middle school. The remaining four elements were considered by administrators to be <u>important</u>. Administrators felt "family and community partnerships, a shared vision, an adult advocate for every student, and flexible organizational structures" were not as important to the success of the middle school as the other elements listed on the survey instrument.

By contrast, faculty perceived all but one, of the essential elements as <u>very important</u>. "Family and community partnerships" was identified as the least important element necessary for the success of the middle school. There was no significant difference in the perceptions of administrative and faculty respondents.

Montana middle school educators regarded the essential elements described in the professional literature, and surveyed on the MSQE^2, as <u>important</u> to the success of the middle school. The question of why these <u>important</u> elements are not implemented to a greater extent will be addressed later in this chapter.

"Barriers" to the Successful Implementation of the Essential Elements

None of the suggested barriers included on the MSQE^2 was identified as a <u>serious factor</u> obstructing the successful implementation of the essential elements. Respondents identified most of the barriers as "moderate factors," though approximately one-fourth of them were perceived as "not a factor." "Lack of funding, apathetic parents, and problem students" were identified as the most "serious" <u>moderate factors</u> based on the perception of the participants in this study involving accredited Montana middle schools.

Administrative perceptions agreed with that of the respondents as a whole, with respect to which factors had the most serious impact on the ability to successfully implement the essential elements. Administrative respondents perceived "apathetic parents" as the only <u>serious factor</u> which inhibited the implementation of the characteristics identified in <u>This We Believe</u> (1995). Administrative respondents identified nine of the barriers listed on the MSQE^2 as <u>not a factor</u>.

Faculty perceived none of the suggested barriers as <u>serious</u>. A lack of funding was regarded by teachers as the most "serious" of the <u>moderate factors</u> suggested. Seven of the factors were considered by faculty to be <u>not a factor</u> to the successful implementation of the essential elements of developmentally responsive middle schools.

Relationships between the level of implementation, degree of importance, and the barriers to successful implementation will be discussed in the next section of this chapter.

Implications

Several interesting dichotomies emerged from this study of Montana middle schools. Differences in the perceptions of the <u>importance</u> and <u>level of implementation</u>, identification of the <u>barriers</u>, perceptions of the <u>importance</u> of some characteristics, and the dramatic difference in number of accredited middle and 7-8 schools were some of the most obvious disparities.

Data collected in this study indicated respondents believed the elements identified in the study were <u>important</u> to the success of their middle school. <u>None</u> of the elements however, was <u>implemented</u> to a level emblematic of developmentally responsive middle schools. Compounding this paradox was the fact that educators identified <u>no</u> serious barriers obstructing the successful implementation of these elements. At issue is whether middle level educators have committed, even philosophically, to the middle school concept. It is evident from the data collected in this study that middle level practitioners have not committed to the middle school concept in practice.

Middle school literature clearly identified, and a national consensus of middle school educators agreed with, the essential elements of a developmentally appropriate education targeting the early adolescent learner. Montana middle school educators consistently agreed that these elements are, at the very least, <u>important</u> to the success of their middle school. Most disconcertingly however, this study revealed that implementation has failed to occur at even minimal levels despite the fact that these same educators identified none of the barriers listed in this study as serious obstacles to

implementation. How can this apparent paradox be explained?

Several hypotheses can be suggested to explain this contradiction. Is it possible that Montana middle school educators believe in the essential elements, but as perfectionist or idealist, are dissatisfied with an implementation level that is actually higher than their response rate indicated? Is is possible that the actual barriers to implementation were not included on the list provided in this study? Is it possible that middle school educators in Montana do not perceive an individual barrier, a single large boulder, as the primary reason for the limited level of implementation of the essential elements in the state, but rather see a number of smaller obstacles, numerous smaller sand piles, as the real cause?

An analysis of the data collected in this study highlight a number of inconsistencies to survey responses which expose the flaws in these hypotheses. Intellectually engaged students was identified by both administrators and faculty as one of the most important components of an effective middle school, yet, the use of technological resources which enhance learning and self-evaluation were regarded as considerably less important. Are technological resources unable to intellectually engage Montana's early adolescent learners? Does allowing students to reflectively evaluate their educational experiences fail to engage these learners in their own education?

A variety of educational methods was identified by respondents as important to the success of their middle school. Specific variations, such as heterogeneous groups, reflective self-evaluation, and the elements of interdisciplinary teaming however, were rated as considerably less important. The question emerges as whether respondents are committed to providing

variety, innovation, and risk-taking as components of their middle school or merely mouthing platitudes.

Is implementation occurring even at the levels indicted by the results of this study? Inconsistencies of responses to survey items suggest that actual implementation levels may actually be lower than indicated. For example, every student is well know by at least one adult, sounds good, but when nearly one-half of the responding schools have enrollments of 500 or more students and the implementation levels of those elements designed to address this need, such as student scheduling, common planning time for teams, regular team meeting times, and special assistance for students are scored conspicuously lower, one must question whether Montana middle schools are really ensuring that every middle school child has an appropriate adult advocate.

Exploratory experiences received one of the highest ratings on the level of implementation scale, yet components of this element, reflective self-evaluation, lifelong activities, appropriate challenges, and technological resources recorded much lower levels of implementation. Again, concern escalated regarding the actual level of implementation of these elements in Montana middle schools.

Respondents indicated there were no serious barriers impeding the successful implementation of the essential elements, but responses tend to blur the accuracy of this assessment. Both groups identified factors outside of the school as the most moderate barriers, (e.g., funding shortfalls, apathetic parents, and problematic students). Incompatible responses again support concern regarding the seriousness of the barriers to implementation.

Respondents identified <u>apathetic parents</u> as one of the most serious factors obstructing implementation. One of the least important components identified by respondents, however, was the involvement of families and the community in the education of the early adolescent learner. If <u>apathetic parents</u> are one of the most serious barriers to implementation of the essential elements of developmentally responsive middle schools it seems as though the involvement of families should have been identified as a priority for middle school educators. Perhaps the real issue for middle level practitioners is how to effectively involve parents, families, and community organizations in the middle school program.

<u>Problem students</u> were identified as another of the most serious barriers middle school personnel face. Documentation supports the concept that student problems frequently result from a lack of interest in the practiced curriculum. Students actively engaged in relevant, challenging, hands-on curriculum are less likely to become problems. This type of curriculum is exactly the type advocated by the developmentally responsive middle school. If Montana middle level educators identify <u>problem students</u> as one of their most serious concerns perhaps it is because their middle school lacks a developmentally appropriate curriculum.

Is it possible that middle school educators are idealists or perfectionist who are completely dissatisfied with the current level of implementation in their respective schools? Incongruencies of responses do not support this interpretation. It would seem that if middle school educators were dissatisfied with the current level of implementation of the essential elements in their school they would be equally dissatisfied with the individual components of

each element and could clearly identify, or at least suggest, one or more serious barriers. Respondents identified none of the barriers suggested on the survey instrument as serious. Consequently, the data makes it difficult, if not impossible, to embrace this interpretation.

Were the actual barriers to successful implementation missing from the survey? Respondents were provided with the opportunity to suggest additional or alternate barriers. Only one respondent suggested an alternative to the barriers identified on the survey instrument. It is absolutely clear that neither alternate barriers or idealistic middle school educators was the reason respondents perceive the level of implementation of the essential elements of developmentally responsive middle schools as inadequate. Thus, the fundamental question remains, "Why are the essential elements of developmentally responsive middle schools so inadequately implemented in accredited Montana middle schools?"

One explanation is a lack of effective leadership. A number of factors may contribute to this condition. Middle school leaders demonstrate an inability to abandon the junior high model many of them experienced during their own early adolescent education. A lack of official support, which does not allow for the kind of risk-taking necessary to implement the complete middle school program, contributes to this lack of direction from middle school leaders.

Respondents cited a lack of time as one of the barriers influencing implementation of the elements. This is a concern voiced by many educators at various educational levels. Middle school educators may feel they are already overburden with responsibilities and the adoption of a new and

different curricular design is more than they are able to assimilate.

Coupled with this concern may be a lack of suitable resources. The resources necessary to design and implement a child-centered curriculum, specifically one intended to address the needs of the early adolescent learner, may be insufficient in many districts. Aside from a lack of political support, fiscal resources may also be limited or lacking. One of the most serious factors cited by participants in this study was a lack of funding. Aside from the availability of funds, the manner in which these resources are applied can critically effect the success of the middle school program.

A lack of understanding of middle school concepts may also contribute to the limited level of successful implementation of the essential elements. Inconsistent responses to survey items illustrate that most respondents don't really "get" the middle school concept. Montana has no post-secondary training program which specifically addresses middle school education. The state accreditation agency does not recognize middle level education as a separate or unique entity. The state department of education and institutions of higher learning need to take the lead in producing teachers who are specifically prepared and certified for teaching at the middle level.

A criticism, often leveled at middle schools focuses on the perceived lack of continuity the middle school program places on the educational continuum. Frequently, the continuum becomes the focus at the expense of early adolescent education. Greater understanding of the unique and varied developmental needs of this age-level learner and the incorporation of the characteristics into practices is at the core of the middle school concept. An adjustment of this magnitude may threaten the comfort level of some middle

level educators and further entrench them in the existing paradigm.

The barriers to implementation, whatever they may actually be, contribute to the general malaise of middle level education in the state. Respondents were unable to identify a single serious barrier, but rather noted several lesser, moderate ones. The road to successful implementation of the essential elements is apparently no blocked by a single barrier, but rather by a number of smaller, seemingly less significant, barriers. Each of the smaller barriers may seem to be easier to remove, but the sheer number of them apparently creates an inertia of its own which result is a sense of futility middle school educators seem unable to overcome. The fallacy of this assessment rests in the fact that most of the barriers identified as moderate were closer to a not a factor response than to the serious factor rating. The final analysis calls into question the validity of a hypothesis which doesn't really identify a lot of even moderate barriers.

The final implication of the findings of this study is the bleak future it paints for middle school education in Montana. There are 207 intermediate level school in Montana. Thirty-two of these schools are accredited as middle schools. The remaining 175 are accredited 7-8 schools. The overwhelming number of schools which are not middle schools, coupled with those schools which are not successfully implementing the practices of developmentally responsive middle schools, calls into question the future of middle school education in Montana. Despite volumes of literature supporting the middle school concept as the best method of providing an age appropriate education to the early adolescent learner, Montana middle schools appear unwilling, or unable, to implement the essential elements.

Suggestions for Future Research

Given the majority position of the 7-8 school in Montana, it seems reasonable to survey the level of implementation of the essential elements in these schools. A sense of how these schools are addressing the unique needs of the early adolescent learner would provide an interesting contrast to the data collected in this study.

An answer to the question of why so many Montana schools have elected not to seek middle school designation would be another valuable piece of information. Researchers might be interested to know how the rural nature of the state, the limited educational budget, and broadly distributed population, influence the adoption of the middle school program.

Researchers may want to focus on the processes and procedures which are effective in Montana middle schools. Focusing on what works may improve the quality of middle level education and serve to promote middle schools as a legitimate third tier of American education.

A study which examines the philosophy and mission statements of the two predominant intermediate level models in the state may prove enlightening. Comparing the characteristics of middle level education which are actually implemented, with the beliefs which receive written emphasis may reveal the elements which are actually valued.

In light of, the identification of, "lack of funding" as a one of the more serious barriers identified in this study, school board members and central office personnel, those who influence the funding level for the middle school programs, should be surveyed. These constituents play an integral part in the

successful implementation of the essential elements. Certainly, their perspective would contribute valuable information to the portrait of middle level education in Montana.

Parents would provide another important perspective of the level of implementation of the essential elements. How this group perceives middle schools attempts to inculcate them into the fabric of the middle schools movement would be valuable. Current and former students could, similarly, submit information useful in completing the picture.

One of the primary aims of middle level education is to move from a subject-area curriculum, which has dominated American education for the better part of the past three generations, to an issue-focused, client-centered one. This struggle has been taking place in the larger education field for most of this century (Beane, 1987). The success of the middle school movement can have dramatic effects on the elementary and secondary levels of education. This reform movement, which seeks to provide a developmentally appropriate education to a specific clientele, will impact the nature of the program offered at every educational level. The failure of the middle school movement may signal the continuation of subject-centered approach to education.

Central to the middle school concept is a issue-focused, client-centered approach to education. Recent events, such as the rash of school shootings and related tragedies, emphasizes the lack of connection too many of our young people have with schools, teachers, and the institution of education in America. It is becoming increasingly incumbent on education to refocus its efforts to produce a client-centered model of education, exactly the concept

advocated by the middle school. The complete implementation of all of the essential elements is vital to creating the connections early adolescent learners desperately need. To deny this critical element is to, all but, guarantee the Carnegie Council's prediction of a dual society...or worse.

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APPENDIX A:

MSQE^2 HYPOTHESES AND SUPPORT

MSQE[2] HYPOTHESES AND SUPPORT

(1) Middle school educators understand the developmental uniqueness of the young adolescent.

H_i: Middle school educators who understand the developmental uniqueness of the young adolescent contribute significantly to the effectiveness of the developmentally responsive middle school.

H_0: There is no statistically significant difference in the effectiveness of the developmentally responsive middle school as a result of the level of understanding of the developmental uniqueness of the young adolescent on the part of the middle school educator.

Supporting research: Scales, 1996; Goulatt, 1995; George and Shewey, 1994; Irvin, Valentine, and Clark, 1994; Wiles and Bondi, 1993; George and Alexander, 1993; Manning, 1993; Clark and Clark, 1992; Schurr, 1992; Epstein and Mac Iver, 1990; Carnegie Council, 1989; Merenbloom, 1988; Binko and Lawlor, 1986; NASSP (no date given); Georgiady and Romano, 1973; NMSA, 1985; Munsell, 1984; Brown, 1981; Riegle, 1971; Moss, 1971; and Gatewood and Dilg, 1970.

(2) Middle school educators form learning partnerships with students based on needs, interests, and abilities of the middle level student.

H_i: Learning partnerships between teachers and students, based on needs, interests, and abilities of middle school students significantly impact the effectiveness of the developmentally responsive middle school.

H_0: There is no statistically significant difference in the effectiveness of the developmentally responsive middle school as a result of educators forming learning partnerships with students based on their needs, interests, and abilities.

Supporting research: George and Shewey, 1994; George and Alexander, 1993; Wiles and Bondi, 1993; Carnegie Council, 1989; Munsell, 1984; Riegle, 1971; and Gatewood and Dilg, 1970.

(3) Educators in the middle school **serve as role models** for the middle level student.

H_j: Middle school educators who serve as role models for middle school students contribute to the effectiveness of the developmentally responsive middle school.

H_o: There is no statistically significant difference in the effectiveness of the developmentally responsive middle school in which educators serve a role models for middle school students.

Supporting research: Wiles and Bondi, 1993; NASSP, (no date given) NMSA, 1985.

(4) The middle school involves all stakeholders - students, faculty, administrators, families, board of education members, & community members -**in the development of a** shared **mission statement.**

H_j: Middle schools which involve all stakeholders in the development of a shared mission statement contribute to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which involves all stakeholders in the development of a shared mission statement does not significantly contribute to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; George and Alexander, 1993; Carnegie Council, 1989; NASSP, (no date given) and Moss, 1971.

(5) The middle school mission is operationalize to allow educators to pursue appropriate practices which **provide for a challenging academic program.**

H_j: The middle school which operationalize its mission statement in such a manner as to allow teachers to provide for a challenging academic program contribute to the effectiveness of the developmentally responsive middle school.

H_0: The middle school which operationalize its mission in a manner which allows teachers to provide for a challenging academic program does not significantly contribute to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Alexander, 1993; Carnegie Council, 1989.

(6) The middle **school provides** appropriate learning **opportunities** which permit **students to become intellectually engaged.**

H_i: The middle school which provides appropriate learning opportunities which permit students to become intellectually engaged contribute to the effectiveness of the developmentally responsive middle school.

H_0: The middle school which provides appropriate learning opportunities which permit students to become intellectually engaged does not statistically significantly contribute to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; George and Alexander, 1993; Clark and Clark, 1992; Carnegie Council, 1989; Merenbloom, 1988; NASSP, (no date given); NMSA. 1985; Munsell, 1984; and Brown, 1981.

(7) The middle **school utilizes a variety of educational methods** and approaches to address individual learning styles of the learner.

H_i: The middle school which utilizes a variety of educational methods and approaches to address individual learning styles of the learner contributes significantly to the effectiveness of the developmentally responsive middle school.

H_0: The middle school which utilizes a variety of educational methods and approaches to address the individual learning styles of the learner does not significantly contribute to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; George and Alexander, 1993; Clark and Clark, 1992; Carnegie Council, 1989; NASSP, (no date given); Binko and Lawlor, 1986; NMSA, 1985; Munsell, 1984; Brown, 1981; Georgiady and Romano,

1973; Riegle, 1971; Gatewood and Dilg, 1970; and Montebello, CA School District, 1969.

(8) The middle school organizes students into small, heterogeneous groups designed to empower students to become actively engaged in their own learning.

H_i: The middle school which organize students into small, heterogeneous groups designed to empower students to become actively engaged in their own learning significantly contribute to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which organizes students into small, heterogeneous groups designed to empower students to become actively engaged in their own learning does not significantly contribute to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; George and Alexander, 1993; Carnegie Council, 1989; NASSP, (no date given); Munsell, 1984; and Riegle, 1971.

(9) The middle school provides students with the opportunity to develop responsible **citizenship skills.**

H_i: Middle schools which provide students with the opportunity to develop responsible citizenship skills contribute to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which provide students with the opportunity to develop responsible citizenship skills does not significantly contribute to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Alexander, 1993; Carnegie Council, 1989; NASSP, (no date given); Binko and Lawlor, 1986; NMSA, 1985; Brown, 1981; and Gatewood and Dilg, 1970.

(10) The middle school provides adult advocates to serve as a link between the school and home.

H_i: The middle school which provide adult advocates to serve as a link between the middle school contribute to the effectiveness of the developmentally responsive middle school.

H_0: The middle school which provide an adult advocate to serves as a link between the middle school and the home do not significantly contribute to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Alexander, 1993; Munsell, 1984; and Riegle, 1971.

(11) The middle school provides every student with the opportunity to be well known by at least one adult in the school.

H_i: The middle school which provide every student with the opportunity to be well known by at least one adult in the school contributes to the effectiveness of the developmentally responsive middle school.

H_0: The middle school which provide every student with the opportunity to be well known by at least one adult in the school does not significantly contribute to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Alexander, 1993; Clark and Clark, 1992; Binko and Lawlor, 1986; NMSA, 1985; Munsell, 1984; Brown, 1981; and Riegle, 1971.

(12) The middle school uses a variety of organizational arrangements (e.g. advising groups, homebase groups, team-based mentorships) to augment guidance and support services.

H_i: The middle school which uses a variety of organizational arrangements to augment guidance and support services significantly contributes to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which uses a variety of organizational arrangements to augment guidance and support services does not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; George and Alexander, 1993; Clark and Clark, 1992; NMSA, 1985; Munsell, 1984; Brown, 1981; Georgiady and Romano, 1973; Moss, 1971; Riegle, 1971, and Montebello, CA School District, 1969.

(13) The middle school recognizes families as active participants in school programs.

H_i: The middle school which recognizes families as active participants in school programs contributes significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which recognizes families as active participants in school programs does not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; Carnegie Council, 1989; Munsell, 1984; Georgiady and Romano, 1973; Moss, 1971; and Riegle, 1971.

(14) The middle school assists families in creating and sustaining positive learning environments.

H_i: The middle school which assists families in creating and sustaining positive learning environments contributes significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which assists families in creating and sustaining positive learning environments does not significantly contribute to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; Carnegie

Council, 1989; Munsell, 1984; Georgiady and Romano, 1973; and Riegle, 1971.

(15) The middle school supports family involvement by providing for two-way communication.

H_i: The middle school which supports family involvement by providing for two-way communication contributes significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which supports family involvement by providing for two-way communication does not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; George and Alexander, 1993; NMSA, 1985; Georgiady and Romano, 1973; Moss, 1971; and Riegle, 1971.

(16) The middle school seeks appropriate partnerships with business, social service agencies, and other organizations.

H_i: The middle school which seeks appropriate partnerships with business, social service agencies, and other organizations contributes significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which seeks appropriate partnerships with business, social service agencies, and other organizations does not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; Carnegie Council, 1989; NASSP, (no date given); Munsell, 1984; Georgiady and Romano, 1973; and Montebello, CA School District, 1969.

(17) The middle school environment is positive and promotes a sense of community in which individual differences are recognized and accepted with respect and dignity.

H_j: A middle school environment that is positive and promotes a sense of community in which individual differences are recognized and accepted with respect and dignity is regarded as an important component of developmentally responsive middle schools.

H_0: A middle school environment that is positive and promote a sense of community in which individual differences are recognized and accepted with respect and dignity is not regarded as an important component of the developmentally responsive middle school.

Supporting research: George and Alexander, 1993; Merenbloom, 1988; NASSP, (no date given); Munsell, 1984; Brown, 1981; Riegle, 1971; and Gatewood and Dilg, 1970.

(18) The middle school environment is inviting and caring, encourages learning, initiative, and student risk taking.

H_j: A middle school environment that is inviting and caring, encourages learning, initiative, and student risk taking is an important element of the developmentally responsive middle school.

H_0: A middle school environment that is inviting and caring, encourages learning, initiative, and student risk taking is not an important element of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; NASSP, (no date given); NMSA, 1985; and Gatewood and Dilg, 1970.

(19) The middle school provides a safe environment, free of violence, substance abuse, and threatening behaviors.

H_j: The middle school which provide a safe environment, free of violence, substance abuse, and threatening behaviors contribute significantly to the effectiveness of the developmentally responsive middle school.

H_0: The middle school which provides a school environment that is safe, free from violence, substance abuse, and threatening behaviors does not contribute significantly to the

effectiveness of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; Carnegie Council, 1989; NMSA, 1985; and Gatewood and Dilg, 1970.

(20) The middle school **principal is recognized as the instructional leader** in the building.

H_i: The middle school which recognizes the principal as the instructional leader in the building contributes significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which recognizes the principal as the instructional leader in the building does not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Alexander, 1993, Carnegie Council, 1989; NASSP, (no date given); and Montebello, CA School District, 1969.

(21) The middle **school curriculum and procedures** are articulated **with** those of the **elementary and high schools,** including orientation and transition programs.

H_i: The middle school curriculum and procedures which are articulated with the elementary and high school programs contribute significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle schools curriculum and procedures which are articulated with elementary and high school programs contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; George and Alexander, 1993. NASSP, (no date given); Binko and Lawlor, 1986; Munsell, 1984; Brown, 1981; Riegle, 1971; and Montebello, CA School District, 1969.

(22) The middle school curriculum addresses issues and skills that are relevant to the middle level learner.

H_i: The middle school curriculum which addresses issues and skills that are relevant to the middle level learner contribute significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school curriculum which addresses issues and skills that are relevant to the middle level learner do not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Alexander, 1993; Clark and Clark, 1992; NASSP, (no date given): Binko and Lawlor, 1986; NMSA. 1985; Munsell, 1984; Brown, 1981; Georgiady and Romano, 1973, Moss, 1971; Riegle, 1971; Gatewood and Dilg, 1970; Montebello, CA School District, 1969.

(23) The middle school curriculum provides opportunity for students to reflect on experiences as a part of self - evaluation.

H_i: The middle school curriculum which provides opportunity for students to reflect on experiences as part of self-evaluation contributes significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school curriculum which provides opportunity for students to reflect on experiences as part of self evaluation do not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Alexander, 1993; Munsell, 1984; Riegle, 1971; and Montebello, CA School District, 1969.

(24) The middle school curriculum provides students with the opportunity to discover abilities, talents, values, and preferences.

H_i: · The middle school curriculum which provides students with the opportunity to discover abilities, talents, values, and preferences contributes significantly to the effectiveness of the developmentally responsive middle school.

H_0: The middle school curriculum which provides students with the opportunity to discover abilities, talents, values, and preferences does not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; George and Alexander, 1993; Clark and Clark, 1992; Binko and Lawlor, 1986; NMSA, 1985; Munsell, 1984; Brown, 1981; Georgiady and Romano, 1973; Moss, 1971; Riegle, 1971; Gatewood and Dilg, 1970; and Montebello, CA School District.

(25) The middle school **curriculum provide** students with **exploratory experiences** which are enriching, healthy, and contribute to adolescent development.

H_i: The middle school curriculum which provides students with exploratory experiences which are enriching, healthy, and contribute to adolescent development contribute significantly to the effectiveness of the developmentally responsive middle school.

H_0: The middle school curriculum which provides students with exploratory experiences which are enriching, healthy, and contribute to adolescent development do not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994, Wiles and Bondi, 1993; George and Alexander, 1993; Clark and Clark, 1992; NASSP, (no date given); Binko and Lawlor, 1986; NMSA, 1985; Munsell, 1984; Brown, 1981; Georgiady and Romano, 1973; Moss, 1971; Riegle, 1971; Gatewood and Dilg, 1970, and Montebello, CA School District, 1969.

(26) The middle school **utilizes a variety of teaching and learning approaches** designed around the developmental and learning characteristics of young

adolescents.

H_i: The middle school which utilizes a variety of teaching and learning approaches designed around the developmental and learning characteristics of the young adolescent contribute significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which utilizes a variety of teaching and learning approaches designed around the developmental and learning characteristics of the young adolescent does not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; George and Alexander, 1993; Merenbloom, 1988; Binko and Lawlor, 1986; Munsell, 1984; Brown, 1981; Georgiady and Romano, 1973; Riegle, 1971; Gatewood and Dilg, 1970; and Montebello, CA School District, 1969.

(27) Middle school teaching techniques enhance and accommodate the diverse skills, abilities, knowledge, intelligences, and learning styles of young adolescents.

H_i: The middle school which utilizes teaching techniques that enhance and accommodate the diverse skills, abilities, knowledge, intelligences, and learning styles of young adolescents contributes significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which utilizes teaching techniques that enhance and accommodate the diverse skills, abilities, knowledge, intelligences, and learning styles of young adolescents does not significantly contribute to the effectiveness of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; George and Alexander, 1993; Merenbloom, 1988; NASSP, (no date given); Binko and Lawlor, 1986; Munsell, 1984; Brown, 1981; Georgiady and Romano, 1973; Moss, 1971; Riegle, 1971; Gatewood and Dilg, 1970; Montebello, CA School District, 1969.

(28) The middle school curriculum actively engages students in a variety of hands-on learning experiences.

H_i: The middle school curriculum which actively engages students in a variety of hands-on learning experiences contribute significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school curriculum which actively engages students in a variety of hands-on learning experiences does not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Alexander, 1993; Clark and Clark, 1992; NASSP, (no date given); Binko and Lawlor, 1986; Munsell, 1984; Brown, 1981; Moss, 1971; Riegle, 1971; and Gatewood and Dilg, 1970.

(29) The middle school teacher designs learning activities that provide appropriate challenges for all types of students.

H_i: Middle school teachers who design learning activities which provide appropriate challenges for all types of students contribute significantly to the effectiveness of the developmentally responsive middle school.

H_o: Middle school teachers who design learning activities which provide appropriate challenges for all types of students do not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Alexander, 1993; Merenbloom, 1988; NASSP, (no date given); Binko and Lawlor, 1986; Munsell, 1984; Brown, 1981; Georgiady and Romano, 1973; Moss, 1971; Riegle, 1971; Gatewood and Dilg, 1970; and Montebello, CA School District, 1969.

(30) The middle school program utilizes technological resources to enhance and advance instruction.

H_j: The middle school which utilize technological resources to enhance and advance instruction contribute significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which utilizes technological resources to enhance and advance instruction do not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; George and Alexander, 1993; NASSP, (no date given); Binko and Lawlor, 1986; Gatewood and Dilg, 1970; and Montebello, CA School District, 1969.

(31) The middle education program utilizes continuous, authentic, and appropriate forms of assessment of student progress.

H_j: The middle school education program which utilizes continuous, authentic, and appropriate forms of assessment of student progress contribute significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school education program which utilizes continuous, authentic, and appropriate forms of assessment of student progress does not contribute significantly to the effectiveness of developmentally responsive middle schools.

Supporting research: Wiles and Bondi, 1993; Binko and Lawlor, 1986; NMSA, 1985; Munsell, 1984; Brown, 1981; and Montebello, CA School District, 1969.

(32) Middle level education assessment and evaluation methods emphasize individual progress, minimize student comparisons, and reward reasonable efforts.

H_j: Assessment and evaluation methods that emphasize individual progress, minimize student comparisons, and reward reasonable efforts contribute significantly to the

effectiveness of the developmentally responsive middle school.

H_0: Assessment and evaluation methods that emphasize individual progress, minimize student comparisons, and reward reasonable efforts does not contribute significantly t the effectiveness of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; Binko and Lawlor, 1986; NMSA, 1985; Munsell, 1984; Brown, 1981.

(33) The middle school incorporates a flexible program of student scheduling which provides for enrichment programs, cooperative learning groups, and independent study.

H_i: Middle schools which incorporate a flexible program of student scheduling which provides for enrichment programs, cooperative learning groups, and independent study contribute significantly to the effectiveness of the developmentally responsive middle school

H_0: Middle schools which incorporate a flexible program of student scheduling which provides for enrichment programs, cooperative learning groups, and independent study do not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; George and Alexander, 1993; Carnegie Council, 1989; NASSP, (no date given); Binko and Lawlor, 1986; Munsell, 1984; Brown, 1981; Georgiady and Romano, 1973; Moss, 1971; Riegle, 1971; and Montebello, CA School District, 1969.

(34) The middle school program provides teachers with a common planning time, space, core of students, and responsibility for the design and operation of the educational program.

H_i: The middle school which provides teachers with a common planning time, space, core of students and the responsibility for the design and operation of the educational program for those students contribute significantly to the effectiveness of the developmentally

responsive middle school.

H$_0$: The middle school which provides teachers with a common planning time, space, core of students, and the responsibility for the design and operation of the educational program for those students do not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; George and Alexander, 1993; Turning Points, 1989; Binko and Lawlor, 1986; Munsell, 1984; Brown, 1981; Georgiady and Romano, 1973; Riegle, 1971; and Montebello, CA School District, 1969.

(35) The middle school program creates smaller learning environments (i.e. "schools-within-a-school," teams, houses).

H$_1$: The middle school program which creates smaller learning environments with in the school contribute significantly to the effectiveness of the developmentally responsive middle school

H$_0$: The middle school program which creates smaller learning environments within the school do not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; Carnegie Council, 1989; NASSP, (no date given); Munsell, 1984; Riegle, 1971; and Montebello, CA School District, 1969.

(36) The middle school program provide opportunities for adult advocates to meet regularly with their students.

H$_1$: The middle school program which provide opportunities for adult advocates to meet regularly with their students contributes significantly to the effectiveness of the developmentally responsive middle school.

H$_0$: The middle school program which provides opportunities for adult advocates to meet regularly with their students do not contribute significantly to the effectiveness of the

developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; George and Alexander, 1993; Clark and Clark, 1992; Merenbloom, 1988; NASSP, (no date given); Binko and Lawlor, 1986; NMSA, 1985; Brown, 1981; and Georgiady and Romano, 1973.

(37) The middle school **program embraces a comprehensive program of daily physical education** designed to improve cardiovascular fitness, coordination, agility, and strength.

H_1: The middle school program which embraces a comprehensive program of daily physical education designed to improve cardiovascular fitness, coordination, agility, and strength contribute significantly to the effectiveness of the developmentally responsive middle school.

H_0: The middle school program which embraces a comprehensive program of daily physical fitness, coordination, agility, and strength does not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; George and Alexander, 1993; Carnegie Council, 1989; Munsell, 1984; Georgiady and Romano, 1973; and Moss, 1971.

(38) The middle school **physical education program emphasizes lifelong physical activities** such as dance, movement, and leisure-time activities.

H_1: The middle school physical education program which emphasizes lifelong physical activities such as dance, movement, and leisure-time activities contribute significantly to the effectiveness of the developmentally responsive middle school.

H_0: The middle school physical education program which emphasizes lifelong physical activities such as dance, movement, and leisure-time activities does not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; George and Alexander, 1993; Carnegie Council, 1989; Munsell, 1984; Brown, 1981; Georgiady and Dilg, 1973; Riegle, 1971; and Gatewood and Dilg, 1970.

(39) The middle school offers a program in which teachers and specialized professionals are readily available to offer assistance to middle school students.

H_i: The middle school which offers a program in which teachers and specialized professionals are available to offer assistance to the middle school students contribute significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school which offers a program in which teachers and specialized professionals are readily available to offer assistance to the middle school student do not contribute significantly to the effectiveness of the developmentally responsive middle school.

Supporting research: George and Shewey, 1994; Wiles and Bondi, 1993; Clark and Clark, 1992; NMSA, 1985; Munsell, 1984; Brown, 1981; Georgiady and Romano, 1973; Moss, 1971; Riegle, 1971; and Montebello, CA School District, 1969.

(40) The middle school program include counselors who coordinate support services and serve as a resource to teams, teachers, and for classroom activities.

H_i: The middle school program which include counselors who coordinate support services and serve as a resource to teams, teachers, and for classroom activities contribute significantly to the effectiveness of the developmentally responsive middle school.

H_o: The middle school program which include counselors who coordinate support services and serve as a resource to teams, teachers, and for classroom activities do not contribute to the effectiveness of the developmentally responsive middle school.

Supporting research: Wiles and Bondi, 1993; Clark and Clark, 1992; NMSA, 1985; Munsell, 1984; Brown, 1981; Georgiady and Romano, 1973; Moss, 1971; Riegle, 1971; and Montebello, CA School District, 1969.

APPENDIX B

PACKET MATERIALS:
LETTERS AND POST CARDS

Copy of letter mailed to principals with the initial mailing.

March 30,1999

(Principal's Name), Principal
(Principal's) Middle School
(Address)
(City), MT (Zip Code)

Dear (Principal's Name)

We are requesting your assistance with an important study regarding the importance and level of implementation of the essential elements of developmentally responsive middle schools in Montana. As an educator in an accredited Montana middle school, you are acutely aware of the many special features which distinguish a middle level education program, designed to address the diverse needs and characteristics of this age-level learner, from other educational levels. **However, little information is available regarding the implementation these characteristics in Montana middle schools.** We are conducting a study to determine your professional perceptions of the level of importance and degree of implementation of these characteristics in accredited Montana middle schools. The items on the Middle School Questionnaire of Essential Elements (MSQE2) require mostly circle type responses and should take approximately 20-30 minutes to complete. **Your participation is extremely important to this study as you are one of a small number of middle level educators being surveyed.**
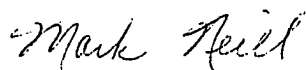
To assure confidentiality, no name is required or requested on the questionnaire. Information collected in this study will not identify particular school districts, schools, or individuals. Please return the questionnaire in the self-addressed, stamped envelope. At the same time, please complete and mail, separately, the return post-card included with your packet. The post-card allows us to keep track of those schools which have responded and enables us to make follow-up contacts as necessary. On the post-card you will also find a space to request an abstract of the completed study. The abstract should be available by late summer of 1999. **Please return the questionnaires as soon as possible.** If possible, I encourage you to complete and return the survey right now.

Page two of the letter sent to principal in the initial mailing.
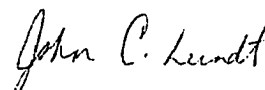
In addition, we **would like to involve two members of your teaching staff in this study.** We would like to request your assistance with this also. Would you please distribute the enclosed teacher packets to two of your staff members who you feel understand the nature of developmentally responsive middle schools. Included in the teacher packets are a cover letter, the MSQE2 survey and instructions for completing it, a self-addressed, stamped envelope, and the post-card. Faculty members are requested to mail the post-card at the same time that they return the survey.

We would like to thank you for your participation in this study which we feel will provide important information about accredited middle schools in Montana. If you have additional questions regarding the study, please feel free to contact Mark Neill at 452-4834 (H) or 791-2387 (W) or Dr. John C. Lundt at 243-5204 (W).

Sincerely yours,

Mark Neill
Doctoral Candidate

Dr. John C. Lundt
Professor & Chair
Department of
Educational Leadership
and Counseling

Letter sent to teachers with their packets.

April 8, 1999

Dear Middle School Faculty Member,

I am requesting your assistance with a important study regarding the importance and current level of implementation of the essential elements of developmentally responsive middle schools in Montana. You have be identified by your building administrator as an educator knowledgeable about the unique characteristics and needs of the early adolescent learner and the nature of a middle level education program designed to address these features. However, little information is available regarding the implementation of the characteristics of developmentally responsive middle schools in Montana. I would like you to voluntarily complete the enclosed Middle School Questionnaire of Essential Elements (MSQE2). The survey items require mostly circle-type responses and should take approximately 20-30 minutes to complete. **Your participation is extremely important to this study, as you are one of a small number of middle level educators being surveyed.**

Included in your packet is the questionnaire along with instructions for completing it, a self-addressed, stamped envelope, and a post-card. **Please complete and return the questionnaire as soon as possible.** If possible, I encourage you to complete and return 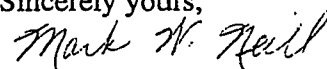the questionnaire at this time. When you return the questionnaire, please return, separately, the enclosed post-card. The post-card allows me to keep track of those schools which have responded and enables me to make follow-up contacts as necessary. On the post-card you will find a space to request an abstract of the completed study. The abstract should be available in late summer, 1999.

To assure confidentiality, no name is required or requested on the questionnaire. Information collected in this study will not identify particular school districts, schools, or individuals.

I would like to **thank you for your participation in this study** which I feel will provide important information about accredited middle schools in Montana. If you have additional questions regarding this study, please feel free to contact me at 452-8434 (H) or 791-2387 (W).

Sincerely yours,

Mark W. Neill
Doctoral Candidate

<u>Copy of the post card included with the packets sent to respondents.</u>

Dear MSQE2 Respondent,

To insure confidentiality of your responses, please return this post-card at the same time you return the completed survey. **Mail the post-card separately from the survey** so we will know that you have completed and returned it. This will prevent the need for any further follow-up contact.

If the following information is inaccurate, please provide the necessary corrections in the space provided.

If you desire an abstract of the results of this study, please indicate as such in the space provided. The abstract should be available in late summer.

Again, **thank you for your participation in this study.**

_____ Please send me an abstract of the results of this study upon its completion.

Reminder notice sent to the principals of initial non respondents.

Dear Principal,

      Once again I need your assistance.

      A review of the response postcards indicates that I have not yet received all of the MSQE2 surveys from your middle school. Because of the limited number of accredited middle schools in Montana, your input is extremely important to this study of the essential elements of developmentally responsive middle schools in Montana.

      Please check to see that each of the surveys and response postcards distributed to the respondents in your school have been completed and returned. Hopefully, this prompt may eliminate the need for further follow-up contact.

      Thanks again for your prompt attention to this matter and the participation of you and two members of your staff in this study.

Mark Neill

APPENDIX C

SURVEY INSTRUMENT AND INSTRUCTIONS

MSQE^2 Instructions

Part A

The enclosed survey is designed to determine the importance and current level of implementation of characteristics of developmentally responsive middle schools in Montana. Your participation in this survey will assist middle school practioners in developing a clearer understanding of these essential elements in Montana middle schools.

Please respond to each question by circling the number of the response which best describes your position. Feel free to remove and use this page as a guide in developing your responses. **All questions relate to middle level education and middle school students.** *Thank you for your participation in this survey.*

PART A: Importance and Level of Implementation
In the "Importance of the Characteristic" column, **please provide a rating** which indicates **how important you consider the characteristic to be to the success of your middle school.** The following scale has been designed to guide you in this process.

I consider the identified characteristic as:

(1) **Not Important** - I do not consider this characteristic to have any connection to my school.

(2) **Not Very Important** - I consider this characteristic to be of minor importance to the success of my school.

(3) **Important** - I consider this to be an important characteristic to the success of my school.

(4) **Very Important** - I consider this characteristic to be essential to the success of my school.

In the "Level of Implementation" column, **please identify your perception of the "Current Level of Implementation"** of each characteristic in your present school.
The following scale has been designed to guide you in this process.

In my view, the identified characteristic is:

(1) **Not Implemented** - we do not implement this characteristic.

(2) **Partially Implemented** - we implement this characteristic, but **less than a third of the** time.

(3) **Moderately Implemented** - we implement this characteristic **more than a third of the time, but less than two-thirds** of the time.

(4) **Majorly Implemented** - we implement this characteristic **more than two-thirds of the** time.

Part B: Barriers

This portion of the survey seeks your view on the "barriers" or obstacles which limit the successful **implementation of the characteristics of developmentally responsive middle schools.**
The following scale has been designed to guide you in completing this process:

(1) Not a factor - I do not consider this factor to be a barrier to the implementation of
the characteristics of developmentally responsive middle schools in
my school.

(2) Moderate factor - I consider this factor to be an obstacle to the successful
implementation of the characteristics of developmentally
responsive middle schools in my school.

(3) Serious factor - I consider this factor to be a serious obstacle to the successful
implementation of the characteristics of developmentally
responsive middle schools in my school.

Part C: Demographics

Please provide the information requested in this section.

** Thank you for taking the time to complete this survey. **

* **Please check to see that you have <u>answered all items</u> on the survey.**

* **Please return the survey in the self addressed stamped envelope**

* **Please mail the accompanying post-card separately.**

Importance of Characteristic to School Success Scale:
(1) Not Important
(2) Somewhat Important
(3) Important
(4) Very Important

Current Level of Implementation Scale:	
(1) Not (0%)	Implemented
(2) Partially (less than 33%)	Implemented
(3) Moderately (33% -67%)	Implemented
(4) Majorly (more than 67%)	Implemented

Importance of Characteristic To Success at My School	MSQE² Part A: Characteristic / Practice:	Current Level of Implementation At My School
1 2 3 4	(1) Middle school educators generally understand the developmental uniqueness of the young adolescent.	1 2 3 4
1 2 3 4	(2) Middle school educators form learning partnerships with students based on the needs, interests, and abilities of the student.	1 2 3 4
1 2 3 4	(3) Educators in the middle school serve as role models for the middle level student.	1 2 3 4
1 2 3 4	(4) The middle school involves all stakeholders - students, faculty, administrators, families, board of education members, & community members -in the development of a shared mission statement.	1 2 3 4
1 2 3 4	(5) The middle school mission is operationalized to allow educators to pursue appropriate practices which provide a challenging academic program.	1 2 3 4
1 2 3 4	(6) The middle school provides appropriate learning opportunities which permit students to become intellectually engaged.	1 2 3 4
1 2 3 4	(7) The middle school utilizes a variety of educational methods and approaches to address individual learning styles of the learner.	1 2 3 4
1 2 3 4	(8) The middle school organizes students into small, heterogeneous groups designed to empower them to become actively engaged in their own learning.	1 2 3 4
1 2 3 4	(9) The middle school provides students with the opportunity to develop responsible citizenship skills.	1 2 3 4
1 2 3 4	(10) Adult advisors in the middle school serve as a link between the school and home.	1 2 3 4
1 2 3 4	(11) Middle schools provide every student with the opportunity to be well known by at least one adult in the school.	1 2 3 4

Importance of Characteristic to School Success Scale:	Current Level of Implementation Scale:		
(1) Not Important	(1) Not	(0%)	Implemented
(2) Somewhat Important	(2) Partially	(less than 33%)	Implemented
(3) Important	(3) Moderately	(33% -67%)	Implemented
(4) Very Important	(4) Majorly	(more than 67%)	Implemented

Importance of Characteristic to Success at My School	Characteristic / Practice:	Current Level of Implementation At My School
1 2 3 4	(12) The middle school uses organizational arrangements (e.g., advising groups, homebase groups, team-based mentorships) to augment guidance and support services.	1 2 3 4
1 2 3 4	(13) The middle school recognizes families as active participants in the school program.	1 2 3 4
1 2 3 4	(14) The middle school assists families in creating and sustaining positive learning environments at home.	1 2 3 4
1 2 3 4	(15) The middle school supports family involvement by providing for two-way communication.	1 2 3 4
1 2 3 4	(16) The middle school seeks appropriate partnerships with business, social service agencies, and other organizations.	1 2 3 4
1 2 3 4	(17) The middle school environment is positive and promotes a sense of community in which individual differences are recognized and accepted with respect and dignity.	1 2 3 4
1 2 3 4	(18) The middle school environment is inviting and caring, and encourages learning, initiative, and student risk-taking.	1 2 3 4
1 2 3 4	(19) The middle school provides a safe environment, free of violence, substance abuse, and threatening behaviors.	1 2 3 4
1 2 3 4	(20) The middle school principal is recognized as the instructional leader in the building.	1 2 3 4
1 2 3 4	(21) The middle school curriculum and procedures are articulated with those of the elementary and high school; including orientation and transition programs.	1 2 3 4
1 2 3 4	(22) The curriculum addresses issues and skills that are relevant to the middle-level learner.	1 2 3 4
1 2 3 4	(23) The curriculum provides opportunity for students to reflect on experiences as a part of self-evaluation.	1 2 3 4

Importance of Characteristic to School Success Scale:		Current Level of Implementation Scale:		
(1) Not Important		(1) Not	(0%)	Implemented
(2) Somewhat Important		(2) Partially	(less than 33%)	Implemented
(3) Important		(3) Moderately	(33% -67%)	Implemented
(4) Very Important		(4) Majorly	(more than 67%)	Implemented

Importance of Characteristic to Success at My School	Characteristic/Practice	Current Level of Implementation at My School
1 2 3 4	(24) The curriculum provides students with the opportunity to discover abilities, talents, values, and preferences.	1 2 3 4
1 2 3 4	(25) The curriculum provides students with exploratory experiences, which are enriching and healthy and which contribute to adolescent development.	1 2 3 4
1 2 3 4	(26) The middle school utilizes a variety of teaching and learning approaches designed around the developmental and learning characteristics of young adolescents.	1 2 3 4
1 2 3 4	(27) Middle school teaching techniques enhance and accommodate the diverse skills, abilities, knowledge, intelligences, and learning styles of young adolescents.	1 2 3 4
1 2 3 4	(28) The middle school curriculum actively engages students in a variety of hands-on learning experiences.	1 2 3 4
1 2 3 4	(29) The middle school teacher designs learning activities that provide appropriate challenges for all types of students.	1 2 3 4
1 2 3 4	(30) Middle school technological resources enhance and advance instruction for students.	1 2 3 4
1 2 3 4	(31) The middle education program utilizes continuous, authentic, and appropriate forms of assessment of student progress.	1 2 3 4
1 2 3 4	(32) Middle level education assessment and evaluation methods emphasize individual progress, minimize student comparisons, and reward reasonable efforts.	1 2 3 4
1 2 3 4	(33) The middle school incorporates a flexible program of student scheduling which provides for enrichment programs, cooperative learning groups, and independent study.	1 2 3 4
1 2 3 4	(34) The middle school program provides teachers with a common planning time, space, core of students, and responsibility for the design and operation of the educational program.	1 2 3 4

Importance of Characteristic to School Success Scale:
(1) Not Important
(2) Somewhat Important
(3) Important
(4) Very Important

Current Level of Implementation Scale:		
(1) Not	(0%)	Implemented
(2) Partially	(less than 33%)	Implemented
(3) Moderately	(33% -67%)	Implemented
(4) Majorly	(more than 67%)	Implemented

Importance of Characteristic to Success at My School

Characteristic/Practice:

Current Level of Implementation at My School

1 2 3 4 — (35) The middle school program creates smaller learning environments (e.g., "schools-within-a-school," teams, houses). — 1 2 3 4

1 2 3 4 — (36) The program provides opportunities for staff to meet regularly with their students. — 1 2 3 4

1 2 3 4 — (37) The program advocates a comprehensive program of physical education designed to improve cardiovascular fitness, coordination, agility, and strength. — 1 2 3 4

1 2 3 4 — (38) The middle school physical education program emphasizes lifelong physical activities such as dance, movement, and leisure-time activities. — 1 2 3 4

1 2 3 4 — (39) The program provides teachers and specialized professionals who are readily available to offer assistance to middle school students. — 1 2 3 4

1 2 3 4 — (40) Counselors coordinate support services and serve as a resource to teams, teachers, and for classroom activities. — 1 2 3 4

Please continue on to Part B on the next page.

MSQE 2: Middle School Questionnaire of Essential Elements
Part B

Listed below are several factors which could considered "roadblocks" to successful implementation of "essential elements" of developmentally responsive middle schools. **Please indicate the degree to which each factor has or has not been a roadblock to the implementation of these elements in your school.**

FACTOR:	Not a Factor	Moderate Factor	Serious Factor
(41) Collective bargaining agreement	1	2	3
(42) Deficient communication among administrative levels	1	2	3
(43) Inability to obtain funding	1	2	3
(44) Inability to provide teacher time for planning of professional development	1	2	3
(45) Insufficient space and physical facilities	1	2	3
(46) Lack of competent administrative assistance	1	2	3
(47) Lack of competent office help	1	2	3
(48) Lack of data about student skills and styles	1	2	3
(49) Lack of data on program successes or failures	1	2	3
(50) Lack of district-wide flexibility (all schools conform to same policy)	1	2	3
(51) Lack of knowledge among staff regarding programs for middle level students	1	2	3
(52) Lack of time for myself	1	2	3
(53) Long-standing tradition in the school/district	1	2	3
(54) Parents apathetic or irresponsible about their children	1	2	3
(55) Pressure from the community	1	2	3
(56) Problem students (apathetic, hostile, etc.)	1	2	3
(57) Regulations or mandates from state or district governing boards	1	2	3
(58) Resistance to change by staff	1	2	3
(59) Resistance of Superintendent or central office staff	1	2	3
(60) Teacher tenure	1	2	3
(61) Teacher turnover	1	2	3
(62) Time required to administer/supervise extracurricular activities	1	2	3
(63) Time taken by administrative detail at expense of more important matters	1	2	3
(64) Too large a student body	1	2	3
(65) Too small a student body	1	2	3
(66) Variations in the ability and dedication of staff	1	2	3

(67)　Other: _____

_____

_____

_____

Please continue to Part C on the next page

MSQE 2: Middle School Questionnaire of Essential Elements
Part C

Please provide the following information as it relates to you in your present position by circling or providing the appropriate response.

---

(68) I am a(n):

    (1) Teacher   (2) Administrator

(69) The grade level I teach most often is:

    (1) Fifth   (2) Sixth
    (3) 5-6 Combo   (4) Seventh
    (5) 6-7 Combo   (6) Eighth
    (7) 7-8 Combo   (8) Specialist

(70) My current endorsement is:

    (1) K- 8   (2) 5-12   (3) 7-12   (4) K-12

(71) Please identify the number of years of middle school experience you have, including this year.

    _____ years.

(72) How many students attend your middle school?

    _____ students

(73) Did you apply for your current assignment in the middle school?

    (1) Yes   (2) No

Thank You for your participation is this study.

APPENDIX D

COMPARATIVE MATRIX OF

THIS WE BELIEVE (1995)

APPENDIX D

Essential Elements	Montebello, CA	ASCD	Riegle	Moss	Georgiady & Romano	Brown	Munsell	NMSA	Binko & Lawlor	Carnegie Corp.	George & Alexander	Wiles & Bondi	George & Shewey	NMSA	Scales	TOTALS
	1969	1970	1971	1971	1973	1981	1984	1985	1986	1989	1993	1993	1994	1995	1996	
1. Educators Committed to Young Adolescents	X			X		X	X	X	X	X	X	X	X	X	X	12
2. A Shared Vision		X	X	X				X	X	X	X	X		X	X	8
3. High Expectations for All			X		X			X	X	X	X	X	X	X	X	10
4. An Adult Advocate for Every Student	X	X	X		X		X	X	X	X	X	X	X	X	X	11
5. Family and Community Partnerships			X	X	X	X	X	X	X	X		X	X	X	X	9
6. A Positive School Climate		X						X	X	X				X	X	6
7. Curriculum that is Challenging, Integrative, and Exploratory	X	X	X		X		X	X	X	X	X	X	X	X	X	13
8. Varied Teaching and Learning Approaches	X		X	X	X		X	X	X	X	X	X	X	X	X	12
9. Assessment and Evaluation that Promote Learning			X	X	X		X	X	X	X	X	X	X	X	X	8
10. Flexible Organizational Structures	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14
11. Programs and Policies that Foster Health, Wellness, and Safety		X	X	X	X	X	X	X	X	X		X	X	X	X	11
12. Comprehensive Guidance and Support Services	X	X	X	X	X	X	X	X	X	X				X	X	11
TOTALS																