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The recommendations of the Carnegie Council on adolescent development: Attitudes of middle level administrators and degree of implementation in Arizona middle level schools

Klein, Marvin M., Ed.D.
The University of Arizona, 1990
THE RECOMMENDATIONS OF THE CARNEGIE COUNCIL ON ADOLESCENT DEVELOPMENT: ATTITUDES OF MIDDLE LEVEL ADMINISTRATORS AND DEGREE OF IMPLEMENTATION IN ARIZONA MIDDLE LEVEL SCHOOLS

by

Marvin Klein

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A Dissertation Submitted to the Faculty of the
DIVISION OF TEACHING AND TEACHER EDUCATION

In Partial Fulfillment of the Requirements
For the Degree of

DOCTOR OF EDUCATION
WITH A MAJOR IN SECONDARY EDUCATION

In the Graduate College

THE UNIVERSITY OF ARIZONA

1990
As members of the Final Examination Committee, we certify that we have read the dissertation prepared by Marvin M. Klein entitled THE RECOMMENDATIONS OF THE CARNEGIE COUNCIL ON ADOLESCENT DEVELOPMENT: ATTITUDES OF MIDDLE LEVEL ADMINISTRATORS AND DEGREE OF IMPLEMENTATION IN ARIZONA MIDDLE LEVEL SCHOOLS.

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ABSTRACT

The Carnegie Task Force on Education of Young Adolescents, following two years of in-depth research involving America's middle level education, published in June of 1989 a report, Turning Points: Preparing American Youth for the 21st Century. The report contained eight recommendations for changes in education of early adolescents, identified as those children between the ages of eleven and fifteen years. Since the publication of "Turning Points", no assessment of its impact on the educational system has been completed.

On the premise that the success or failure of implementing such sweeping reform hinges on the degree of acceptance of the recommendations by the middle level administrators, this study has been devised to determine the degree of acceptance of the concepts supporting each of the eight recommendations by the middle level principals in Arizona. The study also examined the level of implementation of these notions in Arizona's middle level schools.

The data collected from a survey of middle level principals in Arizona revealed the respondents almost universally agreed with the concepts of the recommendations of the Carnegie report, while showing a less than adequate level of implementation of those concepts. The data uncovered no significant relationship between either the degree of acceptance, or implementation of the recommendations of the Carnegie report by middle level school principals in Arizona, and grade level configuration, school size or community size.
CHAPTER I
THE PROBLEM

Introduction

Almost immediately following the cessation of the Civil War in America, dissatisfaction with the educational system extant in the United States developed into debates concerning the purposes of public education, the types of subject matter to be delivered per age group, curriculum delivery methods, and the grade configuration of schools. The archetypical graded elementary and secondary school system, configured as an 8-year elementary/4-year secondary administrative organization, with a few variations in some southern states where only eleven years of public schooling were provided and some 8-5 versions in New England, began to suffer severe criticism from leading educators, especially from the colleges and universities.

For well over a hundred years, such polemics have spawned studies of the issues relevant to the imbroglio of pre-adolescent learning, and to middle level education, i.e., the high drop-out rate, the purpose of middle grades education, teaching techniques and classroom strategies, including the problems of appropriate curriculum and delivery techniques for children in-between elementary and secondary education.

As early as 1873, Charles W. Eliot, president of Harvard, expressed his concerns involving both shortening and enriching the pre-college curriculum. (Howard & Stoumbis, 1970). As one of the most influential of the critical
college administrators, Eliot soon took the lead in demanding some kind of reform, and succeeded in touching off serious discussion with far-reaching effects. In 1892, the National Education Association appointed the Committee of Ten On Secondary Education with Eliot as Chairman. In 1893, the Committee of Ten published its first report calling for revisions in the curriculum. (Howard & Stoumbis, 1970).

During the two decades between 1885 and 1905, weaknesses in the American educational structure were discerned by such noted educators as William T. Harris, and G. Stanley Hall as well as Charles W. Eliot. (Tye, 1985). These leading educators perceived teaching/learning problems inherent in the 8-4 educational grouping of children between the ages of about 6 and 18 years. (Hansen & Hearn, 1971).

Harris criticized the 8-year elementary school segment of the educative hierarchy as lacking in provision for addressing the individual differences, ability grouping, and developmental teaching. G. Stanley Hall contributed physical, emotional and social evidence of these respective differences among the children. Charles W. Eliot, in a variety of speeches in his work with the Committee of Ten, asserted his perception that the last years of elementary school (grades 7 and 8) were wasted years. The views Eliot held coincided with, and lent prestige to the notions of the advocates of an "intermediate school". (Hansen & Hearn, 1971).
In the 1901 Conference of the University of Chicago, John Dewey added his prestige to the cause against the 8-4 system with his pronouncement that elementary school was critically too long since secondary school required at least six years to adequately develop the cultural appreciation for civic competence. (Hansen & Hearn, 1971). Dewey joined the educators proposing either the 6-year elementary/6-year secondary, or 6-year elementary/3-year middle/3-year secondary educational system, creating the idea of a "middle school" transitional stage between elementary school and secondary education. (Hansen & Hearn, 1971). Between 1907 and 1911 a number of reports of studies of 6-8 grade pupils conducted by educators and psychologists were widely published and circulated, i.e., E.L. Thorndike, a noted psychologist, related the results of his investigation of drop-outs in twenty-three cities with populations of more than 25,000 in "The Elimination of Pupils from School"; Leonard P. Ayers compiled data garnered from fifty-nine cities in his influential book "Laggards in Our Schools"; George D. Strayer entitled his report of 319 cities "Age and Grade Census of Schools and Colleges". All three studies showed a high drop-out rate beyond fifth grade. (Tye, 1985). G. Stanley Hall, in the development of his culture-epoch theory, focused on the importance of adolescence and characterized this period of life as one of upheaval, of new interests, deepening feelings, and a widening outlook upon life adding strength to the junior high rationale. In Hall's view, the physiological advent of puberty was responsible for these great changes (Tye, 1985). In 1920, R. A. Mackie stated:
The young adolescent is a new kind of being which demands a new environment, new methods and new matter... We must take into account the nature of the great upheaval at the dawn of the teens, which marks the pubescent ferment, and which requires distinct change in matter and method of education (Tye, 1985).

The expressed dissatisfaction with the existing 8-year elementary/4-year secondary public educational system in addressing the developmental needs of early adolescents culminated in the inauguration of the "junior high school" program, intended as a "transitional stage" between elementary school and secondary education, as well as to reduce an unacceptably high drop-out rate. However, the junior high school evolved as a junior edition of the senior high school, with similar characteristics and programs more relevant to the learning traits of the older teenager, rather than the in-between-ager" (Alexander, 1984).

By the mid 1920s, the "junior high school" concept was widely accepted as a distinct and separate school, and continued to proliferate to more than 7000 junior high schools, for reasons other than those originally intended (Melton, 1984). With the passage of time, however, because the junior high school evolved as a "junior edition" of the senior high school with very similar characteristics and programs, the "new" junior high school program failed to adequately address the problems which it was supposed to have resolved, i.e., being a transitional experience between elementary school and secondary
education meeting the unique developmental needs of the students and reducing the unacceptably high drop-out rate.

Some thirty years after the establishment of the junior high school as a distinct and separate intermediate school, William T. Gruhn and Harl R. Douglass published their landmark volume, *The Modern Junior High School* (1947). Revised in 1956, and again in 1971, this work, based on six functions of the junior high school identified by Gruhn and Douglass, established a philosophical framework for junior high school education that counseled both theoreticians and practitioners for many years regarding the developmental characteristics of junior high school students (Vars, 1984). By 1960, in an effort to refocus attention on addressing those unique developmental characteristics and needs of students between 11 and 15 years, a strong stimulus developed to reorganize the middle years of public education comprising grades 5-8. From the post-bellum era reports of Charles W. Eliot (1873), to the contemporary works of Noar (1953), Conant (1960), Van Til (1961), Eichorn (1966), Howard and Stoumbis (1970), Romano, Georgiadi and Heald (1973), and the more current efforts of Clark and Clark (1981), and Clark and Valentine (1981) in the 1980s regarding education in America, greater interest was stimulated in the continuing dilemma involving the issues of middle level education. Researchers, viz., Lipsitz (1984), George and Oldaker (1985), working in a different direction in an effort to identify the reasons why some very few middle level schools are exceptionally successful in attaining high
academic achievement, have directed their studies towards identifying the methods of middle grades schools with outstanding records of accomplishment which have established records of non-reliance on the socio-economic or ethnic backgrounds of their students. Collectively, these and other research studies have spotlighted the need for reform in middle level education.

Despite the abundance of studies in support of reform and improvement in middle level education, little or no progress has been made towards accomplishing such change. Fueled by mounting anxiety expressed by critics exorcised by reports, such as *A Nation At Risk*, (National Commission on Excellence in Education, 1983) which have shown that American students are at the bottom of the international academic achievement scale, the dilemma of middle level education has become an issue commanding the attention of one of the most prestigious foundations supporting educational research in America.

In 1986 the New York City-based Carnegie Foundation established the Carnegie Council on Adolescence with the stated purpose "...to place the compelling challenges of the adolescent years higher on the nation's agenda." The following year, the Council organized the Task Force on Education of Young Adolescents as its first major commitment, with former Maryland Superintendent of Schools David W. Hornbeck as its chairman. In June of 1989, following two years of definitive research, the Council published its report entitled *Turning Points: Preparing American Youth for the 21st Century*. The report identifies eight specifically weak areas, with relevant recommendations to
"vastly improve the educational experiences of all middle grade students, but will most benefit those at risk of being left behind" (Carnegie Council on Adolescent Development, 1989).

The members of the task force were drawn from research, education, government, health, and the non-profit and philanthropics sectors. They began their activities by commissioning papers, interviewing experts in relevant fields, and meeting with teachers, principals, health professionals, and leaders of youth-serving organizations, to examine first-hand, promising new approaches to fostering the education and healthy development of young adolescents. This effort, for the first time, integrated the study of the various areas of concern to middle level educators. The resulting report has been called a landmark publication which fills a gap in reports on education reform in the 1980s.

The significance of the Carnegie report lies in its ubiquitous engagement of people at all levels of American society, from the President and Congress, to state and local governments, members of boards of education, district and school administrators, teachers, health professionals, leaders of organizations serving youth and community, parents, and the students themselves, focusing on dramatically improving middle level academic achievement.

The report, Turning Points: Preparing American Youth for the 21st Century, in the form of eight recommendations, summons a complete metamorphosis of societal attitudes as well as philosophical approaches towards middle level education, and entirely new methods of curriculum delivery.
The Problem

Nationally recognized middle level education specialists, e.g., Alexander, Loundsbury, Georgiady, Valentine, Clark and Clark, and others, fully support and place great importance on the concepts inherent in the Carnegie recommendations requiring a complete change in middle level education. Because of its potential impact, this change has been referred to variously as reformation, restructuring, and transformation. Although the Carnegie report with its profoundly consequential recommendations was published over 16 months ago, there is no evidence of follow-up inquiry on its actual impact on influencing change in middle level education.

The National Association of Secondary School Principals has published reports in its bulletin, including Clark and Valentine (1981), describing the principals of middle level schools as the essential key in implementing change in the function of their schools.

Valentine and Kirkham state:

...in the effective schools, principals were perceived as the primary change agents... change processes in the effective schools were characterized by principals who were highly effective facilitators employing definite strategies, and a staff and community who offer little resistance to change. (1985, p.17)
Clark and Valentine state that "...The administrator must promote people and program growth which remains contemporary with the research and issues of the middle level" (1981, p. 5). Tye states:

The principal is the key person in the process of change. The degree to which he/she motivates, supports, and provides leadership to the staff determines to a great extent the willingness of the school staff to work to improve the schooling program (1985, p.7).

In her study Successful Schools for Young Adolescents, Lipsitz states:

Every study of school effectiveness concludes that strong leadership is a key, perhaps the key, to excellent schools. . . . Each of the four schools has or has had a principal with a driving vision who imbues decisions and practices with meaning, placing powerful emphasis on why and how things are done (1984, p.173).

Recognizing this importance of the middle school principal in the successful implementation of change in the middle schools function, especially change of such imposing nature as recommended by the Carnegie report designed to address the concerns of critics citing the poor performance of American students in comparison with competing students of other nations, it was considered appropriate to understand the attitudes of the middle level principals towards the recommendations of the Carnegie report, as well as the current level of implementation of the concepts inherent in those recommendations. In the 10 months between the publication of Turning Points
and the start of this study, no effort had been made to determine either the attitudes of the middle level principals or the level of current implementation of any of the concepts supporting its eight recommendations. The primary purpose of this study has been to determine the attitudes of middle level principals and the level of implementation of the Carnegie recommendations. Secondly, whether the demographics, identified for this study as grade configuration, size of school enrollment, and size of community served by the school, had any significant relationship with either the attitude of the principals, or implementation of the Carnegie recommendation's concepts.

Rationale

For almost one hundred years the American educational system has been examined and studied with increasing depth and perception. The findings of those studies over the years show cause for specific changes in the basic structure of our educational delivery system which seem to be repeatedly similar in emphasizing concerns regarding the 10 to 15 year old middle level students. Although there is consensus of opinion among many educators in America that middle level education has progressed through a meaningful era in the past decade, numerous reports on recurring studies of the issues have redundantly surfaced and have been published in the literature on middle level education (Valentine, 1984). Researchers, including Briggs (1920), Noar (1953), Conant (1960), Romano, Georgiady & Heald (1973), Clark & Valentine (1981),
George & Oldaker (1985), have strongly advocated parallel reforms designed to foster greater effectiveness in the middle schools in meeting the developmental needs and characteristics of the middle level pupil, the 10 to 15 year old early adolescent. The report of the Carnegie Task Force on Education of Young Adolescents, based on the most recent comprehensive studies of middle level education conducted over a period of two years, contains recommendations which suggest the need for immediate, and vital reforms for educating our early adolescents. However, despite the abundant data supporting the need for specific changes, as well as the pervasive dissatisfaction with middle level education, the initiation of "new" studies which identify the same problems inherent in the system today tend to prove that inadequate attention has been paid to implementing the very programs repeatedly called for in the "old" studies. Valentine states: "The principal is the key that unlocks the effectiveness of a given school. Before the school can function at the most effective level, the principal must function effectively." (1986, p. 39)

It appears that if improvement of the educational delivery system is to become an actuality, the onus of implementation of reform rests on the shoulders of the administrators. The degree of acceptance, and degree of determination to implement the recommendations of the Task Force on Education of Young Adolescents as manifested and encouraged by the administrators will prove to be the deciding factors in whether or not the efforts to achieve the data supporting the report were worthwhile.
Statement of the Problem

The purpose of this study is to determine:

1. the attitudes of the middle level school administrators in Arizona regarding the recommendations of the Carnegie Task Force on Education of Young Adolescents;

2. the degree of implementation of the recommendations of the Carnegie report;

3. whether or not there is a relationship between the size of the school, and the attitudes of the principals towards, or the implementation of the recommendations of the Carnegie report.

4. whether or not there is a relationship between the size of the community and the attitudes of the principals towards, or the implementation of the recommendations of the Carnegie report.

5. whether or not there is a relationship between the grade level configuration of the school and the attitudes of the principals towards, or the implementation of the recommendations of the Carnegie report.
Research Questions

The following research questions support the design of this study:

1. How strongly do middle level school principals in Arizona agree with the recommendations of the Carnegie report?

2. To what degree are the recommendations of the Carnegie report implemented in the middle level schools in Arizona?

3. How do the middle level school principals in Arizona rank the recommendations of the Carnegie report in order of priority of importance?

4. Does the size of the middle level school in Arizona appear to have any relationship with the principal's attitude towards the recommendations of the Carnegie report?

5. Does the size of the middle school in Arizona appear to have any relationship with the implementation of the recommendations of the Carnegie report?

6. Does the size of the community served by the middle level school in Arizona appear to have any relationship with the principal's attitude towards the recommendations of the Carnegie report?

7. Does the size of the community served by the middle level school in Arizona appear to have any relationship with the implementation of the recommendations of the Carnegie report?
8. Does the grade level configuration of the middle level school in Arizona appear to have any relationship with the principal's attitude towards the recommendations of the Carnegie report?

9. Does the grade level configuration of the middle level school in Arizona appear to have any relationship with the implementation of the recommendations of the Carnegie report?

Assumptions

For the purpose of this study, the following assumptions are made:

1. The questionnaire developed for this study is a reliable instrument to measure the attitudes of the middle level principals toward the recommendations of the Carnegie report.

2. The questionnaire developed for this study is a reliable instrument to measure the degree of implementation of the recommendations of the Carnegie report.

3. The middle level school administrators responded to the items included in the survey instrument honestly and truthfully.

4. Respondents require no special training to reply to the survey items.

5. Middle level school administrators personally responded to the questionnaire items.
Limitations

1. This study was confined to Middle Level School principals located in the State of Arizona.

2. The participants were volunteers.

Definition of Terms

**Academic emphasis:** The degree of execution of general areas of concern within a school, or educational system.

**Advisory:** A small group of not more than 10 students assigned to a teacher/advisor for general guidance and counsel.

**Carnegie Corporation of New York:** A philanthropic institution, and major funding organization for educational research, set up by Andrew Carnegie, headquartered in New York City.

**Committee of Fifteen:** Comprised of thirteen school superintendents, one college president, and the United States Commissioner of Education, William T. Harris, this committee was appointed by the National Education Association's Department of Superintendence (c1892) to investigate school system organization, training of teachers, and the coordination of studies in primary and grammar schools.
Committee of Ten on Secondary School Studies (Committee of Ten): A committee organized in 1892 by the United States Commissioner of Education which included five college presidents, one college professor, two private school headmasters, one public high school principal, the U.S. Commissioner of Education, and Harvard College president Charles W. Eliot as the chairperson.

Community service: Voluntary service in the community such as working in senior citizens centers, nursing homes, soup kitchens, child care centers, parks, etc.

Core subjects: Integration of English, fine arts, foreign languages, history, literature and grammar, science, mathematics, and social studies, as a basic requirement in middle level education.

Developmental responsiveness: The degree to which the school responds to the developmental characteristics and needs of its students.

Early adolescent: Any child between the ages of 10 and 15.

Grand Means: The mean ($X_i$) of all the means in a group ($j$).
Home Base: Similar to the "homeroom" concept, home base is where small group advisories begin the school day with a 10-minute meeting between advisor and advisees in a secure and stabilizing environment.

Houses: Sub-divisions of the total student body within the reformed middle level school, organized as fully functioning, interdisciplinary learning communities containing between 200 and 300 students.

Interdisciplinary teaming: Groups of 2 or more teachers from various disciplines forming non-fragmented, subject-integrated, teaching/learning teams, assigned to 60 to 150 students.

Middle level administrator: Interchangeable with the term: middle level principal.

Middle level principal: The individual who is the chief executive administrator of each middle level school.

Middle level schools: Schools in various limited grade configurations, usually between grades 5 and 8, specifically designated to serve students between 10 and 15 years of age.
Middle level schools grade configurations:

8 - 4: The two-level educational system configuration where "8" refers to an 8-year elementary level of kindergarten through 8th grade, and "4" refers to a 4-year secondary level of 9th through 12th grades.

5 - 8: The discrete middle level school configuration limited to only 5th through 8th grades.

6 - 8: The discrete middle level school configuration limited to only 6th through 8th grades.

7 - 8: The discrete middle level school configuration limited to only 7th through 8th grades.

7 - 9: The discrete middle level school configuration generally accepted as the junior high school configuration limited to only 7th through 9th grades.

Outlier study: Research focused on painstaking analysis of the most successful examples of a subject that could be found, those that lay outside the boundaries of the tolerable.

Psychosocial environment: The climate of interpersonal relationships between students and teachers, between students and other students, and between members of the school staff.
School restructuring: Reorganizing the middle level school to conform to the recommendations of the Carnegie report *Turning Points: Preparing American Youth for the 21st Century.*

Socio-psychological model: A two-dimensional model, used by Donald H. Eichorn (1966) to explain his notion of *transescent behavior* which addresses the problems of physical, emotional, intellectual, sociological, political and economical maturation in relation to internal body changes, and external environmental impingements affecting the individual.

Transescent: Obsolete term referring to any child at the onset of puberty and extending through all early stages of adolescence, usually between ten and fifteen years of age.

Organization of the Remaining Chapters

Chapter 2 presents a review of the literature pertinent to: 1) the historical background, prototypical purposes and development of middle level education in America, 2) studies supporting the report of the Carnegie Council on Adolescent Development: *Turning Points: Preparing American Youth for the 21st Century.*
Chapter 3 comprises a description of the methodology used in developing the study, including the survey instrument employed in gathering the data, and the statistical procedures employed to analyze the data. The findings of the research data are presented and examined in Chapter 4. Chapter 5 concludes the study with an evaluation and summary of the findings.
CHAPTER 2

REVIEW OF RELATED LITERATURE

Introduction

In this chapter, the literature review germane to this study will be arranged as follows. First, an historical background of the middle level school concept with its prototypical purpose and functional development. This will be followed by the recommendations of the Carnegie report: Turning Points: Preparing American Youth for the 21st Century.

Historical Background of the Middle School Concept

For more than three decades, spanning the ending of the eighteenth century and the beginning of the twentieth century, an era of dissatisfaction with the educational delivery system in the United States had begun with a proliferation of reports recommending significant reorganization and improvement in America's schools. Targeted primarily was the frequently used educational system configuration of 8-4, the most popular organizational plan following the Civil War, which was found to have become inadequate in addressing the developmental characteristics of adolescent children. (Melton, 1984). It was believed at that time that the faults in education were caused by supposed deficiencies in the 8-4 configuration. (Hansen & Hearn, 1971). T.H. Briggs (1920) listing weaknesses he found in the 8-4 plan, noted the 8-4
organization made inadequate provision for the varying needs of pupils due to individual differences of ability or aptitude, of sex, or of probable career.

A central point common to the early reports was the recommendation for the institution of a six-year high school in a 6-6 (six years of elementary education followed by six years of secondary education) organizational plan. (Melton, 1984). The Committee on Economy of Time in Education, in 1909, proposed the 6-6 plan on the basis that two years could be saved "in the entire period of general education without loss of any essential in culture, efficiency, or character-thinking", and in 1918, the Committee on the Reorganization of Secondary Education suggested that the six years of secondary education might be separated into two periods that could be specified as the junior and senior periods. These major committees on educational reform, however, did not promote or stipulate an explicit junior high school configuration. (Melton, 1984). In further support of the 6-6 plan, a sub-committee of the Committee of Ten gave support to the idea of an earlier start for teaching intermediate courses:

...several subjects now reserved for high schools...such as 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 at present, leaving six years of the eight for the elementary period. (Tye, 1985, p.34).
The issues of economy of time, and the early introduction of college level work into the secondary school curriculum were hotly and long debated, with the proponents of college preparatory work on one side and, generally, the superintendents of large city school systems in opposition. The latter group, appointed by the NEA Department of Superintendence through the Committee of Fifteen, opposed the reduction of time for elementary schooling. (Hansen & Hearn, 1971). For a long while during the debate, the issue of the establishment of a separate school known as a junior high school did not arise, although junior high schools were inaugurated around 1900. However, no umbrella of national support for the junior high school program, or for expansion of the involved issues was mounted beyond the issue of economy of time until 1918 when the Commission on Reorganization of Secondary Education published their report entitled: Cardinal Principles of Secondary Education, which held such pivotal recommendations as a reorganization of the school system whereby the first six years would be devoted to elementary education designed to meet the needs of pupils approximately 6 to 12 years of age, and the second six years to secondary education designed to meet the needs of pupils approximately 12 to 18 years of age. The six years devoted to secondary education could be divided into two periods designated as the junior and senior periods. In the "junior" period, emphasis would be placed on the attempt to help the pupil explore his own aptitudes and to make at least provisional choice of the kinds of work to which he chose to devote himself. In
the "senior" period emphasis should be given to training in the fields thus chosen. This distinction lies at the basis of the organization of the junior and senior high schools. In the junior high school there should be a gradual introduction of departmental instruction, some choice of subjects under guidance, promotion by subjects, pre-vocation courses, and a social organization that calls for initiative and develops the sense of personal responsibility for the welfare of the group. (Hansen & Hearn, 1971)

Criticism regarding the 8-4 structure increased both in volume and efficacy with the contributions of the notable educators of the era. William T. Harris berated the 8-year elementary school because of the dearth of programs addressed to the individual differences of the pupils, lack of use of ability grouping and developmental teaching (teaching without repetition); G. Stanley Hall provided the evidence of the physical, emotional, and social differences among the various age groups of the children; Charles W. Eliot perceived the last years of elementary school as wasted. Still, none of these leaders of educational reform explicitly promoted the establishment of a change in organizational concept such as the current junior high school program. (Hansen, & Hearn, 1971).

There is confusion and argument as to where and when the first junior high school was established, however, in 1896 the public schools of Richmond, Indiana, introduced a two-year intermediate school for grades 7-8, and in 1905-1907 the New York City school system converted PS #24, #62, and #159 into
7-8 intermediate schools as recommended by Charles Hartwell, a Brooklyn teacher. In 1914-1916, the ninth grade as well as commercial and prevocational subjects were added. (Hansen & Hearn, 1971). In 1909 a 3-year intermediate school was established in Columbus, Ohio, and in 1910, two "introductory high schools" were opened in Berkeley, California. (Melton, 1984). Increasing general approval for the innovation resulted in a proliferation of junior high schools. By 1918, there were 557 such schools and the next two years saw that number mushroom to 883. It was not too long before the number of junior high schools across the nation expanded to more than 7000. (Melton, 1984).

The explosive increase in the number of schools with the junior high designation, however, was set in motion less for the purpose of meeting the needs of the early adolescent than addressing such administrative pressures as alleviating the problems of changing enrollments and crowded conditions in other schools. Surveys taken in 1967 and 1977 confirmed that in the decade between the two inquiries, the motivation for establishing junior high schools shifted more towards ameliorating the demands of desegregation. (Alexander, 1984). The broad range of divergent notions regarding the junior high school varied from a simple and straightforward belief in the downward extension of the senior high school programs and activities into the seventh and eighth grades, to the demand for an entirely new program addressing the uniqueness of early adolescence. (Alexander, 1984). Modifying progress towards a completely new educative process conceived especially for the early adolescent's
transition from elementary to high school levels, the use of the adjective "junior" in the name of the new design expedited the inclination for this new concept to become, in fact, a "junior" edition of the "senior" level. (Alexander, 1968). Fortunately, there were many educators, (Noar, 1953; Conant, 1960; Van Til, 1961; Eichorn, 1966; Howard & Stoumbis, 1970; Romano, Geogiadi & Heald, 1973; etc.), who contended for the type of programming essential for this age group. (Alexander, 1968).

Following 1960, a strong stimulus developed for the reorganization of the middle years of public education. Increasing negative criticism of the junior high design included such accusations as housing the wrong students, losing sight of its original purpose and transitional nature, being too subject-matter oriented, and lacking appropriate teacher training programs. The junior high school character had, in fact, evolved as an attempt to emulate senior high school methods and programs. Further research showed failure of the junior high programs to address the actual intellectual needs and developmental characteristics of the middle level adolescents, and that major revisions in the basic approach to middle level education were essential in order to satisfy the educational requirements of those students. (Alexander, 1968).

Georgiady and Romano (1977) note socio-psychological differences exhibited between the "transescent" of today and those of previous generations. Changes in American culture, such as the impact of television viewing, more numerous mass media resources, and extensive traveling as well as the more
transient nature of many families, have produced appreciable differences in the way contemporary youth interact with society. Earlier maturation of children, two to three years in advance of their grandparents time, as well as consequential societal modifications and quantum leaps in information accessibility support the requirement for a new model to deal with the education of our early adolescent youth. (Alexander, 1968). G. Stanley Hall, a half century ago, noted the roller-coaster like growth pattern of children between the ages of 10 and 15 years which involved sudden acceleration and abrupt deceleration of physical growth, considerable anxiety resulting from new organic functions, emotional upheaval, erratic behavior and independent assertiveness. (Alexander, 1968).

Other early studies of junior high school students, e.g., Thorndyke (1907), Ayers (1909), and Strayer (1911), added weight to the argument for a separate school to provide for the distinctive educational requisites of early adolescents. The reports of E.L. Thorndyke, Leonard P. Ayers, and George D. Strayer, showed a high drop-out rate beyond fifth grade, with only about 1 in 3 students entering the public school systems reaching ninth grade, and only 1 in 10 completing high school. James Coleman, who published his report of a national study involving equal educational opportunity in 1960, concluded that the only truly meaningful factor in academic achievement, which became known as the home effect, was the socioeconomic status of the children attending a school which appeared to preempt whatever the educators attempted, with the
implication that teachers did not matter, that the school effect had no impact on the lives of the attending students and was unimportant and inconsequential. (George & Oldaker, 1985) This point of view, however, gradually lost favor among researchers. Although several reasons were accepted for the large numbers of drop-outs, there can be no doubt that the poor quality of the school programs was a prime factor. (Tye, 1985). George and Oldaker (1985) note pivotal research in teacher effectiveness established quite clearly that teachers do make a difference and that poor children are capable of efficient scholarship. Significant efforts at school improvement based on teacher effectiveness research have been instituted in hundreds of districts with consequential increases in student achievement scores.

Dr. William Glasser (Chance and Bibens, 1990, p.1) in an interview for the Middle School Journal said:

Schools Without Failure was based on the premise that we are still responsible for what we do, and as those who run the schools we're responsible for creating a school environment which is not so discouraging to a child that the child will give up.

In his A Memorandum to School Boards: Education in the Junior High School Years, emphasizing the importance of providing seventh, eighth, and ninth graders with the educational experiences they need, James B. Conant stated:
Because of a wide diversity in school organization, professional disagreement, and my own observations, I conclude that the place of grades 7, 8 and 9 in the organization of a school system is of less importance than the program provided for adolescent youth. (1960, p.12) Alexander quotes anthropologist Margaret Mead who complained that "we have imprisoned our early adolescents within a category, teenager, and our early adolescents with all the striking differences and discrepancies within a category - junior high school student..." (1984, p. 18). Eichorn (1966), in detailing the rationale for his recommendation of a 5-3-4 (5-years elementary/3-years middle/4-years secondary) structure for public education, based his concept of the middle level on his notion of transescence, which he describes as the period of human development which begins in late childhood prior to the onset of puberty and extending through the early stages of adolescence, more recently referred to as early adolescence. Eichorn's concept of an appropriate educational program for this age group involved a careful integration of cultural forces, mental, emotional and physical growth factors, along with administrative variables, guidance activities and teaching requirements. In his socio-psychological model he shows that transescents with similar physical maturation characteristics are now being educated in two separate organizational levels - the sixth grade, considered elementary, and the seventh and eighth grades associated with the junior high school. Eichorn also notes there exists an accumulation of research evidence that shows students
presently situated in a sixth grade elementary setting possess greater similarity of physical maturational and social interests with seventh and eighth grade pupils than they do with children in grades 4 and 5, while ninth graders tend to show greater affinity physically and socially, to the tenth-twelfth graders.

The assumption that contemporary elementary and junior high school plans do not realistically meet the maturational patterns of the early adolescent students has been blatantly implied by the movement towards the middle school concept. (Alexander, Williams, Compton, Hines, Prescott, & Kealy, 1969). During the 1960s and 1970s many educators generated a strong advocacy for the middle school as the organizational plan most suitable for the transition from elementary to the secondary levels of education. (Tye, 1985). This plan includes such ideas as configuring the middle level in a grades 6-7-8 organization with emphasis on the age group function, and the ninth grade returned to senior high level. (Alexander, 1984). However, the most important distinction between the extant junior high school and the new middle school plans is much less the grades configuration and more the educational emphasis. (Clark & Valentine, 1981).

More recent research has been directed towards identifying schools with outstanding records of success which have established records of non-reliance on the socioeconomic or ethnic backgrounds of their students. (George & Oldaker, 1985). In 1979, one of the first such studies was directed by M. Rutter in twelve junior high schools in inner-city London. Rutter's probe revealed that
within his sample of twelve schools, several were successful while others were not, that superior accomplishments were not related to grade level, school name, their physical or administrative characteristics, the student's socioeconomic background or the differences in the elementary schools which fed them. The success of some of those schools and the failure of others in that study appeared to be related to two separate but closely associated sets of determinants, 1) academic emphasis, and 2) the psychosocial environment. Representative of considerable research on teacher and school effectiveness, the Rutter study confirms the importance of emphasis on academics. (George & Oldaker, 1985).

In September 1980, following the Rutter studies in London, middle level research in American education began taking a different path. The National Institute of Education assigned Joan Lipsitz the task of identifying and examining "effective middle-grade schools that foster healthy social development". (Lipsitz, 1984) In the beginning, the study was focused on determining the answer to the one question: how do public schools deal with the developmental diversity of the (middle level) age group? This was expanded to include the significance of school effectiveness for this age group. Four middle schools were selected from such diverse areas as Alamance County, North Carolina; Detroit, Michigan; Louisville, Kentucky; and Shoreham, New York for the study which convincingly revealed a profound number of similarities among all four of these exemplary schools, similarities which
contributed to their inherent effective difference from the great majority of other middle level schools. The most arresting quality shared by these four schools is their willingness and ability to adapt all school practices to the individual differences in the intellectual, biological, and social maturation of their students. (Lipsitz, 1984).

In an approach similar to that used in the Lipsitz investigation, a new strategy called the outlier study, which first became popular among the researchers in industry, was adapted to the needs of education in extending the concept of identifying successful schools and examining the qualities that make them effective. The term outlier study refers to inquiry focused on the meticulous probing of the most productive samples that could be found in any given study, those that lay above and beyond the confines of the passable. In education, this new strategy has been applied with stipulated basic premises, i.e., the researchers rejected the notion that there are no differences between teachers or schools. They began with the assumption that teachers can make a difference and sought teachers and schools with exemplary records of achievement who could be demonstrated to have made significant differences in the lives of their students in order to identify any special characteristics specifically related to outstanding teaching achievement. Subsequent to the identification of the characteristics of teacher and school effectiveness the researchers then made comparisons to learn whether or not successful teachers and schools shared important commonalities that might be linked to improved
academic achievement. Ultimately, researchers have ventured to develop models which can be used in aiding other teachers and schools to become more successful. The commonalities of success, included such traits as: high levels of rewards and praise, pleasant and comfortable school conditions for students, ample opportunities for students to take responsibility and participate in running their school, an academic emphasis set by school staff, and consensus among staff members about curricular expectations, school norms and discipline. (George & Oldaker, 1985).

Researchers, e.g., Rutter, Lipsitz, who studied schools as social organizations found that students' behavior and academic success are considerably influenced by the internal life of the school. (George & Oldaker, 1985). Beane and Lipka, state: "...from the sense of self springs a myriad of variables such as behavior, perceptions of others, and motivation" (1987, p.3). Beane has said "Academic achievement is related to self perception, but improving self-concept is an important goal for its own sake" (1982, p.504). Students who perceive their own significance in teachers attitudes and regard school as more than just a site to socialize with friends are inclined to demonstrate more respect for their school. (George and Oldaker, 1985). Lounsbury (1988, p.14), quoting from an earlier personal writing says: "Middle schools have no choice but to deal with human relationships, personal development, and character education, which in toto might be termed, civic ethics."
Beane and Lipka (1987) describe an institution they call a "self-enhancing school" which helps young people to clarify their self-concepts, develop positive self-esteem, formulate values, and understand their unique relationship to the social world around them. Gruhn and Douglass (1971, p.35) quote from Charles W. Eliot's 1892 address on "Shortening and Enriching the Grammar-School Course", when the stirrings for educational reform began to gain momentum at the close of the 19th century, in which Eliot recognized the importance of the individual child:

Every child is a unique personality. It follows, of course, that uniform programmes (sic) and uniform methods of instruction, applied simultaneously to large numbers of children, must be unwise and injurious - an evil always to be struggled against and reformed so far as the material resources of democratic society will permit.

Addressing the concerns specified in the report of the Commission on Excellence in Education, A Nation at Risk, John H. Lounsbury (1988, p.58) states: "We have, I believe, a real responsibility to explain and be an advocate for the needs of the early adolescents and what educational program features are thereby called for."
The Carnegie Report

Introduction

The research project which led to the report, *Turning Points: Preparing American Youth for the 21st Century* (Carnegie Council on Adolescent Development, 1989), was instituted on the premise held by the Carnegie Task Force on Education of Young Adolescents that middle level schools inherently possess the potential to "recapture the millions of youth who are adrift" in our prevailing society. By the age of fifteen, significant numbers of American youth are in jeopardy of attaining adulthood without the prerequisites for coping with the competition of the labor market or the basic responsibilities of adulthood, i.e., commitments of marriage and family relationships, and participation in the exigencies of a democratic society. Of the approximately seven million young people, twenty-five percent are early adolescents considered to be critically susceptible to multiple high risk behaviors and school failure. An additional seven million are deemed to be at moderate risk with justification for great anxiety about their futures. (Carnegie Council on Adolescent Development, 1989). Douglas J. MacIver (1990, p.462) says this:

...as students enter the middle grades, they are simultaneously under going the social and biological changes associated with early adolescence...there is clearly a risk that these simultaneous adaptational challenges will overwhelm the coping skills of some students and have
pathogenic effects on their psychological adjustment, self-esteem, and motivation to learn.

Concurrent with the angst attributable to the natural changes occurring in their maturational process, the early adolescents must contend with the ambiguities thrust upon them by the society in which they live. This period of trial and error of decision making is beset with the dichotomous messages of its O.K/its not O.K. to become involved in sexual promiscuity, illegal drugs, violence, and sundry other anti-social activities. (CCAD, 1989).

Inconsistencies in the structure and curriculum of middle level education have survived, causing mid-level schools to acquire the inclination of failing to meet the criteria of appropriate education for their early adolescent students. The negative commentary of the American educative system seems to have changed very little over the past one-hundred years. Researchers still perceive inappropriate grouping of students, inadequate programs for the early adolescent, lack of proper training for middle level teachers, loss of family and community involvement and insufficient teacher input regarding the teaching/learning process. (CCAD, 1989).

The findings of the Carnegie Task Force on Education of Young Adolescents show nearly verbatim similarities with the results of the aggregate research on educational reform performed during the last century. The recommendations contained in the Carnegie report, which are the consequences of data acquired over a two-year period, address the issue of the reorganization
of middle schools and denote specific reforms for optimizing their capability of positively impacting the evolution of the early adolescents they serve. The eight recommendations for transforming middle level schools into effective institutions of early adolescent development embrace the following essential principles:

1. Large middle level schools would be divided into smaller schools-within-schools or houses within the school;
2. Middle grade schools would transmit a core of common knowledge to all students;
3. Middle grade schools would be organized to ensure success for all students;
4. Teachers and principals would have the major responsibility and power to transform each middle grade school;
5. Middle grade teachers would be specifically prepared to teach young adolescents;
6. Middle level schools would promote good health; the education and health of young adolescents are inextricably linked;
7. Families would be allied with school staff through mutual respect, trust and communication;
8. Schools and communities would become partners in educating young adolescents. (CCAD, 1989)
**The Recommendations**

Create small communities for learning within each large middle school.

"School should be a place where close trusting relationships with adults and peers create a climate for personal growth and intellectual development." (CCAD, 1989, p.37).

The formation of smaller schools-within-schools, or houses, will facilitate stability, promote closer ties, and the enhancement of mutual respect between the students and teachers. (CCAD, 1989). Howard and Stoumbis (1970) described the house plan or school-within-a-school notion as a means of overcoming the more undesirable characteristics of school "bigness". In this arrangement, the school's enrollment is sub-divided into groups, each containing a fraction of the total enrollment. Each house has its own teaching staff, counseling personnel, and usually an administrative head, e.g., an assistant principal or dean. Usually the students will remain in the house for the full three years, receiving the bulk of their education there, but sharing with the other houses special facilities such as the cafeteria, library, learning materials center, central administrative offices, music room, gymnasiums, industrial arts, homemaking, and arts and crafts. While the house plan is frequently associated with team-teaching techniques, it not mandatory to adopt team teaching.

Fundamental to this idea is the formation of interdisciplinary groups of teachers as teaching teams, with each team assigned a minimum of five interdisciplinary
teachers and a maximum of 125 students. (CCAD, 1989). Paul S. George (1984, p.57) maintains:

The interdisciplinary team organization is the only acceptable method for grouping teachers on a schoolwide basis in middle and junior high school. There is no evidence to the contrary...the interdisciplinary team organization is becoming a central characteristic of middle and junior high schools.

Such teaming promotes an ambience of cross-discipline problem solving which supports and reinforces cognizance rather than regurgitation of facts. (CCAD, 1989).

In *Successful Schools for Young Adolescents*, Lipsitz (1984) describes an example of "schools-within-schools", or "houses", in her account of Samuel V. Noe Middle School, Louisville, Kentucky. Lipsitz says the genius of Noe Middle School lies in its organizational structure, which is simple in concept and complex in realization. Noe Middle School is highly decentralized. It is the equivalent of seven semi-autonomous schools. Teachers and students are organized in interdisciplinary teams. There are seven academic teams; four are multi-aged and three have single grades. An eighth team consisting of Unified Arts teachers (home economics, industrial arts, music, physical education, art, media, band, orchestra, Spanish, and independent study) serves the other seven teams. The school's central symbol is the cougar, but each team has its own logo symbolic of the strong identification both teachers and students have with
their teams. The school day is divided into two blocks of time, team time and unified arts. Team time includes reading, mathematics, language arts, science, social studies, teacher-based guidance, and Spanish. An important, if not vital aspect of this concept is the common planning time the teaming teachers share in which decisions regarding grouping their 150 students for skill subteams, departmentalization, interdisciplinary units, allocation of time, intramurals, teacher-based guidance, and, beyond thirteen schoolwide rules, team rules. The school's commitment to giving its early adolescent students opportunities for self-exploration and self definition is expressed in the curriculum through the teacher-based guidance program, the 20-minute daily advisor-advisee session where students discuss their problems, such as divorce or the death of a sibling. They also talk about alcohol abuse, prejudice, school and life survival skills, risk taking, and human sexuality. School is informal and active enough that friends can work together in classes, and continue their socializing at lunch, and break time. Because of the school's success in consistent annual gains in student performance on the California Test of Basic Skills, the school is able to effectively oppose back-to-basics proponents.

MacIver (1990), reports advocates of the middle-grade reform movement, i.e., educators, state boards of education, associations, foundations, and researchers, have often recommended the use of interdisciplinary teams, advisory groups, and transition activities as being key components of a responsive and responsible educational program, for young adolescents.
Recommendation: Teaching a core of common knowledge.

"Every student in the middle grades should learn to think critically through mastery of an appropriate body of knowledge, lead a healthy life, behave ethically, and lawfully, and assume the responsibilities of citizenship in a pluralistic society." (CCAD, 1989, p.42).

The prevalent notion that the early adolescent is not capable of cognitive development, which is not supported by any "persuasive evidence", has had a grossly negative effect on middle level curriculum development. (CCAD, 1989). Very much to the contrary, Georgiady and Romano (1977) show where the early adolescent has already learned to make comparisons and recognize likenesses and differences; can meet failure and disappointment and accept criticism; can face reality as well as admit to strength and weaknesses; is capable of making judgements; and can make generalizations based on reflective thinking. American youth need and must be intellectually challenged if they are to be adequately prepared for the world they face. At the present time the shortcomings of many mid-level schools lies in neglecting to foster their students potential ability to think critically. A primary goal in choosing curricula and teaching methods in the middle grades would be disciplining the minds of the young adolescents, and their faculty for vigorous, absorbed reasoning. (CCAD, 1989). John Lounsbury (1988, p.17) says: " We have, over the years, unintentionally nurtured the view that children come to school to be
taught, rather than to learn. And there is more than a semantic difference in these alternatives."

Van Til (1961), in discussing *curriculum*, defines a schools' curriculum as the *sum total of the planned learning experiences and activities* provided for the education of the students. Various educators have provided a number of alternative, but similar plans for the organization of curriculum. Clark and Valentine (1981) have shown where educators for many years have suggested flexible and varied schedules, instructional groupings, and teaching strategies appropriate for the emerging adolescent. With concerns for the wide variations in the population of early adolescents, Alexander, et al. (1969) suggest that each middle school should formulate its own planned program of learning opportunities. Included in their classification of learning opportunities related to the functions of the middle school are (1) personal development; (2) skills for continued learning; and (3) organized knowledge.

An important element of personal development, health education should be presented within the core subject area as part of life sciences. Youth require instruction in mastering resistance to interpersonal or media messages that promote negative behaviors, developing self-control and self-esteem as well as stress reduction and other life skills. (CCAD, 1989). Briefly, health education is concerned with understandings and learnings intended to reduce disease and to better the individual's personal health practices as well as those of the community. (Howard & Stoumbis, 1970). Skills for continued learning must
include the fundamentals of inquiry. Inquiry involves a way of thinking and functioning that grows and improves with experience. (Stevenson, 1986).

Van Til (1961) describes the experience curriculum as being the most far-reaching plan for student learning. Proponents of this proposal support the notion of an unstructured-core program all day long, providing the ultimate in learning based upon the needs, problems and abilities of particular group of individuals. A team of teachers with mutually reinforcing competencies would work with a larger group of students in such an unstructured program. Gordon F. Vars (1978) states that a block-time or core program, in which one teacher provides instruction drawn from two or more areas may be an effective means of bridging the gap between elementary and junior high school. The extended period of time permits a broader assortment of learning experiences than typically occur in a conventional class period. Clark and Clark (1981) point out that since all students do not learn at the same rate, an effective provision to accommodate such variations is the continuous progress curriculum which would involve utilizing a broad diversification of teaching strategies such as discussion, projects, simulations, presentations, and task groups. A continuous progress curriculum design alternative serves the basic structure for addressing the needs of the individuals, as well as providing the cornerstone for a responsive instructional program for early adolescence. Many schools using continuous progress formats have effectively used flexible block-time scheduling, modular scheduling, and daily demand scheduling to gain the time flexibility needed.
The Middle Level Education Council of the National Association of Secondary School Principals (1985), states that middle schools need to present content and information in many different ways in order to accommodate the differences in students. The middle level school should help students examine a subject's use in their lives and help them apply what they learn in school to the "here and now" issues of their lives.

Educators agree that their assignment includes teaching values which include such traits as compassion, regard for human worth, respect for others' rights, tolerance and appreciation for human diversity, willingness to cooperate, and a desire for social justice. (CCAD, 1989).

Mary E. Compton (1984, p.71) said:

One might argue that all education is preparation for citizenship, not merely high school offerings in civics or economics. An American citizen today must understand consumer economics, health, and the basic skills of reading, writing and mathematics. He/she must have some understanding of our political system and the rights of its citizens.

In the context of his notion of cultural literacy, E.D. Hirsch (1987) calls for instituting a policy of teaching traditional information nationwide in all our schools. (Hirsch 1987). And Lounsbury (1988, p.59) states:

Call it indoctrination if you will, and oppose it on that basis if you must, but, as I see it, the advocacy of basic American values and tenets by teachers is called for, especially in the middle school years. We fail in
our responsibility as teachers if we do not model and discuss positively the accepted standards of conduct and the basic beliefs of what we call the American way of life.

**Recommendation: Ensuring success for all students.**

"All young students should have the opportunity to succeed in every aspect of the middle grade program regardless of previous achievement or the pace at which they learn." (CCAD, 1989, p.49).

All middle level grade students must successfully complete the core program suggested in the Carnegie report. (CCAD, 1989). Jomills Henry Braddock II (1990) recounts that nearly every school serving early adolescents must face the dilemma of dealing with students' diverse academic skills and, at the same time, minimizing the use of labels that create invidious distinctions. Used unwisely, such grouping practices exaggerate differences, label some pupils as slow or stupid, and result in a poor learning climate. According to Paul George (1986), in spite of the fact that 95 percent of the research says don't do it, 95 percent of the schools persist. For schools in the middle level, ensuring success for all students must become a fait accompli.

Middle level schools are obligated to rigorously endeavor to produce greater numbers of flourishing students who will not stop trying despite the myriad temporary setbacks in academics they may suffer. (CCAD, 1989). Henry Jay Becker (1990) notes in the last decade research on the development and
learning of early adolescents has led to a widespread conviction that schools should provide middle grade students with significant exposure to a wider range of subjects, increased attention to cognitively demanding tasks, and a greater variety of modes of learning in which they can participate much more actively than merely being listeners. The early adolescent, through his/her own intellectual curiosity becomes an experimenter, and has increasing tendencies to checking out particular subjects of personal interest. (Thornburg 1973). Romano (1973) proposes an "I.G.E."-individual guided education program - which would involve differentiated staffing, nongradedness, and team teaching to produce a teaching-learning environment dedicated to individualizing education according to the needs of each child.

All students must be afforded self-confidence, personal satisfaction building, expertise exhibiting opportunities to demonstrate measures of excellence at something, be it in an academic area, athletics, visual or fine arts, or service (CCAD, 1989). Alexander et al. (1969) suggest a design of special interest activities for the middle school which involves (1) exploratory experiences which would afford each student an opportunity to learn enough about his/her interest in, and decide whether to participate further in such diverse areas as art, dance, drama, foreign language, home and industrial arts, journalism, music, typing, and various work projects including school-sponsored community service activities. Anne C. Lewis (1990), in her article regarding the efforts aimed at reforming American schools since the publication of A Nation
At Risk, describes the positive effects of dedicated educators in schools with exemplary programs who share the notion of valuing their students and their potential in the broadest sense of the term. Johnston and Markle (1983) report that their findings show students perform better when their teachers have high expectations for them and worse when teachers' expectations are lower.

To accommodate the goal of success for all students, flexible scheduling should be instituted as a pivotal element of the transformed middle school. (CCAD, 1989). Howard and Stoumbis (1970, p.382) describe flexible scheduling as "a device that helps to change and improve traditional junior high school practices to provide an educational program more suited to the unique characteristics and needs of the early adolescent and to the functions of the junior high school". Control over duration of each class should rest with the teaching team and allocation of blocks of instructional time should be based on the combined professional judgement of each teaching team. (CCAD, 1989). Clark and Clark (1987) show that most effective interdisciplinary teams are scheduled in multiple period time blocks which affords team members the opportunity of performing such basic tasks as: 1) developing policies and practices for student grouping within the team; 2) developing schedules and establishing assignments that will provide equal opportunities for time flexibility, group size, and teaching load for each of the teachers on the team; 3) identifying areas/facilities appropriate for large group instruction (i.e., use of
media, etc.); 4) examination of course content to find possible ways to integrate the diverse subject matter.

Broadening the parameters of opportunities for learning should be instituted as a major facet of the school's educational program. (CCAD, 1989). As stated by the Middle Level Education Council of the NASSP (NASSP, 1985, p.1) "schools must offer learning experiences that do not frustrate their students, but provide growth, challenge, and success during early adolescence."

Modifications in curriculum, instruction, organization and scheduling will immensely improve the probabilities for high academic achievement for every student. Raising the expectations for student success must be accompanied by the availability and access to learning resources. This includes possibilities of school day extension, Saturday enrichment programs, summer school, specialized daily instruction, greater involvement of the home, and most importantly, strong teacher involvement. (CCAD, 1989). Cooley and Thompson (1988, p.10), describing their Saturday School Model, state:

Although the program has been termed Saturday School, the program might be held anytime, including evenings. The Saturday School Model provides educators with the time and resources to help solve almost any discipline problem.... The model can improve student achievement by focusing on the causes rather than the symptoms of student misbehavior.
Monica D. Jacoby (1986) reports that 10-to 15-year old children who are too old for day care, but too young for paid employment are overlooked. Concerned about the difference between young adolescents either surviving or thriving, the Center for Early Adolescence has focused its efforts on the positive experiences that permit them to learn more about themselves as they mature. This approach is based on the premise that the after-school hours provide a much needed forum in which young adolescents can enjoy opportunities they would otherwise miss. After-school programs and activities which offer remedial help, foster individual contribution and team spirit, and provide rewards for creativity, dependability, and in some instances just for participation alone, become an important supplement to the school day in promoting young adolescents' healthy development.

The very prevalent practice of grouping students by achievement level must be supplanted with an emphasis on cooperative learning groups. (CCAD, 1989). Manning and Allen (1987) explain that cooperative learning provides an instructional approach which tends to minimize competitiveness and overemphasis on individualistic schooling. Small groups of students, usually composed of four or five young members with wide academic, social and racial backgrounds, share responsibility for learning experiences of each other. Research leaves little doubt that both the high and the low achievers benefit greatly by this arrangement; low achievers have shown that they are capable of learning and helping others, while the high achievers cultivate a sensitivity
towards assisting those academically slower. Benefits include students sharing view-points of differing racial, ethnic and cultural backgrounds which serves as preparation for adult workplace experiences, in addition to assisting students in learning course material much faster, lengthening retention and cultivating reasoning power. (CCAD, 1989). Cohen, Kulik and Kulik (1982) have shown through their research that the use of peers in tutoring has dramatically affected the availability of tutoring programs. Tutored students outperformed control students on examinations. Both the tutors and the students being tutored gained a better understanding of, and developed positive attitudes toward the subject matter covered in the tutorial programs.

Recommendation: Empowering teachers and administrators to make changes.

"Decisions concerning the experiences of middle grade students should be done by the adults who know them best." (CCAD, 1989, p.54)

The precedent for the practice of democratization, which is the empowering of workers to make decisions, is being established by business and industry and must be instituted in American education as well. Teachers and administrators throughout the educative milieu are critically impeded in their potential to bring about positive student outcomes by the imposition of limitations in making decisions which affect their students. (CCAD, 1989). Paul George (1984) has said that a decades worth of research on productivity, in corporations and schools, identifies the concept of group involvement as one of
the central factors in improving schools effectiveness and raising student achievement. Erlandson and Bifano (1987) tell us that professionalism is inextricably bound to governance, and neglect of teacher empowerment as a vital dimension of the school organization has encouraged some quality teachers to leave the classroom as well as individuals of high academic quality to avoid teaching careers altogether. Additionally, the considerable research and informed opinion on shared decision making in schools builds a strong case that a more professional, autonomous role for teachers would enhance the effectiveness of the public schools. Teachers must be endowed with substantive decision-making powers with attendant responsibility for the consequences of their decisions pertaining to the everyday educational encounters of their pupils. (CCAD, 1989). Clark and Clark (1981) point out that continuous evaluation of both staff and program are essential and must be performed. Pertinent data must be accumulated on teacher successes and failures as they assume the new roles required by the program. Toepfer (1984) points out that the interaction among interdisciplinary team members allows them to see and learn the strengths and weaknesses of their colleagues with the resultant planning and discussion of such realities defining them into both personal and team development needs. As has been shown in the improvements in the workplace product, impressive gains in improved student achievement can occur only when teachers are sanctioned to use their privy knowledge of students to devise instructional agenda and procedures. (CCAD, 1989). MacIver (1990) introduces
evidence that because interdisciplinary team members share the same students they may be able to respond more quickly, personally, and consistently to the needs of individual students. Additionally, teaming teachers may also meet with the parents of individual students to review the student's progress and to plan appropriate interventions.

Teaching team members should be allowed to employ creative control over the methods used in attaining the goals and objectives of their team, including collectively allocating budget and space for the team, choosing instructional methods and materials for classroom use, identification of interdisciplinary curricular themes, class schedules, field trip selection, and youth service opportunities, and evaluation of students' performance relevant to the school-wide objectives. (CCAD, 1990). In the study of four outstanding middle level schools, Lipsitz (1984) reports that aside from personal and professional support of the principals of these successful schools, the teachers are gratified by administration recognition of their professionalism. They are, in varying degrees in various schools, curriculum builders, budget preparers, schedulers, and student advisors. Teachers make all decisions about grouping their assigned students for skills, departmentalization, interdisciplinary units, establishing skill teams, allocation of time, intramurals, teacher-based guidance, and, beyond thirteen schoolwide rules, team rules. Common planning and lunch periods, team meetings, and team teaching encourage constant communication and allow for high levels of companionship. The teachers in these exceptional
schools do not feel, as do teachers in too many other schools, that they are perceived as the bottom of the barrel, impotent to effect change. The teaching staff is not plagued with feelings of being isolated, unlike the experiences that so many of the teachers recount from their previous teaching assignments. The psychic rewards for teaching in these schools are high.

Additionally, team members should be empowered with a voice in recruiting and selection of new teachers for the team or within the house. (CCAD, 1989). In describing the dilemmas faced by principals in the acquisition of competent teaching staff, Joan Lipsitz (1984, p.176) says

"...The greatest protection these schools have is their strong definition; now that their reputations are established, teachers can and do self-select on the basis of their level of comfort with the school's philosophies and programs."

In-service and staff development are the enabling means of keeping competent teachers upgraded on the most current educational developments as well as assisting other teachers in overcoming deficiencies. Toepfer (1984, p.131) says:

It is essential that faculty participate in decision-making about all aspects of staff development/inservice education... the success or failure of the middle level program will rise or fall in faculty enthusiasm. This involvement helps significantly in establishing faculty perceptions of the need for specific staff development activities.
Clark and Valentine (1981) state that specific staff development guidelines should include: 1) involvement of the total staff in the planning of the program; 2) establishment of an individualized staff development program which promotes personalized growth for each teacher; 3) provision for a gradual program of progress; 4) utilization of a variety of techniques, i.e., workshops, media, conferences, rap sessions, school visitations, etc..

In the restructuring of the school a new leadership position, house or sub-school leader, must be provided. This individual is the lead teacher functioning as consultant to the team teachers in creating ideas for curriculum, acquires requested instructional materials, and generally assists the teams in solving problems involving specific students. (CCAD, 1989). Gruhn and Douglass (1971, p.343) explain the responsibilities of this new position:

...he is referred to as an administrative assistant, an assistant principal, a unit administrator, or a house master. For most administrative matters, teachers and pupils are responsible to the administrator of their small school. He attends to pupil discipline, pupil records, attendance problems, conferences with parents, and care for his part of the school building and facilities. In some schools he serves as instructional coordinator for his teachers, counselors, and pupils. Within the parameters of the sub-school houses, responsibility for production of ambitious educative events rests on the shoulders of the team teachers; administration of concerns outside the individual houses fall under the
supervision of the building governance committee, the members of which are peer-nominated representatives from faculty, administration, support staff, and parents. This group may also function as an advisory to the building principal. Although ultimate accountability for overall administrative consequences rests with the principal, a productive school system is dependant upon accord between the committee and the principal, who must be willing to listen and be open-minded. (CTEYA, 1989).

Clark and Clark (1984, p.3) state: "...the principal in all phases of planning and implementation... must be willing to involve faculty as well as students, parents, and community members in the planning and decision-making process."

The house leader and the principal each hold offices that demand substantially more freedom of action in school-wide decision-making authority than middle level school administrators presently enjoy. Both offices will need energetic, creative individuals who will provide the imaginative motivation in the production of innovative curricula and educational encounters of their early adolescent students. (CCAD, 1989). George and Oldaker (1985/1986, p.79) report in their National Survey of Middle School Effectiveness all respondents to their survey indicated "that administrators and faculty members collaborated on decisions that shaped school policy." The survey was addressed to administrators of schools identified by: 1) the 1982 Study of Well-Disciplined Schools sponsored by Phi Delta Kappa, 2) the 1983 DOE National Secondary
School Recognition Program, 3) a panel of ten persons recognized as experts in middle level education, and 4) several lists from books on middle level education.

Recommendation: Preparing teachers for the middle grades.

" Teachers in middle grade schools should be selected and specially educated to teach young adolescents." (CCAD, 1989, p.58).

Currently, very few middle level teachers have been exposed to special training courses designed specifically for properly equipping the neophyte teacher entering the middle level. (CCAD, 1989). James M. McPartland (1990) states that teaching staffs in the middle level grades can differ in the types of prior training and certification each faculty member possesses. Some middle grade schools may employ primarily teachers with elementary school backgrounds while others may lean heavily towards teachers with academic training in specialized secondary grades subjects. Staffing practices can vary between the completely self-contained classroom, in which a single teacher is completely in charge of all subject-matter instruction for all students in a particular group, to the completely departmentalized system in which each teacher specializes in a single subject content area and instructs several classes of students in that particular subject. This has resulted in the lamentable predicament of many teachers assessing their tenure in middle grades as nothing more than a stepping stone to senior high school assignment; others
are negatively affected by the organization of the middle school and develop
the anxiety of being inadequate to deal with the swollen class loads. Still more
surrender to discouragement resulting from lack of training relevant to early
adolescence and harboring preconceived notions of stereo-typical non-teachable

Educators continue to prepare, for the most part, as if the junior high
and the middle school had never existed... unfortunately most school
districts engage in these kinds of efforts primarily when they are about
to establish new middle schools. This sometimes results in attempts of
the uninformed to provide inservice to the uninterested, or worse, to the
indiscriminate hiring of university consultants to dispense staff
development in teacher workshops that administrators rarely attend.

Teachers must have a strong desire to understand as well as to teach
young adolescents. Middle level administrators should expect prospective middle
level teachers to appreciate early adolescent developmental characteristics
through university courses and direct experience in middle schools. These
neophyte teachers must also acquire knowledge and a sensitivity to the diverse
cultural backgrounds of their students. (CCAD, 1989) Savario J. Mungo (1989,
p.30) states:

In recent years, the problem of preparing teachers who are
predominantly white, to work with an increasingly pluralistic, diverse
population has increased...Regardless of race, or ethnicity, whether the
school populations are poor white, or from a variety of ethnic backgrounds, the fact is they are in many ways, a different culture...Using the same principles in the preparation of our teachers to work with cultural diversity both nationally and internationally, is an approach that needs to be addressed.

Middle level teachers must evolve as team players who are responsible not only for teaching students, but other team members as well, about the relevance of focal principles, concepts and facts within their subject area, and for identifying commonalities in the subjects that they teach. (CCAD, 1989). MacIver reports that a recurring highlight in recommendations made by numerous task forces involved in the reformation of middle level education is the interdisciplinary teaching team. Data gathered by MacIver show that a well-organized interdisciplinary team approach can strengthen a school's overall program for students in the middle grades, as well as eliminating the isolation that many teachers feel by providing a working group of colleagues to conduct activities and to discuss and solve mutual problems.

Demands of dealing with a variety of family situations, i.e., 1- and 2-parent families, families of different racial, ethnic and cultural backgrounds, families stressed for any reasons which impact the academic performance of their children, require that teachers in the transformed schools prepare themselves with university courses in the principles of guidance to serve as advisors. (CCAD, 1989). "One major challenge facing educators in the middle
grades," states MacIver (1990, p.458), "is how to provide early adolescents with the social and emotional support they need to succeed as students." Prominent among the recommended practices is the use of group advisory periods, and the use of "articulation" activities with students, parents, and school staff members to ease students' transition from one level of schooling to the next. Group advisory periods assign a small group of students to a teacher, administrator, or other staff member for a regularly scheduled (often daily) meeting to discuss topics important to students. Social and academic support activities include discussing problems with individual students, giving career information and guidance, developing student self-confidence and leadership, and discussing academic issues, personal or family problems, social relationships, peer groups, health issues, moral or ethical values, and multi-culture and intergroup relations. (MacIver, 1990).

Middle level teachers would also be expected to have specialized expertise in one, preferably two, academic subjects such as English, history, mathematics or biology. Selection of teachers would be based on their undergraduate records and performance in a post-graduate, pre-contractual paid internship or apprenticeship, in a middle level school; the apprentice candidates would teach a maximum of half-time, and would be under the continuing guidance of mentor teachers during which time the candidates would extend their education through graduate courses of the early adolescent as well as the
Partland (1990, p.469) attests:

...a preferred direction for the future is to develop training and certification for teachers that explicitly focus on the middle grade curriculum and on the needs of the early adolescents so that individual teachers will be able to strike an appropriate balance between subjects and students."

Hansen and Hearn (1971) have advocated a pre-service teacher education program which would include three categories of teacher preparation: a) general education, b) subject matter specialization, and c) professional education. They strongly recommend general education should provide a general cultural background concurrent with satisfying specific graduation requirements as demanded by the teaching profession, accounting for between 40 and 50 percent of the time the student spends in college. Subject matter preparation should include a third of the normal four-year undergraduate program in the area of specialized preparation in subject matter. Professional education should involve a gradual induction into every part of their program of teacher education particularly in the professional education aspect of that program.

Throughout the four years in college and the fifth year of the 5-year teacher education programs, prospective teachers must be given opportunities to work with students both in and out of the classrooms to augment the on-going
campus program. Teacher education programs must be heavily saturated with field experiences. The fifth-year experience preferably could be completed after a year or two of initial teaching experience. Every teacher should serve as an intern just as every doctor and dentist fulfills a period of internship. This experience would be a school year in length, at reduced pay, spent under the tutelage of a master teacher who would aid and support every first year teacher regardless of the quality of his/her four year program. (Hansen & Hearn, 1971).

Assessment of candidate teachers would be accomplished by qualified individuals including the mentor teachers, who would screen out those prospective who might serve more effectively in either the elementary or senior high levels, or possibly should enter a profession other than teaching. Those candidates who successfully complete their apprenticeship would be issued a specific endorsement on their teaching certificate to teach on the middle level. (CCAD, 1989).

Recommendation: Improving academic performance through better health.

"Young adolescents must be healthy in order to learn." (CCAD, 1989, p. 60).

As perceived by seventy percent of all U.S. educators, one of the most pervasive problems with their students stems from poor health and
undernourishment. (CCAD, 1989). Georgiadi and Romano (1977) show that because of the erratic psychological effects of the irregular physical growth characteristics of the early adolescent, development of middle level curriculum should include emphasis on early adolescents' self-understanding. This can be achieved by: 1) providing as a function of classroom instruction, health and science experiences which will help the student to develop an understanding of growth, and 2) support for differences in physical development of individual students by arranging students in several groups of differing abilities in their physical education classes. Further, physical education classes should provide health training and required showers, as well as exercise. There should be discussions on good health habits including regular bathing and proper eating habits. Gruhn and Douglass (Gruhn & Douglass, 1971, p.145), in recognizing the importance of a total school health program stated:

   Every school has numerous opportunities to promote health education and has a basic responsibility to protect the health and well-being of its students, as well as other members of the community. This responsibility can best be met by well-planned and carefully implemented procedures of program development.

   Good health in itself will not guarantee high academic achievement, but the implications of substantial data indicate that capricious health imposes a considerably negative affect on academic accomplishment. The transformed middle grade schools must ensure student access to health services and
establish the school as a health-promoting environment. (CCAD, 1989). Gruhn and Douglass (1971) advise the total school health program should consist of three fundamental areas: 1) healthful school living and environment, 2) health services, 3) health instruction. Gruhn and Douglass further describe school health services as including four types of activities: 1) appraisal procedures, 2) follow-up and interpretation of health problems, 3) care of emergency injury or illness, and 4) disease prevention and control.

Health instruction is a vital part of the total school curriculum, and in this sense is an academic or content subject. The concepts, facts, and principles pertaining to healthful living constitutes the body of knowledge for this subject. Healthful school living encompasses attention to school safety, sanitation, mental and emotional health, food services, health of school personnel, and healthful environmental conditions. This can be accomplished by providing a school health coordinator whose prime obligation is to coordinate all obtainable health resources for student access. The position of school health coordinator conceivably could be held by a school nurse, or nursing practitioner who would function as a referral office to health agencies outside the school as well as attending to limited medical screening and first aid. (CCAD, 1989). Harriett Swift (1988), an Assessment Counselor with the Cobb County Board of Education in Marietta, Georgia, reports of positive results of an eight-day course in stress management for seventh graders, taught by both a science teacher and a counselor, as part of the science curriculum. Other aspects would
include liaison with guidance counselors, psychologists, food service personnel, and maintenance engineers. (CCAD, 1989).

Recently evolved approaches to providing health care to students which have very favorable outlooks are school-based health clinics and school-linked health centers. Schools must render not only the instruction, but the environmental modeling for good health practices by providing choice nutrition as well as health education messages in the classroom. Schools should be smoke-free, and should offer programs to school personnel, students, families and community members who wish to quit smoking. Good health practices and physical fitness should be a concern of self-esteem for everyone involved in the school milieu. (CCAD, 1989). Gruhn and Douglass (1971, p.146) state:

A program of health education should have its origin in the lives of people. It should seek to discover and meet the health needs of children in school and of people in the community as a whole. It should be dedicated to the transmission of knowledge and wisdom of science as it affects human life. A health education program should guide people to assume much responsibility for both personal and community health. This means they should have an understanding of health in its broadest sense and of the multifaceted existing and emerging problems which bear on the attainment of good health.
Recommendation: Reengaging families in educating young adolescents.

"Families and middle grade schools must be allied through trust and respect if young adolescents are to succeed in school." (CCAD, 1989, p.66).

Parental involvement in the education of their children declines progressively during the elementary years. By the middle grades, the home-school relationship has been meaningfully truncated, for some children, even nonexistent. This broadening of the separation between families and schools during the middle level years is indicative of the pervasive parental attitude of disengagement from the lives of their young adolescents. (CCAD, 1989). Harold Hester (1989, pp.23-26), director of secondary education for the Capistrano Unified School District in San Juan Capistrano, California, states:

Parent involvement in their youngster's education is imperative to student success..efforts to improve parent involvement pay tremendous dividends..one outcome of an effective parent involvement plan is the emergence of a group of parents who are educational advocates.

Although early adolescents need expanding independence, they also need positive parental counseling and guidance, not a complete break with parents and other family members. Critical to the successful education of young people, parental interest in school programs, curricula, and staff must be encouraged to nurture mutual trust and respect between families and the school staff. (CCAD,
On the assumption that the span of individual differences existing among students extends also to the homes from which they come, Lockledge and Matheny (1989) found that home environment does influence the success/failure potential of the student. Given the perception that their parents did not care about education, the students did not care and felt that the teachers also did not care. School was something to be endured.

Parental interest in school programs can be achieved by offering parents meaningful roles in school governance; keeping parents informed; offering families openings to support the learning process at home and school. (CCAD, 1989). Hester (1989) advises encouragement of parents to serve on school committees to assist in developing policies to address the many school problems such as drug, tobacco and alcohol abuse. Additionally, Hester advises promoting parental involvement as advocates on school site councils, PTA organizations, and related community councils. Lockledge and Matheny (1989) show the importance of enlisting the cooperation of not only the entire team of teachers, but students and their families as well, and offer a variety of suggestions to accomplish such engagement including:

1) inviting parents to school to observe the teacher (but not necessarily their own child's class);

2) encouraging parental support groups so the ideas which promote positive influences are disseminated and enhanced;
3) involving parents on committees and as volunteers in school and starting read-ins where parents and teachers sample materials;
4) starting study groups in the local library;
5) writing notes and telephoning the home to enlist the help of parents in praising their child's achievements;
6) allowing choices in homework assignments so as to have a better chance of capitalizing on a family interest;
7) developing special evening programs that would encourage working parents to join their child in a school activity but are such that the student could come alone or with another family;
8) having students conduct surveys to find out adult attitudes, which may be far more positive than they realize;
9) preparing multiple copies of class or team newsletters so students can more easily share information about school events with divorced parents;
10) telephoning and writing personal notes just to establish positive contacts about school matters;
11) making group counseling available for both students and parents;
12) creating after school libraries where lonely kids can "stick around";
13) providing older students as tutors for students whose parents can't help and may be having guilt feelings about it;
14) guiding gently with standards that are high but attainable and not in direct conflict with those of the home.

The building governance committee provides a significant opportunity for parents to participate in defining the purposes of the school and to join in the decision-making operation affecting the issues and problems of the building. Regarding parents as effective and important to the decision-making process has profound impact on the young adolescent. Informed parents become supportive parents; mid-level schools should establish communication links with families before school starts; parents need to know how the school operates, what rules and procedures their students should anticipate, and that as involved families they are respected and will play an important role in the school program. (CCAD, 1989). Lockledge and Matheny (1989, p.36) summarize their work: As middle level educators recognize the individual differences that exist among families and adopt more appropriate strategies for dealing with them, more of their students may develop appropriate attitudes toward reading and learning, and the future may even hold a greater number of positive, supportive home environments.

Recommendation: Connecting schools with communities.

"Schools and community organizations should share responsibility for each middle grade student's success."
All communities contain their own human and economic resources; locating and coupling them with the educative structure in enduring alliances assumes an overwhelming duty. Arduous as it may be, the advantages of accomplishing such alliances provides substantial justification for the expenditure of time and effort. (CCAD, 1989). Lounsbury (1987, p.36) stated:

The root causes of most of the difficulties teachers face grow out of the quality of life which our young people experience when not in school...Building better school/community relationships has become of the utmost importance...Parent involvement in school-business cooperation are not extra duties to be performed if time permits, they are fundamental and basic ways to improve education.

Michael A. Burke (1986, p.46) director of instructional resources of Green Bay, (Wis.) Area Public Schools citing the report from the National Commission on Excellence in Education, states: "...schools should provide effective leadership for the voluntary efforts, resources, and contributions of individuals, business, parents, and civic groups so that they can strengthen our educational programs."

Essential to maturation is the becoming of an active citizen in the community - early adolescence presents a choice opportunity to gain the skills, values, and sense of social responsibility vital to citizenship in this nation. (CCAD, 1989). Capellutti and Eberson (1990) report on a seven-year-old program at the Auburn Middle School, Auburn, Maine, where, once a year,
parents and students exchange places for a day during the student's seventh or eighth year. Classes proceed as on any other day, with execution of pre-scheduled events, i.e., tests, dramatization, vocabulary development, etc.. The students assume the usual work responsibilities of the parent exchanging places with them, be it in the workplace or at home. At the end of the day, the student lists the form of employment, the tasks, the schedule, skills required, and how the day may have helped with a career or related decision. Included in the five listed benefits provided by the program are: 1) increased student/parent understanding and communication, 2) students learn about careers, 3) parents gain a better understanding of middle level education, 4) increased support for school and staff by parents and community, 5) parents and students become school and community morale boosters.

Five directions communities have taken to achieve congruence of their schools and resources include: placing students in youth service; ensuring student access to health and social services; supporting the middle grade education program; augmenting resources for teachers and students; and expanding career guidance for students. (CCAD, 1989). W. Ben Nesbit (1987) reminds us that due to rising inflation, tax referendum failures, inadequately funded legislative mandates, declining student enrollment and cuts in federal aid all contributing to the financial crunch in public education, schools have often been forced to curtail programs. One answer to this problem is the local education foundation. Educational foundations have been established in many
communities to not only raise funds, but to acquire special materials or equipment, to retain and show appreciation for teachers or improve teacher morale, to provide scholarships, to maintain quality, or to assist less affluent areas. Additional benefits from such educational foundations include improved attitudes about the schools, improved support in the community, and improved communication between school and community.

Youth community service programs should be a function within the core program of the middle school. Young adolescents are capable of volunteering for duties in senior citizen centers, nursing homes, soup kitchens, child care centers, parks or environmental centers. (CCAD, 1989). Lipsitz (1984, p.133) relates the community service experience of the Shoreham-Wading River Middle School, Shoreham, N.Y.:

Many aspects of the curriculum at Shoreham-Wading River Middle School vie with Advisory for first place when students, staff, and parents, are asked to identify one thing that expresses the philosophy of the school. Community service is always high on the list, if not first...In 1979-1980, 484 out of 560 students in the school took part in the community service program, which is staffed by a full-time coordinator and three assistants...Students cite community service as something deeply important to them. They work with younger children in the district's elementary schools, with pre-schoolers at Head Start Centers, with the elderly in a nursing home, with retarded children at BOCES (Board of Cooperative
Educational Service) centers, and on career apprenticeships. They learn to take care of others, outgrow pity and appreciate the insights of the infirm or the handicapped, tap the experiences of people different from themselves, and perform essential duties for which they are held accountable. The students perform real work and, as their journals indicate, conclude they are valuable.

National youth organizations such as Boy Scouts, Boys Clubs, Camp Fire, Girls Scouts, Girls Clubs, and 4-H, participate in an annual Youth for America program sponsored by the Colgate-Palmolive Corporation that makes awards to participating local chapters of each national group in appreciation of commendable youth service. (CCAD, 1989). Michael A. Burke, director of instructional resources, Green Bay, (Wis) Area Public Schools (Burke, 1986, p.45) states: "A school-business partnership can provide a valuable dimension to the educational program, given proper planning and care to ensure a balanced effort. Spilman (1987) tells of the Adopt-A-School program which has greatly helped the Baltimore City Public School System. In this program, career awareness activities were designed to acquaint students with a variety of job opportunities. In one project delegates were selected from various occupations, including blue collar workers, broadcasting and sports figures, lawyers, doctors, professors, and owners and employees of many small business firms. This particular Adopt-A-School Program clearly shows that business and industry can
work effectively and directly with school principals and teachers in education of
young adolescents.

Virtually every community supports a health department, a family
planning clinic, family counseling agency; to be unquestionably accessible to
young adolescents, these services must be well-publicized, affordable, easy to
reach, open at appropriate times, able to accommodate the needs of
adolescents, and must guarantee confidentiality. (CCAD, 1989). Monica Jacoby,
Marketing and Communications Manager for the Center for Early Adolescence
affiliated with the University of North Carolina at Chapel Hill (Jacoby, 1986,
pp.4-5), relates the findings of the Center for Early Adolescent project entitled
"School Improvement and After-School Programs: Making the Connection",
commissioned by the Ford Foundation:

By collaborating on providing enjoyable and meaningful after-school
activities, schools and community agencies can work together to better
serve young people...The possibilities for collaboration between schools
and local organizations, and the benefits that stem from collaboration,
are sufficiently significant to warrant such communication...Working
together, however, schools and community organizations often have the
capability to support high quality after-school programs that neither
entity could manage alone. For example, schools can publicize
community agencies' programs, distribute information on activities to
young people and their parents, and allow agency staff to recruit program participants from school classes.

Community agencies, such as the local public library, settlement houses, YMCAs and YWCAs, Girls Clubs, and Boys Clubs, offer such support services as daily tutoring sessions, homework clinics, and homework hotlines for students. Churches furnish social services during after-school hours by opening their facilities to students or by providing community service opportunities for students in their congregations. Community agencies sustain the academic goals of schools by offering education services to teenage students who fail or drop out, i.e., the Salvation Army's long-standing convention of supporting alternative education for pregnant teenagers through its national network of Booth Services. Innumerable community groups, adult sororities and fraternities, professional and civic groups, i.e., Kiwanis, Rotary, and Lions Clubs, Junior League, Business and Professional Women, and the American Association of University Women, sponsor and promote academic achievement. Community organizations, in addition to giving direct support to students, can amplify and reinforce middle school education with special events, sponsoring internships, and mounting youth-oriented exhibits. (CCAD, 1989). The American Health and Life Insurance Company is involved with the Chinquapin Middle School in Baltimore City, in a program in which a group of individuals from a wide variety of occupations in the company conducted seminars which were attended by youngsters interested in particular careers. The small, personalized sessions
provided an opportunity for students to gain first hand information helpful in planning high school programs that could lead to specific job opportunities. In another activity, the company staff provided opportunities for students to learn the proper method and procedures for applying for a job. Company agents meeting with teams of students stressed the importance of interviews and applications as a means of securing employment. Members of the company advertising staff served as consultants for student publications, affording the middle level students the rare opportunity of working side by side with professional writers and editors. (Spilman, 1987).

Recently, businesses have given forthright tangible support to local education; they have contributed to local non-profit service agencies serving youth, and they have formed alliances with school systems contributing funds, equipment, and employee time as well as other resources. Hundreds of schools across the country have received free microcomputers from Apple, IBM Corporation, and local businesses as well. But the "bottom line" of business patronage, however, is the support of adequate and equitable financing of the public schools with insistence that the schools produce students who are properly prepared for the workforce and who are good citizens. (CCAD, 1989). Burke (1986) says that today, school-business partnerships are regarded as essential for developing an adequate work force by both business people and educators. They may be centrally administered citywide programs or a local business paired with a school in the vicinity. The interest of business and
industry in school-business partnerships arise from three factors: 1) they consider it a public service responsibility; 2) as taxpayers they see this as a means of getting the most out of their investment; 3) they feel it is essential in ensuring that there is a reliable and continuing supply of people educated to work in our rapidly changing society.

Making career choices implies, at the very least, possessing a familiarity with a number of alternatives; lamentably, most middle level schools falter in giving attention to their students desires to learn about employment options. Recent surveys indicate that young people do wish to explore career opportunities, however, the considerable number of students delegated to each school counselor precludes significant individualized career counseling. Agencies such as Junior Achievement, Future Homemakers of America, and Future Farmers of America offer in-school and out-of-school career guidance as well as skill building; the Boy Scouts of America's fastest growing program is its school-linked awareness plan, Career Explorers, designed for adolescent boys and girls. At the initiation of this program in a school, organizers conduct a career-interest survey of all students enrolled, with subsequent school-based seminars and assemblies held in which the expressed interests of the student body are addressed. An adult adviser guides students with similar concerns into small groups to allow them to probe their alternatives and frequently confer with local business persons and other adults. Professional organizations also are able to assist; in most programs, adult/teenage connections ensue through
collaboration with the schools, single community-based youth agencies, and a consortium of several or all groups. With an expanding array of organizations amenable to becoming involved in contributing tangible support to the young adolescents, middle level schools are now able to select the programs most appropriate to the needs and concerns of this age group which permit young people to explore a broad scope of career options and work arrangements. (CCAD, 1989). Burke (1986, p.47) states:

The handbook on school-business partnerships published by the National Association for Industrial Education Cooperation states that school-business partnership councils can play a vital role in assisting schools in the development of relevant curriculum at all levels to meet current and projected vocational needs."

**Summary**

In this chapter, the review of literature concerning this study reported the historical background of the development of the middle level school. The middle school concept took hold at the turn of the 20th century, and was intended to be a transition between the single classroom/ single-teacher structured elementary grades, and the completely departmentalized, multi-classroom, multi-teacher orientation of high school. The proliferation of junior high schools during the early 1900s, however, began more as a solution to the problems of overcrowding and population shifts, than an attempt to bring about
an effective transition between the two levels of education. In the late 1960s the problems of desegregation were added as further justification for establishing junior high schools. Subsequent dissatisfaction with the resultant junior high school programs, generated efforts to redirect middle level education to fulfill the original intentions to assist the in-between-ager in the educational progression. A broad range of studies regarding the developmental characteristics of students between the ages of 10 and 15 years induced a new direction of thinking concerning effective middle-grade education, and spawned variations in middle level school configurations.

The report of the Carnegie Task Force on Education of Young Adolescents, Turning Points: Preparing American Youth for the 21st Century, is the result of the most recent substantive study, with recommendations for a complete reformation of the middle level of education. Evidence of the validity of each of the recommendations generated in the report Turning Points: Preparing American Youth for the 21st Century is supplied by researchers reaching as far back as the last decade of the 1800s, and as current as the most recent editions of scholarly journals on educating American youth.
CHAPTER 3
METHODOLOGY

Introduction

This chapter describes the methodology employed in examining the attitudes of Arizona middle level schools administrators towards, and the degree of implementation of the recommendations of the Carnegie Task Force on Education of Young Adolescents in their comprehensive report: Turning Points: Preparing American Youth for the 21st Century.

Population

Throughout the State of Arizona, the educational structure available for the student between 10 and 15 years includes a variety of middle level configurations. Dependent upon the specific community in which the early adolescent resides, enrollment may be in a school designated elementary containing grades K-6, or K-8, accommodating appropriate early adolescent programs for students in the middle grades or discrete units comprising grades 5-8; 6-8; 7-8; or 7-9.

A list of 162 discrete middle level schools and their principals serving 10-to 15-year-olds was obtained from the Arizona State Department of Education, and updated for the study by Dr. Donald C.Clark, Professor, College of Education, University of Arizona. The sole qualification considered
for inclusion in the list was the school must have an enrollment which includes 10- to 15- year-old students regardless of the school's title.

Sample

The research sample involved the entire list of principals of middle level schools in Arizona.

Measurement

The survey instrument comprised items developed from the 8 Carnegie recommendations, incorporating an adaptation of a 4-point Likert implementation scale used extensively by Valentine (Clark and Valentine, 1981) at the University of Missouri during the 1980s. The four point scale was designed to avoid non-committal responses. The instrument was reviewed by a class of doctoral students in a middle level curriculum course, and their comments enabled positive modifications to be incorporated in the final design of a questionnaire containing three sections comprising: 1) school demographics identified as grade level, total school enrollment, community size, and ethnic population; (2) ranking of the eight individual recommendations by order of perceived importance to the principal; (3) the main section of 59 items with the 4-point Likert scale to measure the degree of acceptance and the degree of implementation of the recommendations of the Carnegie report.
Procedures

A packet containing the five-page survey instrument (Appendix) and a stamped, self-addressed, return envelope was mailed to each of the 162 middle level principals. A follow-up letter was necessary, and the combined mailings resulted in a total return of 82 responses, or 50.6%. Survey results were made available to respondents at their request.

Data Analysis

For the purpose of this study descriptive methods of analysis were employed to analyze the data. The 59 survey items were grouped by the recommendation to which they related, and the grand mean, (mean of all the means of the items for degree of acceptance, and for level of implementation within each group) was used to determine the degree of acceptance and level of implementation for each recommendation.

The Pearson correlation coefficients were used to determine the significance of the relationships between the degree of acceptance, the level of implementation and the demographics, identified as grade configuration, size of school, and size of community served by the responding middle level school.
CHAPTER 4
SURVEY DATA FINDINGS

Introduction

In this chapter, the presentation of the collected data from 82 middle level principals addresses each of the research questions. The data related to demographics, identified as grade configuration, size of school, and size of community served by the middle level schools represented by the responding principals of middle level schools in Arizona, are followed by a presentation of the respondents' rankings of the recommendations of the eight recommendations of the Carnegie report. The results of the data concerning both degree of acceptance, and level of implementation concludes the presentation of the findings. A summary of the findings, completes the chapter.

Demographics

In order to determine if school demographics, identified as school size, community size, and grade level configuration, individually or collectively, might effect either the principal's attitude towards, or the implementation of the Carnegie recommendations, the respondents were asked to identify their school's: A) grade level configuration, B) size of enrollment, and, C) size of community served by the school.
Grade level.

The list of middle level grade configurations in this study included 5-8, 6-8, 7-8, 7-9, and "other" with a request to specify the grades. The 7-8 grades configuration, with a total of 36 (44%) of the responding schools, proved to be the mode. The middle school format, comprising grades 6-8, was a close second totalling 31 (38%) of the total response. Only seven (8%) of the schools represented in the survey were comprised grades 7-9. One school served grades 5-8, and six schools (7%) were in the "other" category: one each in grades 7-12, 4-6, K-8; two 4-8; one not specified.

The survey disclosed a total of 72 (88%) of the responding middle level school principals heading schools excluding the ninth grade. These data tend to indicate a strong inclination among Arizona's educational leaders to maintain the 9th grade at the senior high school level, a perspective strongly supported by recent research (CCAD, 1989). The Pearson correlation was insignificant and revealed no relationship between differences in grade level configuration and the degree of acceptance ($r= -.0240$), or the level of implementation ($r= -.0662$) of the Carnegie recommendations. (Tables 1 and 2).
### Table 1.1

**Means of Degree of Acceptance by Grade Configuration:**

<table>
<thead>
<tr>
<th>Recommendation:</th>
<th>Grade Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>(In respondent-ranked order)</td>
<td>5-8</td>
</tr>
<tr>
<td>1: Ensuring Student success.</td>
<td>3.7</td>
</tr>
<tr>
<td>2: Creating a learning climate.</td>
<td>2.9</td>
</tr>
<tr>
<td>3: Teaching of common knowledge.</td>
<td>1.5</td>
</tr>
<tr>
<td>4: Preparing teachers.</td>
<td>3.1</td>
</tr>
<tr>
<td>5: Empowering teachers/admin.</td>
<td>3.6</td>
</tr>
<tr>
<td>6: Reengaging families.</td>
<td>3.6</td>
</tr>
<tr>
<td>7: Connecting schools and comm.</td>
<td>3.5</td>
</tr>
<tr>
<td>8: Emphasizing health and fitness</td>
<td>2.7</td>
</tr>
</tbody>
</table>

### Table 1.2

**Means of Level of Implementation by Grade Configuration:**

<table>
<thead>
<tr>
<th>Recommendation:</th>
<th>Grade Configuration:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(In respondent-ranked order)</td>
<td>5-8</td>
</tr>
<tr>
<td>1: Ensuring Student success.</td>
<td>3.1</td>
</tr>
<tr>
<td>2: Creating a learning climate.</td>
<td>2.7</td>
</tr>
<tr>
<td>3: Teaching of common knowledge.</td>
<td>1.5</td>
</tr>
<tr>
<td>4: Preparing teachers.</td>
<td>2.6</td>
</tr>
<tr>
<td>5: Empowering teachers/admin.</td>
<td>3.1</td>
</tr>
<tr>
<td>6: Reengaging families.</td>
<td>2.7</td>
</tr>
<tr>
<td>7: Connecting schools and comm.</td>
<td>3.0</td>
</tr>
<tr>
<td>8: Emphasizing health and fitness</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Table 2.1

**Correlation Matrix of Degree of Acceptance by Demographics:**

<table>
<thead>
<tr>
<th>Recommendation:</th>
<th>Grade Level</th>
<th>School Size</th>
<th>Community Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Student success.</td>
<td>.0078</td>
<td>.2354</td>
<td>.1870</td>
</tr>
<tr>
<td>2: Learning climate.</td>
<td>.0414</td>
<td>.3301</td>
<td>.3326</td>
</tr>
<tr>
<td>3: Core knowledge.</td>
<td>-.0158</td>
<td>.1877</td>
<td>.2761</td>
</tr>
<tr>
<td>4: Teacher preparation.</td>
<td>-.1330</td>
<td>.2990</td>
<td>.2607</td>
</tr>
<tr>
<td>5: Empowering faculty.</td>
<td>-.0922</td>
<td>.2179</td>
<td>.1246</td>
</tr>
<tr>
<td>6: Reengaging families.</td>
<td>-.0562</td>
<td>.2346</td>
<td>.1838</td>
</tr>
<tr>
<td>7: Schools and Communities.</td>
<td>.0422</td>
<td>.2297</td>
<td>.1643</td>
</tr>
<tr>
<td>8: Health and fitness.</td>
<td>.0141</td>
<td>.3063</td>
<td>.1990</td>
</tr>
</tbody>
</table>

Column averages (X's) | -.0240 | .2551 | .2160 |

Table 2.2

**Correlation Matrix of Level of Implementation by Demographics:**

<table>
<thead>
<tr>
<th>Recommendation:</th>
<th>Grade Level</th>
<th>School Size</th>
<th>Community Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Student success.</td>
<td>-.0758</td>
<td>.1886</td>
<td>-.0198</td>
</tr>
<tr>
<td>2: Learning climate.</td>
<td>-.1302</td>
<td>.1659</td>
<td>-.0746</td>
</tr>
<tr>
<td>3: Core knowledge.</td>
<td>-.2076</td>
<td>.0487</td>
<td>.0422</td>
</tr>
<tr>
<td>4: Teacher preparation.</td>
<td>-.0799</td>
<td>.1669</td>
<td>-.0946</td>
</tr>
<tr>
<td>5: Empowering faculty.</td>
<td>-.1188</td>
<td>.0126</td>
<td>-.1886</td>
</tr>
<tr>
<td>6: Reengaging families.</td>
<td>-.0180</td>
<td>.0220</td>
<td>-.0361</td>
</tr>
<tr>
<td>7: Schools and Communities.</td>
<td>.0484</td>
<td>.0653</td>
<td>-.1738</td>
</tr>
<tr>
<td>8: Health and fitness.</td>
<td>-.0519</td>
<td>.1898</td>
<td>.1280</td>
</tr>
</tbody>
</table>

Column averages (X) | -.0662 | .1075 | -.0522 |
Size of school enrollment.

The number of schools in each size group varied little. The data showed an almost equal distribution among the various enrollment groupings. There were 16 middle level schools in the 200-399 pupils cluster, 17 mid-level schools in each of the 400-599 and 600-799 enrollment groups, 14 in the 800-999, and 13 middle level schools in the over 1000 students groupings. The category of schools with under 200 pupils was the group least represented, numbering only 3 of the total reply. The Pearson correlation was insignificant and revealed no relationship between the size of the school's enrollment and the degree of acceptance (r=.2551), or the level of implementation (r=.1075) of the Carnegie recommendations. (Tables 2 and 3).

Community size.

More than 34% of the respondents, representing 28 middle level schools, were shown to function in communities larger than 100,000 residents. The next largest group, serving populations between 5000 and 9999, accounted for a total of 14 (17%) middle level schools in the survey. Nine (11%) of middle level schools function in communities of 2000-4999. Eleven (13%) serve districts of 10,000-24,999 residents. Both the 25,000-49,999, and 50,000-99,999, groupings showed 7 (8%) each. Units in locales with less than 200 population numbered only 2 (2%). The Pearson correlation was insignificant and revealed no
relationship between the size of the community served by the responding schools and acceptance (r = .2160), and implementation (r = -.0522) of the Carnegie recommendations. (Tables 2 and 4).

**TABLE 3.1**
Means of Degree of Acceptance by School Size:

<table>
<thead>
<tr>
<th>Recommendation: (In respondent-ranked order)</th>
<th>1-199</th>
<th>200-399</th>
<th>400-599</th>
<th>600-799</th>
<th>800-999</th>
<th>1000+</th>
<th>GrMns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Ensuring students success.</td>
<td>3.4</td>
<td>3.5</td>
<td>3.7</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.7</td>
</tr>
<tr>
<td>2: Creating learning climate.</td>
<td>2.8</td>
<td>3.0</td>
<td>3.4</td>
<td>3.7</td>
<td>3.7</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>3: Teaching of common knowledge.</td>
<td>3.2</td>
<td>3.2</td>
<td>3.5</td>
<td>3.7</td>
<td>3.6</td>
<td>3.4</td>
<td>3.5</td>
</tr>
<tr>
<td>4: Preparing teachers.</td>
<td>2.6</td>
<td>3.2</td>
<td>3.4</td>
<td>3.6</td>
<td>3.5</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>5: Empowering teachers/administrators.</td>
<td>3.0</td>
<td>3.4</td>
<td>3.3</td>
<td>3.7</td>
<td>3.8</td>
<td>3.4</td>
<td>3.5</td>
</tr>
<tr>
<td>6: Reengaging families.</td>
<td>3.2</td>
<td>3.3</td>
<td>3.5</td>
<td>3.7</td>
<td>3.7</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>7: Connecting schools and communities.</td>
<td>3.1</td>
<td>3.3</td>
<td>3.4</td>
<td>3.5</td>
<td>3.6</td>
<td>3.6</td>
<td>3.5</td>
</tr>
<tr>
<td>8: Emphasizing health and fitness.</td>
<td>3.4</td>
<td>3.0</td>
<td>3.1</td>
<td>3.6</td>
<td>3.5</td>
<td>3.5</td>
<td>3.4</td>
</tr>
</tbody>
</table>

**Table 3.2**
Means of Level of Implementation by Schools Size:

<table>
<thead>
<tr>
<th>Recommendation: (In respondent-ranked order)</th>
<th>1-199</th>
<th>200-399</th>
<th>400-599</th>
<th>600-799</th>
<th>800-999</th>
<th>1000+</th>
<th>GrMns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Ensuring student success.</td>
<td>2.3</td>
<td>2.9</td>
<td>2.7</td>
<td>2.9</td>
<td>2.8</td>
<td>3.0</td>
<td>2.8</td>
</tr>
<tr>
<td>2: Creating learning climate.</td>
<td>2.1</td>
<td>2.5</td>
<td>2.6</td>
<td>2.6</td>
<td>2.7</td>
<td>2.7</td>
<td>2.6</td>
</tr>
<tr>
<td>3: Teaching of common knowledge.</td>
<td>2.2</td>
<td>2.5</td>
<td>2.8</td>
<td>2.6</td>
<td>2.6</td>
<td>2.5</td>
<td>2.6</td>
</tr>
<tr>
<td>4: Preparing teachers.</td>
<td>2.0</td>
<td>2.5</td>
<td>2.2</td>
<td>2.5</td>
<td>2.3</td>
<td>2.6</td>
<td>2.4</td>
</tr>
<tr>
<td>5: Empowering teachers/administrators.</td>
<td>2.2</td>
<td>2.9</td>
<td>2.5</td>
<td>2.7</td>
<td>2.9</td>
<td>2.5</td>
<td>2.7</td>
</tr>
<tr>
<td>6: Reengaging families.</td>
<td>2.7</td>
<td>2.7</td>
<td>2.5</td>
<td>2.8</td>
<td>2.6</td>
<td>2.7</td>
<td>2.7</td>
</tr>
<tr>
<td>7: Connecting schools and communities.</td>
<td>1.7</td>
<td>2.4</td>
<td>2.2</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>8: Emphasizing health and fitness.</td>
<td>2.3</td>
<td>2.6</td>
<td>2.4</td>
<td>3.0</td>
<td>2.8</td>
<td>2.8</td>
<td>2.7</td>
</tr>
</tbody>
</table>
Table 4.1

Means of Degree of Acceptance by Community Size:

<table>
<thead>
<tr>
<th>Recommendation:</th>
<th>Community Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gr 1</td>
</tr>
<tr>
<td>1: Student success.</td>
<td>3.4</td>
</tr>
<tr>
<td>2: Learning climate.</td>
<td>3.2</td>
</tr>
<tr>
<td>3: Core knowledge.</td>
<td>3.4</td>
</tr>
<tr>
<td>4: Preparing teachers.</td>
<td>3.4</td>
</tr>
<tr>
<td>5: Empowering faculty.</td>
<td>3.4</td>
</tr>
<tr>
<td>6: Reengaging families.</td>
<td>3.4</td>
</tr>
<tr>
<td>7: Schools and communities.</td>
<td>3.0</td>
</tr>
<tr>
<td>8: Health and fitness.</td>
<td>3.0</td>
</tr>
</tbody>
</table>


Table 4.2

Means of Level of Implementation by Community Size:

<table>
<thead>
<tr>
<th>Recommendation:</th>
<th>Community Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gr 1</td>
</tr>
<tr>
<td>1: Student success.</td>
<td>2.5</td>
</tr>
<tr>
<td>2: Learning climate.</td>
<td>2.2</td>
</tr>
<tr>
<td>3: Core knowledge.</td>
<td>2.2</td>
</tr>
<tr>
<td>4: Preparing teachers.</td>
<td>2.2</td>
</tr>
<tr>
<td>5: Empowering faculty.</td>
<td>2.2</td>
</tr>
<tr>
<td>6: Reengaging families.</td>
<td>2.0</td>
</tr>
<tr>
<td>7: Schools and communities.</td>
<td>1.5</td>
</tr>
<tr>
<td>8: Health and fitness.</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Ranking of the Carnegie Recommendations

The middle level principals in Arizona were asked to rank each of the eight recommendations of the Carnegie report in their perceived order of priority of importance to the others on a simple ordinal scale of 1 through 8, 1 being the highest rank. The means of the scores for each recommendation were used to determine the relative importance placed on each of the eight recommendations by the middle level principals.

The top three rankings impact student academics, and incidentally, were the three ideas most emphasized by the earliest proponents of middle level education. The middle two rankings influence teacher and administrator performance. The remaining three concern participation of families and communities.

Carnegie recommendation #3, ensuring student success was considered the most important, $X=2.1$), Carnegie recommendation #1, creating a learning climate second, $X=2.4$. Teaching a core of common knowledge, Carnegie #2, third, $X=3.1$. Carnegie recommendation #5, preparing teachers for the middle grades specifically for teaching young adolescents was fourth, $X=4.2$. Empowering teachers and administrators with expanded influence and responsibility in classroom curriculum design and delivery systems, Carnegie #4, ranked fifth, $X=4.6$. Reengaging families in the academic process Carnegie #7, was sixth, $X=5.4$. Connecting schools and communities, Carnegie #8, was ranked #7, $X=6.5$. Carnegie recommendation #6, improving academic
performance through emphasis on health and fitness, was ranked the lowest, X=6.7. The data disclosed no differences in the rankings resulting from grade configuration, size of school enrollment, or community size. (Tables 1-4).

Acceptance and Implementation of the Carnegie Recommendations.

Introduction:

To determine how strongly the middle level principals in Arizona agree with the recommendations of the Carnegie report, as well as discover the degree of implementation of those recommendations in Arizona middle level schools, the data for "degree of acceptance" were valued on a likert scale with increments of: "strongly disagree" = 1.0; "disagree" = 2.0; "agree" = 3.0; "strongly agree" = 4.0. The data for "degree of implementation" were compiled on a similar likert scale, incremented: "none" = 1.0, "low/some" = 2.0, "adequate" = 3.0, "high" = 4.0. Due to the wide interpretation of the term "adequate", in computing the percentages of the types of responses to levels of implementation, those for none and low were combined and considered "negative", the adequate and high responses were also merged and considered "positive".

To assess the profile of the middle level principals' degree of acceptance and the level of implementation, of each recommendation, the 59 survey items with the means of their related "agreement" and "implementation" likert scale cores were grouped by appropriate recommendation. The mean of all the
means in each group, the grand mean ($\bar{X}$), for acceptance, and for implementation, was used as the "score" for each recommendation.

The recommendations with their related group of survey items are presented in respondents' ranked descending order of importance. The survey items, grouped within their related recommendations, also are listed in the descending order of their individual means of acceptance.

**Survey Items Grouped By Recommendation**

**#1: Ensuring student success.** (Carnegie recommendation #3.)

Eleven survey items were devoted to the notion of ensuring student success. The grand mean of acceptance for the related survey items in this grouping, was 3.6, falling between strongly agree (4.0), and agree (3.0). Of the respondents, 95% concurred with the concepts relevant to this recommendation (73% "strongly agree;22% "agree"). (Table 5).

Of the eleven items regarding ensuring student success, only four were reported to have implementation levels in the "adequate" range, i.e., ($\bar{X}$ 3.0-3.9). These include: #4 "middle level teachers and administrators should be dedicated to being developmentally responsive to the needs of early adolescents", #5 "middle level teachers and administrators should recognize, and work with, the characteristics of early adolescent growth and development", #11 "middle level teachers and administrators should
TABLE 5
"Ensuring student success"

<table>
<thead>
<tr>
<th>Survey item</th>
<th>Acceptance</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>#16: middle level teachers and administrators should promote spirit of inquiry and to stimulate students to think about, and communicate ideas.</td>
<td>3.8</td>
<td>2.8</td>
</tr>
<tr>
<td>#5: middle level teachers and administrators should recognize, and work with the characteristics of early adolescent growth and development.</td>
<td>3.8</td>
<td>3.0</td>
</tr>
<tr>
<td>#11: middle level students should be afforded opportunities to develop written, as well as oral skills.</td>
<td>3.8</td>
<td>3.0</td>
</tr>
<tr>
<td>#12: middle level students should be encouraged to develop listening skills which include analytical reasoning.</td>
<td>3.7</td>
<td>2.7</td>
</tr>
<tr>
<td>#9: middle level students should be encouraged to develop independent study skills.</td>
<td>3.7</td>
<td>2.9</td>
</tr>
<tr>
<td>#4: middle level teachers and administrators should be dedicated to being responsive to the needs of early adolescents.</td>
<td>3.7</td>
<td>3.2</td>
</tr>
<tr>
<td>#14: middle level students should be given opportunities to develop an awareness of the importance of advancing to, and completing senior high school.</td>
<td>3.6</td>
<td>2.7</td>
</tr>
<tr>
<td>#17: middle level teachers should place greater reliance on learning techniques that allow students to participate actively in discovering and creating new solutions to problems.</td>
<td>3.5</td>
<td>2.7</td>
</tr>
<tr>
<td>#36: middle level administrators and teachers should be dedicated to providing their students with individual attention based on their developmental needs.</td>
<td>3.5</td>
<td>2.7</td>
</tr>
<tr>
<td>#10: middle level administrators should direct their students towards becoming intellectually reflective adults.</td>
<td>3.5</td>
<td>2.7</td>
</tr>
<tr>
<td>#7: middle level teachers and administrators should communicate reasonable challenges and levels of expectations based on individual performance for each student.</td>
<td>3.5</td>
<td>2.7</td>
</tr>
<tr>
<td>#56: tracking students by achievement level should be eliminated.</td>
<td>3.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Group grand means:</td>
<td>3.6</td>
<td>2.8</td>
</tr>
</tbody>
</table>
communicate reasonable challenges and levels of expectations based on individual performance, for each student", and #14-"middle level students should be given opportunities to develop an awareness of the importance of advancing to, and completing, senior high school". All the others fell between low/some (2.0) and adequate (3.0). Only 15% of the responses were rated in the "high implementation" range. The grand mean of the implementation scores of all the items related to ensuring student success was 2.8. (Table 5).

#2: Creating a learning climate. (Carnegie recommendation #1.)

Eighty-five percent of the response to this study shows strong support for the middle level school-within-a-school concept as a method for creating a positive learning climate (55% "strongly agree";30% "agree"). The means of the scores for degree of acceptance of the eight survey items related to developing a positive learning climate, ranged narrowly between "agree" (3.0) and "strongly agree" (4.0), with a grand mean of 3.4. (Table 6).

The means of the individual implementation scores of the survey items, relevant to creating a positive learning climate, ranged from 2.3 to 2.7, (grand mean of 2.6) with more than 54% of the total number of responses denoting below "adequate" implementation. (Table 6).
TABLE 6

"Creating a learning climate"

<table>
<thead>
<tr>
<th>Survey item</th>
<th>MEANS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2: cooperative learning should be encouraged in middle grades.</td>
<td>Acceptance: 3.6</td>
</tr>
<tr>
<td>#21: each middle school should have a plan for &quot;continuous correction&quot; to provide additional support for students needing more time, encouragement, or instruction to learn.</td>
<td>Acceptance: 3.6</td>
</tr>
<tr>
<td>#46: middle level schools can be made more effective through the creation of smaller learning environments, such as schools-within-schools, houses or teams.</td>
<td>Acceptance: 3.5</td>
</tr>
<tr>
<td>#20: all middle level schools should use forms of assessment closely related to the specific instructional goals.</td>
<td>Acceptance: 3.5</td>
</tr>
<tr>
<td>#54: small group advisories are effective for improving the overall performance of all students.</td>
<td>Acceptance: 3.4</td>
</tr>
<tr>
<td>#53: the teaching/learning process can be considerably improved through creation of interdisciplinary teaching/learning teams.</td>
<td>Acceptance: 3.4</td>
</tr>
<tr>
<td>#3: flexible instructional scheduling should be implemented.</td>
<td>Acceptance: 3.3</td>
</tr>
<tr>
<td>Group grand means:</td>
<td>Acceptance: 3.4</td>
</tr>
</tbody>
</table>

#3: Teaching a core of common knowledge. (Carnegie recommendation #2.)

Middle level administrators in Arizona showed a definite acceptance of the recommendation of teaching a core of common knowledge. The grand mean of the scores for acceptance of the four items relating to this concept was 3.4. In this grouping, 90% of the responses revealed positive attitudes to
the survey items relevant to this recommendation (53% "strongly agree"; 37% "agree"). (Table 7).

Arizona middle level administrators, in their responses to teaching a core curriculum, appear to clearly support the notions of the Carnegie recommendation to teach a core of common knowledge. The level of implementation, however, does not reflect the degree of acceptance.

Table 7
"Teaching a core of common knowledge"

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Acceptance</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>#15: middle level schools should have a core curriculum in which the students confront themes in clusters of subjects, and learn to inquire, associate, and synthesize across subjects.</td>
<td>3.5</td>
<td>2.5</td>
</tr>
<tr>
<td>#13: middle level administrators and teachers should foster multi-cultural and multi-language appreciation.</td>
<td>3.4</td>
<td>2.4</td>
</tr>
<tr>
<td>#1: middle level instruction should be organized around a core program.</td>
<td>3.4</td>
<td>2.9</td>
</tr>
<tr>
<td>#19: middle level students should have a core curriculum that is organized around the integration of themes that young adolescents find relevant in their lives.</td>
<td>3.4</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Group grand means: 3.4 2.6

The means of the implementation scores of each of the items varied little between 2.4 and 2.9, with a grand mean of 2.6, generally less than adequate implementation of these concepts. Of substantial interest to the
proponents of middle level education restructuring, the survey item with the lowest degree of implementation, 2.4, related to one of the basic tenets of the middle school plan, i.e., #19-"middle level schools should have a core curriculum that is organized around the integration of themes that young adolescents find relevant in their lives." The survey data show that, even though the principals show a strong advocacy for organizing curriculum around the concept of "integration of themes", most of the middle level principals in Arizona report negative degrees of implementation of this concept. (Table 7).

#4: Preparing teachers for the middle grades. (Carnegie recommendation #5.)

Thirteen survey items were grouped around the proposition that teachers of young adolescents should have special preparation to strengthen their expertise in addressing the distinct developmental needs of early adolescents. Arizona middle level administrators strongly support preparing teachers specifically for middle level education with 81% positive responses (55% "strongly agree; 26% "agree") reflecting a grand mean of 3.4. (Table 8).
Table 8

"Preparing teachers for middle grades"

<table>
<thead>
<tr>
<th>Survey item</th>
<th>Acceptance</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>#31: all middle level teachers should be prepared to work with students of various ethnic and racial backgrounds.</td>
<td>3.8</td>
<td>3.0</td>
</tr>
<tr>
<td>#22: middle level administrators should assist in developing expert teachers of young adolescents.</td>
<td>3.6</td>
<td>2.6</td>
</tr>
<tr>
<td>#24: middle level administrators and teachers should learn about, and become sensitive to, the increasingly multi-cultural differences in the student population.</td>
<td>3.6</td>
<td>2.8</td>
</tr>
<tr>
<td>#30: all teachers in middle level schools should be prepared to work with both one- and two-parent families.</td>
<td>3.6</td>
<td>2.8</td>
</tr>
<tr>
<td>#32: all middle level teachers should be prepared to work with students undergoing stress for any reasons which may influence those students' performance in school.</td>
<td>3.6</td>
<td>2.8</td>
</tr>
<tr>
<td>#23: middle level administrators should encourage their teachers to fully understand adolescent development through university courses as well as direct experience at middle level schools.</td>
<td>3.5</td>
<td>2.6</td>
</tr>
<tr>
<td>#25: middle level teachers should learn to work as members of teaching teams.</td>
<td>3.4</td>
<td>2.7</td>
</tr>
<tr>
<td>#52: mid-level schools should be staffed with teachers especially trained for assignment to the middle grades.</td>
<td>3.4</td>
<td>2.3</td>
</tr>
<tr>
<td>#28: all teachers in a middle level school should be educated in the principles of student guidance to serve as advisors.</td>
<td>3.3</td>
<td>2.1</td>
</tr>
</tbody>
</table>
Table 8 - continued
"Preparing teachers for middle grades"

<table>
<thead>
<tr>
<th>Survey item</th>
<th>Acceptance</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>#35: while teaching, interns should be expected to take graduate courses to further their understanding of young adolescents, the art of teaching, and their comprehension of the learning process.</td>
<td>3.0</td>
<td>1.7</td>
</tr>
<tr>
<td>#34: paid internships in mid-level school should follow undergraduate education prior to long-term contractual appointments, with apprentice teachers teaching no more than half-time under the guidance of mentor teachers.</td>
<td>2.9</td>
<td>1.4</td>
</tr>
<tr>
<td>#29: all middle level teachers, regardless of current certification should have a middle level endorsement.</td>
<td>2.9</td>
<td>1.8</td>
</tr>
<tr>
<td>#33: potential mid-level teachers, as undergraduates, should be expected to concentrate on one, preferably two academic subjects.</td>
<td>2.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Group grand means:</td>
<td>3.4</td>
<td>2.4</td>
</tr>
</tbody>
</table>

The grand mean of the implementation scores for all the items related to teacher preparation, was 2.4, below "adequate" (3.0). However, "high" (4.0) implementation levels were given by 27% of the replies to item #31-"all teachers should be prepared to work with student of various ethnic and racial backgrounds", 23% of the responses to #25-"middle level teachers should learn to work as members of teaching teams", and 22% to #30-"all middle level teachers should be prepared to work with both one-and two-parent families".

Implementation ratings below "adequate" were assigned to 85.4% (65.9% "none",19.5% "low/some") of the responses to #34, "paid internships or
apprenticeships should follow undergraduate education prior to long-term contractual appointments, with apprentice teachers teaching no more than half-time under the guidance of mentor teachers, while less than 8.5% were in the positive "adequate" to "high" range. 43% of the respondents gave a rating of "none, and 30.5% "low/some," for the degree of implementation of #29-"all middle level teachers, regardless of current certification, should have middle level endorsement". 76% reported less than "adequate" implementation (46% "none", 30% "low/some") for #35-"while teaching, interns should be expected to take graduate courses to further their understanding of young adolescents and the art of teaching as well as their comprehension of what is known about the teaching process."

#5: Empowering teachers and administrators. (Carnegie recommendation #4.)

Compiling a grand mean of 3.5, 75% of the middle level administrators in Arizona clearly approve of the proposals for empowering teachers and administrators (50% "strongly agree", 25% "agree"). (Table 9).

The grand mean of the degree of implementation scores for all the items associated with empowering teachers and administrators in Arizona middle level schools in this study fell below the "adequate" range, at 2.69. Of the total response, 38% rated implementation levels below "adequate", while 36.7% claimed "adequate" degrees. Three specific items shown to have implementation levels (X 2.9) closer to the "adequate" level, were: #55,
**Table 9**

"Empowering teachers and administrators"

<table>
<thead>
<tr>
<th>Survey item</th>
<th>MEANS:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acceptance</td>
</tr>
<tr>
<td>#55: teachers should be provided adequate resources, i.e., time, space, equipment, and materials for teaching and classroom preparation.</td>
<td>3.8</td>
</tr>
<tr>
<td>#26: middle level teachers, within the parameters of their interdisciplinary teaching teams, should share the responsibilities of designing, as well as participating in the teaching of study programs appropriate to the students' developmental goals.</td>
<td>3.6</td>
</tr>
<tr>
<td>#48: middle level teachers and administrators should be given creative control over instructional programs in their schools.</td>
<td>3.6</td>
</tr>
<tr>
<td>#47: empowering teachers and administrators to make decisions about the learning experiences of their students to increase their students' academic development.</td>
<td>3.6</td>
</tr>
<tr>
<td>#49: responsibility for creative control over instructional programs should be linked to each student's needs and performance.</td>
<td>3.5</td>
</tr>
<tr>
<td>#27: middle level teachers as interdisciplinary team members, should be responsible for educating colleagues about the importance of key principles, concepts, and facts within their discipline, as well as finding ways to integrate in their respective subjects.</td>
<td>3.4</td>
</tr>
<tr>
<td>#50: making middle level schools more effective by creating governance committees to assist principals in designing and coordinating school-wide programs.</td>
<td>3.2</td>
</tr>
<tr>
<td>#51: governance committees in middle level schools should provide the leadership and have autonomy within interdisciplinary teams and houses.</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Group grand means: 3.5 2.6
"teachers should be provided adequate resources, i.e., time, space, equipment, and materials for teaching and classroom preparation, #47, "empowering teachers and administrators to make decisions about the learning experiences of their students to increase their students' academic development", and #48-"middle level teachers and administrators should be given creative control over instructional programs in their schools". The strongest implementation rating, 71% positive (26% "high", 45% "adequate") was given to #55-"teachers should be provided adequate resources, i.e., time, space, equipment, and materials for teaching and classroom preparation." In this grouping, the item showing the weakest implementation level, #51-"governance committees in middle level schools should provide the leadership and have autonomy within interdisciplinary teams and houses", received 57% of the ratings below "adequate", 31% "adequate", and 12% "high". (Table 9).

#6: Reengaging families in educating young adolescents. (Carnegie recommendation #7.)

The seven survey items relating to the recommendation of reengaging families in the educational process were given approval by 85% of the respondents (57% "strongly agree", 28% agree"), and an accrued grand mean of 3.5 (Table 10).

The seven items comprising this recommendation group were reported to have attained "adequate" degrees of implementation (X 3.0) in 41% of the
replies. Of the middle level schools represented, 42% show below "adequate" implementation of the concepts of "reengaging families". Barely 16% of the total replies indicated "high" measures of implementation. The grand mean for all the implementation scores in this group was 2.7, overall less than "adequate". (Table 10).

**TABLE 10**

"Reengaging families in educating young adolescents"

<table>
<thead>
<tr>
<th>Survey item:</th>
<th>Acceptance:</th>
<th>Implementation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>#39: communicating with parents/guardians regarding individual student's progress should be routinely accomplished.</td>
<td>3.9</td>
<td>3.0</td>
</tr>
<tr>
<td>#38: communication links regarding school progress should be set up between the school and the students' parents/guardians.</td>
<td>3.7</td>
<td>3.0</td>
</tr>
<tr>
<td>#41: middle level schools should support consistent positive contact contact with families, teachers and advisors, to create a climate of trust among the primary adult influences on young adolescents.</td>
<td>3.6</td>
<td>2.8</td>
</tr>
<tr>
<td>#6: middle level teachers and administrators should identify, and communicate to parents, specific social, as well as academic goals of achievement for their children.</td>
<td>3.6</td>
<td>2.8</td>
</tr>
<tr>
<td>#40: families should be extended opportunities to acquire student-support skills to strengthen the learning process at home and at the school.</td>
<td>3.5</td>
<td>2.5</td>
</tr>
<tr>
<td>#37: parents and guardians should be encouraged to participate in the governance of their schools through meaningful roles in the process.</td>
<td>3.4</td>
<td>2.3</td>
</tr>
<tr>
<td>#8: parents, grandparents and other adults should be regularly involved in the daily life of the middle school, i.e., school clubs, athletics, youth service programs.</td>
<td>3.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Group grand means:</td>
<td>3.5</td>
<td>2.7</td>
</tr>
</tbody>
</table>
#7: Connecting schools and communities. (Carnegie recommendation #8.)

Of the Arizona middle level principals responding to this survey, 88% endorse the four survey items relevant to this recommendation (53% "strongly agree", 35% "agree"). The grand mean for this grouping of acceptance scores is 3.5. (Table 11).

Advocacy for the recommendation notwithstanding, the degree of implementation of "connecting schools and communities" is very low with a grand mean of 2.3. 59% of the respondents reported negatively (18% "none"; 41% "low/some"). Only 30.5% claimed "adequate", and 8.8% "high" implementation of these concepts. (Table 11).

#8: Improving academics through better health and fitness.

This recommendation, regarding health and fitness, was ranked lowest of the eight, still, health and fitness were highly supported by the respondents, with 83% positive replies (50% "strongly agree"; 33% "agree"), and a grand mean for the grouping of 3.3. (Table 12).

Implementation levels for this grouping (grand mean 2.7), were rated as "adequate" by 34.8% of the respondents, "none" to "low/some" by 36.6%. Of the responding administrators, 22% appraised their schools as having "high" degrees of emphasis on health and fitness. (Table 12).
Table 11
"Connecting schools and communities"

<table>
<thead>
<tr>
<th>Survey item</th>
<th>Acceptance:</th>
<th>Implementation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>#43: commercial, industrial and public community resources should be used at every opportunity to enrich the instructional process.</td>
<td>3.6</td>
<td>2.3</td>
</tr>
<tr>
<td>#42: middle level school administrators, teachers, and families should identify and promote community service opportunities for their students.</td>
<td>3.5</td>
<td>2.3</td>
</tr>
<tr>
<td>#44: mid-level administrators and teachers should foster community support for a wide variety of constructive after-school activities.</td>
<td>3.5</td>
<td>2.3</td>
</tr>
<tr>
<td>#45: middle level staff should actively promote the establishment of community-based partnerships and coalitions to ensure students' access to health and social services.</td>
<td>3.3</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Group grand means: 3.5 2.3

Table 12
"Improving academics through better health and fitness"

<table>
<thead>
<tr>
<th>Survey item</th>
<th>Acceptance:</th>
<th>Implementation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>#58: middle level students should be provided with access to health care and counseling services.</td>
<td>3.6</td>
<td>2.9</td>
</tr>
<tr>
<td>#59: middle level schools should provide a strong health-promoting school environment.</td>
<td>3.5</td>
<td>2.9</td>
</tr>
<tr>
<td>#18: middle level schools should integrate health education into core instructional programs as an element of life sciences.</td>
<td>3.1</td>
<td>2.5</td>
</tr>
<tr>
<td>#57: a health coordinator should be provided for students in every middle level school.</td>
<td>3.0</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Group grand means: 3.3 2.7
Summary

The data in this study have been used to determine how strongly middle level principals agree with the recommendations of the Carnegie report, and the level of implementation of those recommendations, as well as to discover if community size, school size, and/or school grade level configuration might have an effect on the degree of principal's agreement and/or the level of implementation of those recommendations. The results of the data analysis have been presented in three sections in this chapter.

The demographics data revealed an almost equal distribution of schools in each of two middle school grade configurations, 31 schools with grades 6-8, and 36 schools with grades 7-8. These two grade level configurations accounted for 81.7% of the total response. The grades organization most frequently identified with the junior high school plan, 7-9, was shared by only 7 (8.5%) of the responding schools. The remaining schools were reported as: 1 each of grades 5-8, 7-12, 4-6, K-8, and 2 with grades 4-8. The data analysis showed no relationship existed between grade configuration and the degree of acceptance, or the level of implementation.

With the exception of only one grouping, the number of schools in each enrollment size group varied only slightly, with a range between 13 and 17 schools per group. Two groupings, 400-599, and 600-799, were shown to have the highest number of units with 17 each. The 200-399 student enrollment group totalled 16 schools, 14 units serve 800-999, and schools of
over 1000 pupils enrolled totalled 13. The group of middle schools with "less than" 200 students was represented by only 3 schools. There appeared to be no significant relationship between school enrollment size and either acceptance, or implementation of the eight Carnegie recommendations.

Of the schools responding, 28 (34%) serve communities larger than 100,000. Only two of the middle level schools represented in the survey response serve populations of fewer than 200 people. Seven middle level schools function in communities of 25,000-49,999, and 7 operate in populations of 50,000-99,999. Nine middle level units serve areas of 200-4999 people, 11 serve the 10,000-24,999 grouping, and 14 function in the 500-9999 sized communities. No differences were found between varying community sizes and the principal's "degree of acceptance" or the level of "implementation".

The respondents' rankings of the eight Carnegie recommendations are presented in descending consecutive priority order of importance, the rankings were: (1) ensuring success for all students, (2) creating a climate for learning, (3) teaching a core of common knowledge, (4) preparing teachers for the middle grades, (5) empowering teachers and administrators, (6) reengaging families in the education of young adolescents, (7) connecting schools and communities, (8) improving academic performance through better health and fitness.

The 59 survey items related to the degree of acceptance and degree of implementation of the Carnegie were grouped according to their individual
relevance to specific recommendations. The grand means of all the means in the group for each of the recommendations were used to determine both the degree of acceptance, and the degree of implementation for each recommendation. The degree of acceptance for all 59 survey items showed a strong negative skewness, with an average of 87% of the respondents answering either "strongly agree" or "agree" to nearly all of the survey items. This indicates strong overall support for the proposals in the Carnegie report. The extent of current implementation, however, did not measure up to the degree of general acceptance. Of the responses, 43.4% were negative range, while 56.6% were positive. Ratings of "high" implementation were reported in only 17.4% of the replies. The grand mean of the implementation scores was 2.6, below "adequate" levels.
CHAPTER 5
CONCLUSIONS

Importance of the Study.

The report of the comprehensive, two-year study of middle level education in America, Turning Points: Preparing American Youth for the 21st Century, completed and published in 1989 by the Carnegie Council on Adolescent Development's Task Force on Education of Young Adolescents, calls for an extensive transformation of what many educators have come to recognize as an inadequate system of educating American children between the ages of 10 and 15 years. Chronic enigmas plaguing American education for almost a century, particularly high drop-out rates and falling achievement scores, have been in the limelight since 1961. Events affecting the socio-scientific-economic self image of American society, such as the Soviet's space exploits, Japan's explosive emergence as a leader in the automobile industry, as well as on the international electronics market, and the disclosure of the academic status of American youth falling to bottom place among the industrialized nations of the world, served to focus the collective attention of Americans on the educational system. National apprehensions over contemporary international competition, along with federally funded studies culminating in reports such as A Nation At Risk that show America does have a problem with its current educational system, have provided the impetus and background for the Carnegie effort. The Carnegie Foundation sponsored
researchers probed into the myriad causes of the development of the inadequacy. This effort resulted in providing the educational community with suggestions for dealing with problems besetting the middle level of American education. The results of their study provide evidence for the urgency of the transformation of the schooling of students encompassing the 10- to 15-year old early adolescents, considered by many as being in a most crucial period in their development. At the heart of Turning Points are the 8 recommendations which call for a significant change of perspective of middle level education by all concerned, as well as the expenditure of effort by middle level principals, teachers, parents, and the general community served by the individual middle level schools, to make this necessary change take place.

In the more than 14 months since the publication of Turning Points: Preparing American Youth for the 21st Century, there has been little or no effort made to determine how well its recommendations have been accepted and implemented anywhere in America. Accordingly, the function of this study is to provide insight into the extent of middle level principals acceptance, and the current level of implementation of the 8 recommendations of the Carnegie report in the State of Arizona as a first step towards understanding what has been accomplished.
Procedures for the study

Underscoring this study is the tenet that, due to the significant influence of middle level administrators, the key to implementing the eight recommendations of the Carnegie report is assumed to be the middle level school principal. Accordingly, the middle level school principals in Arizona were identified as the appropriate respondents for the survey.

The survey in its final form, was mailed to a list of 162 middle level school principals in Arizona. This initial mailing resulted in a return of 60 responses. A second mailing, with a follow-up cover letter added 22 additional replies, yielding a total of 82 responses, 50.6.% of the original list. The data from the response was subjected to a combination of both univariate and multivariate statistical examinations.

Discussion of the findings

Demographics

The purpose of including this data in the survey, was to determine if any of the specified demographics had any significant relationship with the principals' acceptance or the implementation of the concepts inherent in the 8 Carnegie recommendations. Pearson's correlation was used to determine whether or not the demographics appeared to have any significant relationship
with the principals' degree of acceptance, or on the level of implementation. The relationship was insignificant for each of the specified demographics.

**Grade level configurations**

Grade level configuration classifications included 5-8, 6-8, 7-8, 7-8, and other. The two grade level organizations occurring most often, 31 schools comprising grades 6-8, and 36 of the 7-8 grades plan, were two grade level plans most frequently associated with the middle school concept which incorporates many of the particulars inherent in the eight Carnegie recommendations. Only 7 respondents headed schools with the 7-9 configuration which is usually associated with the junior high school system. There were 6 schools in the "other" category: 1 each containing grades 7-12, 4-6, K-8; 2 units containing grades 4-8, and 2 with unspecified grade level arrangements.

**Size of school enrollment**

School enrollment categories included: (1) under 200, (2) 200-399, (3) 400-599, (4) 600-799, (5) 800-999, (6) over 1000. With the exception of the under 200 set, the number of schools for each grouping varied little within the range of 13 to 17 units for each group. The schools with 200-399 students numbered 16, both the 400-599, and 600-799 enrollment groups contained 17 schools each, those with 800-999 pupils totalled 14, and there were 13 in the over 1000 student category.
Community size

Not unexpectedly, the category of communities with over 100,000 population was served by the largest number of middle schools, 28. Only 2 schools were reported serving districts of under 200 inhabitants. There were 14 schools that function in communities of 5000-9999 people, 11 mid-level schools in communities of 10,000-24,999, and in each of the 25,000-49,999, and 50,000-99,999 sized populations, 7 middle grade schools.

The data revealed a positive slope between the size of the community and both school enrollment and number of schools serving the community: the larger the size of the community, the larger each individual school enrollment tends to be. Likewise, the larger the community, the greater the number of middle schools serving the community tends to be.

Rankings of the recommendations

The range of the means of the ranking scores varied between a high of 2.1 to a low of 6.7, and tended to be grouped. The three tabulations at the top related directly to support for student achievement: (#1)-ensuring student success, (#2)-creating a climate for learning, (#3)-teaching a core of common knowledge. The next highest mean scores involved teacher performance: (#4)-preparing teachers for middle grades, (#5)-empowering teachers and administrators. The next two, (#6)-reengaging families in the academic process, and (#7)-connecting schools and communities, addressed the issue of beyond
the class support for the students. (#8)-emphasizing health and fitness was ranked the lowest in "relative importance".

Degree of acceptance

The data revealed a high degree of acceptance of the concepts captained in the eight recommendations of Turning Points: Preparing American Youth for the 21st Century. Of the total number of respondents, 87% answered either "strongly agree" or "agree". The range of the total percentages of both "strongly agree" and "agree", comprising "acceptance" for each of the recommendations, was between 95% for Carnegie recommendation #3, "ensuring student success", and 81% for Carnegie recommendation # 5, "preparing teachers for middle level teaching" indicating an almost universally solid support for the concepts intrinsic to all the Carnegie recommendations.

Degree of Implementation

Implementation of the concepts of the recommendations averaged at slightly higher than 54%, with a range between 67% (ensuring student success) and 44% (teaching a core of common knowledge).
Implications

It is incumbent upon the middle grade practitioners to accept their responsibility to BE the professionals they desire to be and assume the leadership in their schools to confront, in a positive manner, the issues of transformation as being not only necessary, but also surmountable challenges. Every member of the school staff will need to participate in the process of change if it is to succeed. The challenges focus on providing for the students:

* an organization recognizing the developmental needs of early adolescents;
* stable and supportive links for students with peers and teachers;
* adequate, or better, common planning time for effective team operation;
* a positive learning climate comprising the creation of sub-schools, interdisciplinary teaching/learning teams, developmentally appropriate assessment methods with the elimination of all forms of tracking, a core curriculum with challenging levels of math, science, languages, social studies, health and fitness;
* critical self-analysis of the efficacy of the total school program to ensure delivery of learning opportunities for all the students;
opportunities for parents and ambient community to participate in the educational process of students especially the oft-neglected 11- to 15-year olds;

* an aggressive anti-drug education effort including self-esteem building courses and opportunities for community service;

* staff development programs designed to promote understanding of the unique characteristics and needs of the early adolescent as well as guidance in the mechanics of interdisciplinary teaming;

* administrators who are concerned about their teachers professional and personal self-perception levels related to the overall school climate.

**Recommendations for Further Study**

The following recommendations are made for further study:

1. A study designed to ascertain the level of middle level teachers' familiarity with the recommendations of the Carnegie Task Force on Education of Young Adolescents.

2. A quasi-ethnographic "shadow study" of classroom life of early adolescents to determine the degree to which the recommendations of Turning Points are impacting on students.
3. A study designed to determine roles of the families of middle level students in assisting with the educational process.

4. A study to determine appropriate kinds and levels of support of commercial firms in the education of young adolescents.

5. A study to determine the processes of change employed by successful middle level schools.

6. A study to develop strategies for coordinating in-service teacher development programs with the restructuring of middle level schools.

Summary

The need for a transitional stage between elementary and secondary levels in the continuum of education has been proven by research studies beginning prior to the turn of the century. In the early 1900's the junior high school concept was created to provide just that transitional stage. However, as they have evolved and proliferated, the junior high schools have not adequately responded to the developmental characteristics and needs of its early adolescent students.

The 1989 report of the Carnegie Task Force on Education of Young Adolescents, Turning Points: Preparing American Youth for the 21st Century represents a comprehensive study of middle level education, integrating a wide variety of concerns relevant to middle level educators. Turning Points has been
called a "landmark publication" due to its scope and depth in calling for extraordinary restructuring of the middle level schools in order to address the developmental characteristics and needs of the early adolescent between the ages of 11 and 15.

The importance of these recommendations lies in the documented requirement for a transformation of middle level education so that the unique needs of early adolescents may be appropriately addressed in providing the transition from elementary to secondary education.

This study, recognizing the key role principals of middle level schools play in the successful application of changes in school function, has examined the attitudes of middle level principals in Arizona, as well as the implementation levels of the concepts of the Carnegie recommendations in the schools represented by those principals. Additionally, the grade level configuration, size of the school, and size of the community served by the school were examined to determine whether those demographics had any significant relationship with the attitudes of the principals towards, or the implementation of the Carnegie recommendations.
The findings conclusively show that middle level principals in Arizona are very supportive of the 8 Carnegie recommendations, however, implementation generally is very low. It would seem that because of the low level of implementation of the concepts inherent in the Carnegie recommendations, the middle level principals, given their key role of affecting change in their schools, would not have demonstrated the high degree of acceptance for the recommendations.
APPENDIX A

Survey Instrument
**Section 1: School Information**

<table>
<thead>
<tr>
<th>A. Grade Level Configuration: (Check appropriate configuration).</th>
<th>C. Community Size:</th>
</tr>
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<tbody>
<tr>
<td>5 - 8</td>
<td>Less than 2,000</td>
</tr>
<tr>
<td>6 - 8</td>
<td>2,000 - 4,999</td>
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<tr>
<td>7 - 9</td>
<td>5,000 - 9,999</td>
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<tr>
<td>Other - Specify:</td>
<td>10,000 - 24,999</td>
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<td></td>
<td>25,000 - 49,999</td>
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<td></td>
<td>50,000 - 99,999</td>
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<td></td>
<td>Over 100,000</td>
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<tr>
<th>B. School Enrollment:</th>
<th>D. Ethnic Population of School: (Please write percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 200</td>
<td>Hispanic</td>
</tr>
<tr>
<td>200 - 399</td>
<td>Native American</td>
</tr>
<tr>
<td>400 - 599</td>
<td>Black</td>
</tr>
<tr>
<td>600 - 799</td>
<td>Asian</td>
</tr>
<tr>
<td>800 - 999</td>
<td>White</td>
</tr>
<tr>
<td>1000 or more</td>
<td>Other - Specify:</td>
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</table>

**Section 2: Recommendations of the Carnegie Report - please rank each recommendation in priority order according to importance to your school: (place #1 by the recommendation you believe to be MOST IMPORTANT, #2 by the SECOND MOST IMPORTANT, ETC.)**

1. **Creating a Climate for Learning** (creating smaller learning environments forming teams and assigning an adult advisor to each student.)
2. **Teaching a Core of Common Knowledge** (teaching young adolescents to think critically, to develop healthful life-styles, and to become active citizens. Integrating subject matter across disciplines and teaching students to learn as well as to test successfully)
3. **Ensuring Success for All Students** (grouping students for learning - elimination of tracking, scheduling classroom periods to maximize learning, and expanding the structure of the opportunity for learning)
4. **Empowering Teachers and Administrators** (giving teachers greater influence in the classroom, establishing building governance committees, and designating leaders for the teaching process)
5. **Preparing Teachers for the Middle Grades** (developing expert teachers of young adolescents)
6. **Improving Academic Performance Through Better Health and Fitness** (ensuring student access to health services and establishing the school as a health-promoting environment)
7. **Reengaging Families in the Education of Young Adolescents** (offering parents meaningful roles in school governance, keeping parents informed, and offering families opportunities to support the learning process at home and at school)
Connecting Schools with Communities: (Placing students in youth service, ensuring student access to health and social services, augmenting resources for teachers and students, and career guidance for students)

Section 3 - In June of 1989 the Carnegie Council on Adolescent Development published the first major report specifically addressed to the needs and developmental characteristics of America's adolescent youth.

The purpose of this instrument is to determine the degree of acceptance and implementation of the recommendations of the report, entitled "Turning Points: Preparing American Youth for the 21st Century". Would you please circle the most appropriate number for your response as follows:

Degree of acceptance: Degree of implementation in my school:
1 = STRONGLY DISAGREE 1 = NO IMPLEMENTATION
2 = DISAGREE 2 = LOW/SOME IMPLEMENTATION
3 = AGREE 3 = ADEQUATE IMPLEMENTATION
4 = STRONGLY AGREE 4 = HIGH IMPLEMENTATION

<table>
<thead>
<tr>
<th>Degree of acceptance</th>
<th>Degree of implementation</th>
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<tbody>
<tr>
<td>1) Middle level school instruction should be organized around a core program.</td>
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<td>2) Cooperative learning should be encouraged in middle grades.</td>
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<td>3) Flexible instructional scheduling should be implemented.</td>
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<tr>
<td>4) Middle level teachers and administrators should be dedicated to being developmentally responsive to the needs of early adolescents.</td>
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<tr>
<td>5) Middle level teachers and administrators should recognize, and work with, the characteristics of early adolescent growth and development.</td>
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<td>6) Middle level teachers and administrators should identify, and communicate to parents, specific social, as well as academic goals of achievement for their children.</td>
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<tr>
<td>7) Middle level teachers and administrators should communicate reasonable challenges and levels of expectations, based on individual performance, for each student.</td>
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</table>
8) Parents, grandparents and other adults should be regularly involved in the daily life of the middle school; i.e., school clubs, athletics, youth service programs.

9) Middle level students should be encouraged to develop independent study skills.

10) Middle level administrators and teachers should direct their students towards becoming intellectually reflective adults.

11) Middle level students should be afforded opportunities to develop written, as well as oral, skills.

12) Middle level students should be encouraged to develop listening skills which include analytical reasoning.

13) Middle level administrators and teachers should foster multi-cultural/multi-language appreciation.

14) Middle level students should be given opportunities to develop an awareness of the importance of advancing to, and completing, senior high school.

15) Middle level schools should have a core curriculum in which the students confront themes in clusters of subjects, and learn to inquire, associate, and synthesize across subjects.

16) Middle level teachers should promote a spirit of inquiry and to stimulate students to think about, and communicate ideas.

17) Middle level teachers should place greater reliance on learning techniques that allow students to participate actively in discovering and creating new solutions to problems.

18) Middle level schools should integrate health education into core instructional programs as an element of life sciences.

19) Middle level schools should have a core curriculum that is organized around the integration of themes that young adolescents find relevant in their lives.

20) All middle level schools should use forms of assessment which are closely related to the specific instructional goals.
21) Each middle level school should have a plan for "continuous correction" to provide additional support for students needing more time, encouragement, or instruction to learn. 1 2 3 4 1 2 3 4

22) Middle level administrators should assist in developing expert teachers of young adolescents. 1 2 3 4 1 2 3 4

23) Middle level administrators should encourage their teachers to fully understand adolescent development through university courses as well as direct experience in middle level schools. 1 2 3 4 1 2 3 4

24) Middle level administrators and teachers should learn about, and become sensitive to, the increasingly multicultural differences in the students population. 1 2 3 4 1 2 3 4

25) Middle level teachers should learn to work as members of teaching teams. 1 2 3 4 1 2 3 4

26) Middle level teachers, within the parameters of their interdisciplinary teaching teams, should share the responsibilities of designing, as well as participating in the teaching of study programs appropriate to the students' developmental goals. 1 2 3 4 1 2 3 4

27) Middle level teachers, as interdisciplinary team members, should be responsible for educating colleagues about the importance of key principles, concepts and facts within their discipline, as well as finding ways to integrate in their respective subjects. 1 2 3 4 1 2 3 4

28) All teachers in a middle level school should be educated in the principles of student guidance to serve as advisors. 1 2 3 4 1 2 3 4

29) All middle level teachers, regardless of current certification, should have a middle level endorsement. 1 2 3 4 1 2 3 4

30) All teachers in middle level schools should be prepared to work with both one- and two-parent families. 1 2 3 4 1 2 3 4

31) All middle level teachers should be prepared to work with students of various ethnic and racial backgrounds. 1 2 3 4 1 2 3 4

32) All middle level teachers should be prepared to work with students undergoing stress for any reasons which may influence those students' performance in school. 1 2 3 4 1 2 3 4
33) Potential middle level school teachers, as undergraduates, should be expected to concentrate on one, preferably two, academic subjects.

34) Paid internships or apprenticeships in middle level school should follow undergraduate education prior to long-term contractual appointments, with apprentice teachers teaching no more than half-time under the guidance of mentor teachers.

35) While teaching, interns should be expected to take graduate courses to further their understanding of young adolescents and the art of teaching as well as their comprehension of what is known about the process of learning.

36) Middle level administrators and teachers should be dedicated to providing their students with individual attention based on their developmental needs.

37) Parents and guardians of middle level students should be encouraged to participate in the governance of their schools through meaningful roles in the process.

38) Communication links regarding school progress should be set up between the school and the students' parents/guardians.

39) Communicating with parents/guardians regarding individual student's progress should be routinely accomplished.

40) Families should be extended opportunities to acquire student-support skills to strengthen the learning process at home and at the school.

41) Middle level schools should support consistent positive contact with families, teachers and advisors, to create a climate of trust among the primary adult influences on young adolescents.

42) Middle level school administrators, teachers, and families should identify and promote community service opportunities for their students.

43) Commercial, industrial and public community resources should be used at every opportunity to enrich the instructional program.
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<th>Degree of:</th>
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<tbody>
<tr>
<td>44</td>
<td>Middle level administrators and teachers should foster community support for a wide variety of constructive after-school activities.</td>
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<tr>
<td>45</td>
<td>Middle level staff should actively promote the establishment of community-based partnerships and coalitions to ensure students' access to health and social services.</td>
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<td>46</td>
<td>Middle level schools can be made more effective through the creation of smaller learning environments such as schools-within-schools, houses, and teams.</td>
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<td>1 2 3 4</td>
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<td>47</td>
<td>Empowering middle level teachers and administrators to make decisions about the learning experiences of their students increases the effectiveness of the academic development of the students.</td>
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<tr>
<td>48</td>
<td>Middle level teachers and administrators should be given the responsibility of creative control over instructional programs in their schools.</td>
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<tr>
<td>49</td>
<td>Responsibility for creative control over instructional programs should be linked to each student's needs and performance.</td>
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<tr>
<td>50</td>
<td>Middle level schools can be made more effective by the creation of governance committees to assist the principals in designing and coordinating school-wide programs.</td>
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<td>51</td>
<td>Governance committees in middle level schools should provide the leadership and have autonomy within interdisciplinary teams and houses.</td>
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<tr>
<td>52</td>
<td>Middle level schools should be staffed with teachers especially trained for assignment to the middle grades.</td>
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<tr>
<td>53</td>
<td>The teaching/learning process can be considerably improved through creation of interdisciplinary teaching/learning teams.</td>
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<tr>
<td>54</td>
<td>Small group advisories are effective for improving the overall performance of all students.</td>
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<tr>
<td>55</td>
<td>Teachers should be provided adequate resources; i.e., time, space, equipment, and materials for teaching and classroom preparation.</td>
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<td>Degree of acceptance</td>
<td>of implementation</td>
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<td>56) Tracking students by achievement level should be eliminated.</td>
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<td>57) A health coordinator should be provided for students in every middle level school.</td>
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<td>58) Middle level students should be provided with access to health care and counseling services.</td>
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<td>59) Middle level schools should provide a strong health-promoting school environment.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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</table>
REFERENCES


Jacoby, Monica D. (1986 November). School-improvement and after-school programs: making the connection. Middle School Journal pp.3-8


