The middle school: A review of current literature

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The middle school: A review of current literature

Abstract
Education in the United States has presented many patterns of school organization. Separate junior and senior high schools were suggested in the early 1900s, but the grade levels and ages for distinguishing these divisions were unclear (Wiles & Bondi, 1981). The junior high was designed to bridge the gap between elementary and high school. It usually included grades 7-8-9. An alternative to the junior high school, the middle school, began to emerge in the late 1950s. The middle school was designed to facilitate grades 6-7-8. Its development was primarily to relieve overcrowding and to provide an educational environment to effectively educate young teens (Wiles & Bondi, 1981). Many experts in the field of education support the middle school concept as a means to better meet the educational and developmental needs of adolescents. The middle school concept can concisely be defined as an educational environment created to meet the unique needs and characteristics of emerging adolescents.
THE MIDDLE SCHOOL:
A REVIEW OF CURRENT LITERATURE

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Entitled: The Middle School: A Review of Current Literature

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# TABLE OF CONTENTS

Chapter 1  
Introduction ................................................. 1  
Scope of the Review ........................................ 3  

Chapter 2  
A History and Philosophy of the  
Junior High/Middle School ................................. 5  
The Middle School Teacher .................................. 15  
The Adolescent: Middle School Student ................. 23  
Organization of the Middle School ......................... 34  
Exploratory Education in Middle Level Schools .......... 39  

Chapter 3  
Summary ......................................................... 50  
Conclusions ...................................................... 52  
References ....................................................... 57
Introduction

Education in the United States has presented many patterns of school organization. Separate junior and senior high schools were suggested in the early 1900's, but the grade levels and ages for distinguishing these divisions were unclear (Wiles & Bondi, 1981). The junior high was designed to bridge the gap between elementary and high school. It usually included grades 7-8-9. An alternative to the junior high school, the middle school, began to emerge in the late 1950's. The middle school was designed to facilitate grades 6-7-8. Its development was primarily to relieve overcrowding and to provide an educational environment to effectively educate young teens (Wiles & Bondi, 1981).

Many experts in the field of education support the middle school concept as a means to better meet the educational and developmental needs of adolescents. The middle school concept can concisely be defined as an educational environment created to meet the unique needs and characteristics of emerging adolescents.

The key to quality education at any level is the teacher. The effective middle school teacher should be a self-confident,
personable professional, who demonstrates awareness of both student needs and varied learning strategies (Alexander & George, 1981). Teachers at this level need specialized preparation in working with adolescents (Wiles & Bondi, 1981).

Research reveals there is a lack of specific training for the junior high and middle school teacher. This paper will show the need for teachers to have preparation which includes the study of adolescent psychology and the philosophy and functions of the middle school (Howard, 1974). As information on early adolescence continues to increase, it is essential for the effective teacher to keep abreast of what is happening (Thornburg, 1980).

Can the middle school adapt to the needs of its students? The extent to which the middle school becomes a viable educational alternative to traditional school models is directly proportional to the ability of middle school educators and researchers to identify and investigate the developmental needs and learning capacities of the students it serves (Thornburg, 1980). The unique characteristics of adolescence will be discussed in this paper.

Educational research supports the importance of both academic and exploratory areas in the middle school curriculum. The literature suggests, if instruction is to be successful in the middle school, the learner must be the focal point of instructional planning. The curriculum should offer alternative
learning opportunities in addition to general education areas which should be explored by all learners. Middle schools need to offer a wide variety of courses, intellectual, artistic, and physical to accommodate adolescents' emotional energy and creative drive.

Exploratory subjects, such as art, music, home economics, and industrial technology are important courses for adolescent learners (Lounsbury, 1985). The middle school should help students examine a subject's use in their lives through exploration and help them apply what they learn in school to the issues occurring in their lives (Alexander & George, 1981). Exploratory and enrichment studies in the middle school curriculum is supported by leading practitioners and theoreticians in the field (Georgiady, 1974).

This review will define and characterize the middle school philosophy and history, the middle school teacher, the adolescent student, the middle school organization, and the exploratory curriculum and its implementation at this level. The middle school will be presented as an institution which should reflect the transitional nature of the adolescent, employ trained staff to work with this age group, and provide a flexible and supportive program to fit the changing situations of its students.

Scope of the Review

The scope of this review will be the history and
philosophy, teacher, student, organization, and exploratory curriculum of the middle school. Interest in the middle school organization has fluctuated and a great deal of literature has been published on the topic over the last thirty years. The past decade has brought a plethora of new articles and publications on the characteristics of the middle school, teacher, and student. For this reason it was decided that this review be based on two books, *The Exemplary Middle School*, by W. Alexander and P. George and *The Essential Middle School* by J. Wiles and J. Bondi. These books were provided by Dr. Cheryl Budlong, Cedar Falls, Iowa.

There is a need for more published material on the nature of exploratory studies in middle school curriculum. Various sources were consulted to obtain information on exploratory education. The Current Index to Journals in Education (CIJE), Resources Information Center (ERIC) documents, and the Educational Index were sources used. Journal articles, books, and other research reports were obtained from the Donald O. Rod Library at the University of Northern Iowa, Cedar Falls, Iowa.
CHAPTER 2

REVIEW OF THE LITERATURE

A History and Philosophy of the Junior High/Middle School

The middle school of the 1980's developed as an alternative to the traditional junior high school. The emergence of the middle school has represented a dramatic break from the past.

The junior high was formed in the early 1900's with a curriculum and organization that paralleled the high school. Attempts in the early 1940's to reform and reorganize the junior high were unsuccessful. In the 1950's and early 1960's middle schools emerged with a new philosophy about middle level education. This review will outline the history and philosophy of the junior high and middle school.

After the civil war, the eight year elementary and four year secondary plan of education had gained acceptance. By the end of the century, the 8-4 plan was more common than the 7-5 arrangement. The two decades from 1890 to 1910 included many education conferences, addresses by educational leaders, and reports from professional groups. These gave a sense of direction to American education for the first half of the twentieth century (Wiles & Bondi, 1981).

The dominant 8-4 organizational plan, for example, was challenged following Harvard President Charles W. Eliot's address
to the Superintendents' Association in 1888. He questioned, whether school programs could be shortened and enriched. College presidents wanted their freshmen classes to enroll at an earlier age. As a result, several committees were formed to study a reorganization of schools. The most important one was the Committee of Ten (Wiles & Bondi, 1981).

In general these new committees favored moving the secondary programs down into the elementary grades. The influence of colleges on secondary committees was apparent in the report from the Committee of Ten. This 1893 report stressed that high school academic subjects be initiated in the last years of the elementary school under a 6-6 organizational plan (Wiles & Bondi, 1981).

The Committee on Economy of Time in Education also recommended a 6-6 plan of organization. The basis for this decision was to shorten the elementary program by two years without losing general education essentials (Wiles & Bondi, 1981).

Separate junior and senior high schools were suggested early in the 1900's, but the grade level and age for distinguishing these divisions was unclear. Even before a junior high was defined, the first one opened in Columbus, Ohio in 1909. The school included grades 7-8-9 (Wiles & Bondi, 1981). It was designed to bridge the gap between elementary and high school and to introduce a slightly modified program to meet adolescent needs.
(Alexander & George, 1981).

Two junior high schools opened in 1910. They were established in Berkley, California to relieve overcrowding and to reduce the drop-out rate. Many students were leaving school after the eighth grade under the 8-4 plan (Wiles & Bondi, 1981). Berkley Superintendent Frank Bunker, felt that the 6-3-3 plan would keep students in school at least one more year. These schools also offered a program designed to meet the needs of early adolescents (Wiles & Bondi, 1981).

A report from the Committee on the Reorganization of Secondary Education presented the Cardinal Principles of Secondary Education in 1918, which suggested the six year secondary program be divided into two groups (Alexander & George, 1981). It suggested that the divisions be a junior period and a senior period. So it was basically a 6-3-3 proposal, with the middle three years acting as an imitation of the high school.

The North Central Association of Colleges and Secondary Schools defined a junior high school, after several committee reports and establishment of these new schools. In 1919, this committee defined a junior high school as a separate building containing grades 7-8-9 with their own staff and administrators (Wiles & Bondi, 1981).

In 1920, Thomas H. Briggs suggested the junior high school should attempt to become something more than a downward extension
of the high school. The key words he used as a guide for junior high school development were: integration, exploration, interests, aptitudes, capacities, and needs.

Over 400 junior high schools existed in the United States in 1920, yet 4 out of 5 graduates went through an eight year elementary school and a four year high school (Wiles & Bondi, 1981). Research reveals that following W.W.I., junior high schools caught on because of increased enrollment, the change from a rural to an urban society, major waves of immigration, new social problems, less importance of family influence, and a younger working age (Alexander & George, 1981).

During the next twenty years the junior high schools were criticized for imitating the high school in curriculum and organization. The Carnegie unit was assigned to grade nine, which exerted more high school influence on the course offerings. There were some attempts to add exploratory programs and core teaching, but not enough was being done to change the junior high school (Wiles & Bondi, 1981).

In the 1940's, William Gruhn and Hari Douglass developed a list of six basic functions of the junior high school. The functions were: (a) integration, to help students use the skills, attitudes, and understandings previously acquired by integrating them into their lives, (b) exploration, to allow students the opportunity to explore particular interests so that they can make
better choices, vocationally and academically, and to broaden the students' range of cultural, civic, social and recreational interests, (c) guidance, to help students make better decisions academically, socially, emotionally, and vocationally, (d) differentiation, to provide for individualized educational opportunities and facilities to accommodate for unique differences, (e) socialization, to furnish learning experiences to prepare students for effective participation in a complex and changing social order, and (f) articulation, to provide for a gradual transition from pre-adolescent education to an educational program suited to the unique needs of adolescents. The schools did not seem to change to facilitate these functions (Wiles & Bondi, 1981).

For over forty years, educational leaders were not able to break the junior high away from the high school mold. The junior high schools were under constant fire, but an alternative was not proposed until the middle school concept in the late 1950's and in the early 1960's. By this time there were over 6,500 junior highs in the U.S. and 4 out of 5 graduates went through a six year elementary school, three year junior high school, and a three year high school (Alexander & George, 1981).

The middle school concept emerged as an alternative to the junior high school. The middle school differs from the junior high in terms of philosophy, curriculum, and grade levels in one
building. Some factors leading to this development were the launching of Sputnik in 1957, teacher and classroom shortages, increased enrollment, high taxes, elimination of racial segregation, the book, *Why Johnny Can't Read*, and it became the "thing" to do (Wiles & Bondi, 1981).

The Cornell Junior High School Conference in 1963 proposed that the experimentation with the new middle school should serve several purposes. It should: (a) have a status of its own, to facilitate specialization and team teaching in sixth grade, (b) promote reorganization of teacher education, (c) require competent middle school teachers, and (d) support a clearly defined middle education unit (Alexander & George, 1981).

William Alexander coined the term "middle school", based on this new set of principles in the 1960's. Why a middle school? Alexander believed there were two basic reasons for the emergence of a middle school. First, a special program was needed for the child going through the unique transescent period of growth and development. Second, by creating a new school, educators may develop new programs and a new organization for making needed changes in curriculum and instruction (Alexander & George, 1981).

The advantages of the middle school became defined early in its development. Joseph Bondi published a compiled list of sixteen advantages of the middle school. The model offers these advantages: (a) own status, (b) team teaching, (c) teacher
training, (d) grades 6-8 as a homogenous group, (e) common experiences, (f) gradual change, (g) facilities one year earlier, (h) continuation and enrichment of basic skills, (i) extended guidance, (j) transfer of older students from each school, (k) puts district students together one year earlier, (l) physical unification of grades 9-12, (m) ninth grade included in college preparatory programs, (n) elimination of special facilities for the ninth grade only, (o) elimination of duplicate equipment for just ninth grade use, and (p) present and future flexibility.

In 1968, the authors of The Emergent Middle School cited three major functions of the middle school. They include providing a program adapted to the wide range of individual differences and special needs of the adolescent, creating a school ladder that promotes continuity of education from K-12 and facilitating, through a new organization, the introduction of the needed innovations in curriculum and instruction.

A pioneer in the middle school movement, Neil Atkins, identified the unique features of a middle school, in 1968, which should distinguish it as suitable for the adolescents it serves (Wiles & Bondi, 1981). The features include its attitudinal stance, operational flexibility and innovative practices, and supportive instructional strategies. These closely related strategies lead to a central goal for the middle school.

Theodore Moss, a professor at the State University of New
York, published his book, *Middle School*, in 1969 for the purpose of setting specific middle school goals (Alexander & George, 1981). The programs and activities he proposed were related to the interests and needs of adolescents. Unfortunately, according to the 1967 Alexander survey, most middle schools were started to relieve overcrowding, for consolidating schools, and desegregation, rather than to provide a program of education specifically designed for this age group. Many middle schools were good, according to Joseph Bondi, in spite of the reasons they were formed.

By the mid-1970's, the Association for Supervision and Curriculum Development Working Group on the Emerging Adolescent Learner declared that a middle school should have these ten functions: (a) a unique program, (b) a wide range of experiences, (c) the respect for individual differences, (d) a problem-solving climate, (e) staff members who understand the adolescent, (f) a smooth transition between elementary and high school, (g) a child-centered environment, (h) guidance in citizenship and values, (i) competent personnel, (j) facilities and time to achieve these goals (Wiles & Bondi, 1981).

In 1977, the Committee on Future Goals and Directions gave its report to the National Middle School Association. The report included goals for the middle school, with meeting the needs of adolescents as the number one priority. These goals supported:
(a) exploration in aesthetics, leisure time, careers, and life appreciation, (b) the development of decision-making skills, (c) help with mastery of basic skills and a commitment to their use and improvement, (d) the body of fundamental knowledge, and (e) that each student should be well-known to an adult at the school to help with guidance (Wiles & Bondi, 1981).

Wiles and Bondi feel the rationale for middle schools of the 1980's is about the same as that of the 1950's and 1960's, except for two changes: the criticism is directed toward basic skills in reading and math, instead of academic mastery, and the increased enrollment of the 1960's has become a declining enrollment in the 1980's (Wiles & Bondi, 1981).

One of the problems in developing the middle school was determining the scope of the schools' responsibility in educating children. The scope of possibilities is expanding because of the diversity of our population. Middle schools must identify areas of concern and develop programs within the boundaries of available resources and set standards for determining the curriculum (Alexander & George, 1981).

One way schools have tried to work through the responsibility question is by using the "developmental tasks" steps described by socialist Robert Havighurst in the 1950's. During the past twenty years, developmental psychologists, educators, and others have identified many developmental needs and
concerns encountered by individuals as they progress from childhood to adolescence. The success of middle schools may be how well they serve these needs and concerns.

The middle school is a school with a differentiated function for transescent students (Eichorn, 1966). It does not want to be modeled after the elementary, junior high, or high schools. As the social conditions keep changing and understanding the growth and development of emerging adolescents increases, the purpose of a middle school becomes clearer (Alexander & George, 1981).

Middle schools today have a number of common characteristics that have helped identify it. The middle school model evolved from the junior high school, so the goals are similar, but there are different essential concepts which make the middle school unique. Some of the middle school characteristics according to Wiles and Bondi, are: (a) the absence of the ninth grade, (b) an attempt to provide success for more students, (c) instructional methods prepared for this age group, (d) increased teacher-student guidance, (e) increased flexibility, (f) some team teaching, (g) interdisciplinary studies, (h) a wide range of exploratory opportunities, (i) increased physical activity and movement, (j) earlier introduction to organized academic programs, (k) continued learning skills, (l) increased student responsibility and independence, (m) flexible facilities, (n)
values-clarification and career education, (o) teacher training especially for the education of emerging adolescents.

The key differences of the middle school, in contrast to the junior high school, are the emphasis on guidance and exploratory courses, a program of transitional education, more interdisciplinary classes, less sophisticated student activities, a greater individualization of instruction, and the elimination of grade nine from the building and the addition of grade six or grades five and six (Wiles & Bondi, 1981).

**The Middle School Teacher**

The middle school teacher should be a self-confident, personable professional, who demonstrates awareness of both student needs and varied learning strategies. Teachers need to act in effective ways to produce greater student achievement (Gage, 1972). The key to quality education at any level is the teacher.

Middle school teachers need good teaching qualities plus strong personal skills and techniques to work effectively with adolescents (Alexander & George, 1981). Some special qualities of a successful middle school teacher are: (a) a solid personal characteristics, (b) an effective classroom manager, (c) consistent discipline policies, (d) competency in a subject field, and (e) professional preparation (Wiles & Bondi, 1981).

Most of these characteristics can be evaluated by
performance or observation (Wiles & Bondi, 1981). Wiles and Bondi (1981) provided a list of desired personal characteristics of a middle school teacher:

1. The middle school teacher likes working with children.
2. The middle school teacher shares middle school philosophies.
3. The middle school teacher shows enthusiasm and commitment towards the profession.
4. The middle school teacher has a variety of skills, abilities, and talents.
5. The middle school teacher develops the creative potential of each child.
6. The middle school teacher shares knowledge in their subject field.
7. The middle school teacher works effectively with other teachers and teams.
8. The middle school teacher is open minded toward innovations and change.
9. The middle school teacher is alive intellectually, physically, and socially.
10. The middle school teacher is compassionate, tolerant, and flexible.
11. The middle school teacher is honest.
12. The middle school teacher has a sense of humor.
13. The middle school teacher has patience.

14. The middle school teacher has counseling skills.

Effective classroom management is very important, especially at the middle school level. There are many processes taking place in every classroom. Wiles and Bondi have organized the techniques that a good classroom manager employs into several categories: (a) group alerting, (b) stimulus boundedness, (c) overlappingness, (d) dangle-one, and (e) "with-it-ness".

Skilled teachers check group transition when changing activities and react according to need (Wiles & Bondi, 1981). They also have the ability to be flexible when there is interrupted student activity in the classroom. Successfully organizing overlapping classroom activities and guiding transitions back and forth between several activities is very important for an effective classroom manager (Wiles & Bondi, 1981).

Jacob Kounin (1970) developed a system for analyzing the classroom management of teaching. The system is designed to monitor the verbal pattern of teachers which control student learning. Aspects of teacher skill related to student growth, which are monitored include the method a teacher uses to notify students of a change in activity and the reaction of a teacher to deviant student behavior. These management skills are monitored in all curricular areas.
Teachers must be aware of deviant student behavior in the classroom. Middle school teachers also need to have consistent discipline policies. It is very important for the teacher to understand adolescent behavior. Most problems are natural and will straighten themselves out (Wiles & Bondi, 1981).

Students will function most effectively when teacher expectations are clear (Wiles & Bondi, 1981). A successful disciplinarian will try to avert problems by revising the instruction or by changing their own behavior before imposing a punishment on students. An effective teacher controls the students, but sets a good example, has high expectations, and consistently encourages appropriate behavior. Punishment has a place, but should not be abused or it will become an ineffective tool for success (Wiles & Bondi, 1981).

Teacher competency in a subject field has many variables. A standardized test may show the strengths and weaknesses of the teacher's expertise in a certain subject. Competency depends upon the teacher's undergraduate college training, graduate classes, individual pursuit of current issues, in-service workshops, and interest. This is important, but being able to transfer knowledge to students, so it is clear, relative, and workable is most important (Wiles & Bondi, 1981).

Knowledge of adolescents will help teachers choose appropriate teaching strategies to use in the middle school
classroom. Wiles and Bondi present four systems of teaching strategies: (a) interaction analysis, (b) classroom questioning, (c) independent study, and (d) verbal patterns.

Analysis of interaction is divided into verbal and non-verbal areas. There are several observation systems available. The Flanders' System of Interaction Analysis (1965) is one of the most popular systems for monitoring verbal behavior (Wiles & Bondi, 1981). It is a ten category system that takes into account the verbal interaction between teachers and pupils in the classroom. Non-verbal interaction is necessary also. "How" the teacher says something is often as important as "what" is said. Teachers and students should be aware of each others facial expressions, body gestures and vocal tones. This can be an effective teaching strategy (Wiles & Bondi, 1981).

Classroom questioning can be analyzed by several systems. The Modified Flanders System, which has 13 categories, has a category for observing and recording classroom questions (Wiles & Bondi, 1981). Another system for analyzing and controlling classroom questions is the Gallagher-Aschner System (1963). This would be an ideal process to use as a reference of performance for student teachers, as well as a monitoring of classroom questioning for all teachers (Wiles & Bondi, 1981). Most questions used in the classroom are cognitive memory questions. The preferred divergent questions are used less, but lead to an increase in
divergent ideas (Wiles & Bondi, 1981).

Wiles & Bondi (1981) think independent study can be an effective learning activity, if it fosters student self-discipline and direction. If the teacher needs to control the progress and make decisions for the student, a change in the method employed is needed. The minimum amount of direction should be used to change the situation.

Verbal patterns of teachers exert great control on pupil learning. The Flanders System (1965), has a category for tabulating the amount of time the teacher is involved in verbal activity. Student verbal participation is also monitored and teacher reaction recorded. Teachers need to be good listeners, accept student ideas and feeling, react effectively, and deal with deviant behavior and understand verbal expressions of adolescents (Wiles & Bondi, 1981). If teachers "accept" more, they will enhance learning.

Flexibility is also a key to good classroom management (Wiles & Bondi, 1981). Teachers need to avoid being too predictable, especially at the middle school level, to retain effectiveness.

Preparation for teaching in the middle school is usually minimal. Most middle school teachers were trained for either elementary or secondary teaching, according to Wiles and Bondi (1981). Some have had in-service training about adolescents and
middle school curriculum. Most, however, developed their own on-the-job methods of teaching at this level. Several problems exist because of the lack of appropriate teacher training (Alexander & George, 1981). Former elementary teachers are praised for their student orientation, but are accused of lacking enough depth in their subject field. Teachers trained for senior high are accused of being too subject oriented with little interest in their students (Alexander & George, 1981). Because of the lack of consistency in approach, the climate of the school often reflects the principal's training, either elementary or secondary in philosophy. Teachers, with or without specialized preparation in the middle school, should provide enthusiasm for new approaches, see the value of team teaching, be effective in an advisor and advisee program, work in a disciplined or interdisciplined curriculum, provide for the special needs of adolescents and show effective management skills (Wiles & Bondi, 1981).

The Florida Department of Education has developed an excellent example of in-service education needed for teachers in the essential middle school (Wiles & Bondi, 1981). This model suggests some underlying principles to consider for teacher education: (a) promoting continuity, (b) the development of personal qualities and professional abilities, (c) personalization, (d) a blending of didactic instruction and
practical experience, (e) use of appropriate materials.

According to the Florida model, the general education requirements should include sufficient experiences of a liberal education nature, to qualify the teacher as a literate, self-directing learner able to understand and interpret current developments in a changing society (Wiles & Bondi, 1981). The example has many modes to offer experiences for individual specialization. Early in the program, candidates should have an opportunity to study the operation of schools at different levels.

Middle school teachers need both breadth and depth in preparation, specialization should be planned for each teacher. The general education program should provide opportunity for relating general professional preparation and individual specialization (Wiles & Bondi, 1981).

Professional preparation should include a study of adolescent characteristics. The program should include middle school laboratory experience and curriculum and instructional guidance. A professional seminar designed to develop understandings, skills, and attitudes for working in the middle school should also be required.

The Florida program also cites guidelines for admission and a follow-up in-service program to complete the model. The implementation of a middle school program will only be successful when teachers examine the methodology used in the classroom and
are able to select appropriate teaching strategies.

Several researchers compiled their findings and made a list of indicators to determine the competency of middle school teachers (Johnston & Markle, 1986). Effective middle school teachers: (a) have a positive self concept, (b) demonstrate warmth, (c) are optimistic, (d) are enthusiastic, (e) are flexible, (f) are spontaneous, (g) accept students, (h) demonstrate awareness of developmental levels, (i) demonstrate knowledge of subject matter, (j) use a variety of instructional activities and materials, (k) structure instruction, (l) monitor learning, (m) use concrete materials and focused learning strategies, (n) ask varied questions, (o) incorporate indirectness in teaching, (p) incorporate "success-building" behavior in teaching, (q) diagnose individual learning needs and prescribe individual instruction, (r) listen (Wiles & Bondi, 1981).

Middle school teachers are generally conscientious and desire to operate as effectively as possible in the classroom. Administrators want to hire teachers with the greatest potential for success, and colleges and universities preparing teachers want to graduate high quality candidates to fill teaching positions (Wiles & Bondi, 1981).

The Adolescent: Middle School Student

The most important group of pupils in our schools today is a diverse group of youngsters caught in the middle years, the
years between childhood and adulthood, according to Wiles and Bondi (1972). Adolescents are confused by self-doubt, plagued with forgetfulness, addicted to extreme fads, preoccupied with peer status, disturbed about physical development, aroused by physiological impulses, stimulated by mass media communication, comforted by daydreams, chafed by restrictions, loaded with purposeless energy, bored by routine, irked by social amenities, veneered with "wise cracks", insulated from responsibility, labeled with delinquency, obsessed with person autonomy, but destined to years of economic dependency, early adolescents undergo a critical and frequently stormy period in their lives. (Illinois Junior High Principal's Association, 1965).

Early adolescents experience a variety of dramatic changes. More biological changes occur in the body of youngsters between the ages of ten and fourteen, than at any other time, except during the first three years of life. Adolescents are also plagued with social, emotional, and intellectual changes (Alexander & George, 1981).

The uniqueness of the "in-between" years lead to the creation of a middle school to help with this transition period. This stage of development was labeled "transescence" by Don H. Eichhorn in 1966.

L. C. Jensen (1985) summarizes the nature of adolescence by combining research and theory with past results and new
expectations. Presented is a condensed list formed from Jensen's 1985 book, *Adolescence: Theories, Research, Applications*. Adolescence is a time: (a) of great change, (b) of involvement in a search for "who am I?", (c) of becoming aware of her/himself, (d) of examining and pondering one's own development, (e) of self-examination which is painful, delightful and most of all an obsession, and (f) of "storm and stress".

Jensen defines adolescence in three categories: biological, psychological, and sociological. The specific definitions are:

1. The biological definition is the condition of being in the period of becoming first capable of sexual reproduction.

2. The psychological definition is the period in life when certain developmental tasks take place in the behavior or the cognitive development of the individual (Robert Havighurst's development tasks, 1972).

3. The sociological definition is a transition period from the interdependent state of childhood to a self-sufficient state of adulthood.

These categories can also be classified in stages also. Jensen recorded the biological category as the first stage of adolescence, beginning at about age eleven. The second and on-going stage is the psychological category, especially strong
between the ages of eleven and nineteen. The sociological category is the final stage of adolescence.

Some theorists believe these ages may change over time. Youth are maturing faster now and are more "worldly wise" than their parents were at the same age (Cole, 1976). The research, however, on this theory is conflicting. Some recent studies show that the average age at which girls first menstruate has not changed over the last thirty years (Zacharias, Rand and Wurtman, 1976). J. M. Tanner's (1971) research supports the earlier maturation theory as well as the more "worldly" issue. The experiences of today's youth, because of the "jet age" and access, are probably broader than that of their parents (Wiles & Bondi, 1981).

Security and freedom are characteristic needs of the adolescent (Wiles & Bondi, 1981). The aspects of security characteristic of the ten to fourteen year old are: (a) safety, (b) security, (c) love, (d) identification, (e) acceptance, and (f) recognition. Freedom needs are: (a) exploration, (b) experience, and (c) independence.

Adolescents have many unique needs because of the changes they are experiencing. Adolescence is a time of restlessness, which suggests steady seat work would be very undesirable at this age. It is an opportune time for drawing, designing and constructing. Adolescents need a chance to search for their
values. This is a time when they must sort out the confusion of value inconsistencies around them and formulate their own. They need guidance to help them grow and develop into functioning individuals, which makes the adult role models in their lives very important. What happens to kids at ten to fourteen years old may determine their future success in school, and success in life as well (Bondi, 1987).

According to Alexander and George (1981) sometime in their middle school years, each student will: (a) become aware of physical change, (b) organize knowledge into problem-solving strategies, (c) learn new social and sexual roles, (d) recognize their identification with stereo-typing, (e) develop friendships, (f) gain a sense of independence, (g) develop a sense of morality, and (h) clarify some values.

There is much research on the intellectual characteristics of the adolescent. Piaget's (1952) theory defines formal intellectual operations beginning at about age eleven. Toepfer's (1979) research indicates a brain growth plateau at age twelve. He indicates that these kids cannot continue to grow and develop new and higher level cognitive thinking skills (Alexander & George, 1981). Toepfer thinks there is a real danger of over challenging students during their plateau period, so he advocates the need for a broad curriculum in the middle school. There is research that supports and questions both of these theories (Wiles
The social, emotional characteristics of the adolescent, according to Alexander and George (1981) are: (a) confusion about "self", (b) uncertainty towards what others think about them, (c) low self-concept, (d) awkwardness, (e) ignorance, (f) need for freedom from parents, (g) becoming self-directive, (h) trying to establish a wholesome relationship with the opposite sex, (i) changes in mental outlook, (j) turning away from parents and toward peers, (k) tremendous emotional turmoil, with many peaks and valleys, (l) high ideals, (m) many interests of short duration, and (n) common display of tears and giggles.

Erik Erikson (1968), a neopsychoanalyst, developed eight psychosocial stages through which everyone must pass. The first four stages would occur before adolescence and the last four during it. They are: (a) trust : mistrust, (b) autonomy : shame : doubt, (c) initiation : guilty, (d) industry : inferiority, (e) identity : diffusion, (f) intimacy : isolation, (g) generativity : stagnation, (h) integrity : despair. To insure a healthy, normal personality, Erikson believes we must pass through these eight stages (Jensen, 1986).

James Marcia (1980) is a researcher who expanded Erickson's concept of identity formation into four stages:

1. Identity achievement is a crisis followed by a development of firm commitments.
2. Moratorium is a crisis in which one is actively seeking an acceptable choice.

3. Foreclosure is no crisis, but is a commitment of goals, values, and beliefs, developed in childhood from strong adult values.

4. Diffusion is characterized by one with no commitments and is not actively trying to form them.

Erikson also tried to define adolescent love. His definition is someone trying to find one's identity by projecting one's diffused ego image onto another and seeing it thus reflected and gradually clarified. Puppy love is characterized by conversation and can be on one minute and off the next.

The developmental characteristics of pre-adolescents are affected by the environment (Thornburg, 1970). Thornburg (1970) discussed some of these characteristics as they unfold developmentally. One important aspect of development according to Thornburg (1970) is making friendships with others. The curious and exploratory nature of adolescents 10-15 years old manifests itself well socially. Peer group formations at this age are usually initiated among friends of the same sex. They have learned that friendships are important (Thornburg, 1980).

The transition from same sex to opposite sex friendships usually takes place from ages 12-13 (Thornburg, 1980). The trend has been to become interested in the opposite sex two to three
years sooner. This correlates with increased emphasis on physical maturation and social pressure to become involved earlier.

A second developmental characteristic is becoming aware of increased physical changes (Thornburg, 1970). The age of adolescent developmental maturity has moved into the preteen years of 10-12 years old (Tanner, 1974). This is within the age of traditional elementary students. Anxiety often accompanies physical growth due to social stereotypes and peer comparisons.

Pre-adolescents are expected to learn new social and sex roles (Thornburg, 1970). Confusion exists because role models have become more diverse between traditional and contemporary roles. Men and women have become more balanced in their roles, yet research indicates adolescents have strong traditional sex-role beliefs (Tanner, 1979).

Many pre-adolescent behaviors seem to be attributed to stereotypy (Thornburg, 1980). American society has traditionally used images as their criteria for evaluating personal change. The prevalence of beauty contests, athletic prowess, manliness and sexiness encourage our teens to plug into stereotypes (Thornburg, 1980). Adolescents are both vulnerable and impressionable and the external environment often capitalizes on these traits (Thornburg, 1980).

The adolescent learner has to develop the ability to organize knowledge and concepts into problem-solving strategies
Pre-adolescents are within Piaget's (1958) concrete operations stage which is a very conceptual stage. The formal stage is just beginning, which utilizes components of logic, reasoning, and abstract thought to make decisions.

Pre-adolescents show an interest in planning their own learning experiences (Thornburg, 1979). They have inquiring minds that cause them to go beyond ideas presented in class, so the curriculum needs to be flexible enough to allow students to explore personal interests (Wiles & Bondi, 1981).

The value system of the preteen is emerging from primarily parental values. At this age the primary source begins to shift to peers. This sets the stage for many significant adult influences to be challenged in their moral and value teachings (Thornburg, 1980).

The preteen will begin to question discrepancies between parent, teacher and themselves. They will question why some behaviors are acceptable for the adult, but not for the child (Wiles & Bondi, 1981).

The impact of individuality in the 1970's and 1980's, within our society, has rendered pre-adolescents to feel "no one has the right to tell them what to do" (Thornburg, 1980). Significant adults need to stress individual rights must be accompanied by individual responsibility (Wiles & Bondi, 1981).

Emerging adolescents are victims of a changing society.
Many of their problems are forced on them by adults. Young teens are the most troubled, least understood, least cared for and most fragile members of society according to Wiles and Bondi (1981).

Mauritz Johnson (1979) cites several changes as indicators of maladjustment in adolescents: (a) the break-down of the American family unit, (b) the increase of violence on television, (c) the poor physical health of adolescents, (d) a 10% increase of gonorrhea cases in 10-14 year old youths, (e) the increase of drug abuse of adolescents, (f) teen alcohol abuse, (g) the increase in adolescent runaways, (h) the increase in teen mental hospital patients, (i) the increase in the rate of teen suicides, pregnancies, alcoholism and juvenile delinquency, (j) a sexually permissive society, and (k) the increase of poor nutrition and diet in teens (Alexander & George, 1981).

Clarifying values is a major activity for the adolescent (Wiles & Bondi, 1981). It is a time when there is intense interest in deciding right from wrong. Middle school students do not want parents to parent, which makes it difficult to help (Bondi, 1987). Hormonal and chemical imbalances affect their personality and behavior. Mood changes are common and affect their judgments. Most national youth organizations, church groups, community and private recreational programs, and lessons show a drop in enrollment of adolescent participants (Wiles & Bondi, 1981). This is also a time in adolescent's lives when the
range of achievement widens. They need effective programs in school, not just basic skills, to offer a chance of success to the most students (Wiles & Bondi, 1981).

Students are usually grouped by age into grades, so they spend most of their time with others their age. The differences in maturation of a group of thirteen year old children can be monumental.

Adolescents often compete with adults of the same sex for identity. Most parents and other significant adults have trouble understanding this behavior. Young teens also pull away from adults and go to peers for support and direction. Because adults misunderstand this behavior, they may withdraw as parents, quit P.T.A. and avoid sharing time and activities with the teenager (Jensen, 1985). They warn that some think these teens will grow up fine without parental help. Wiles and Bondi (1981) feel parents need to be involved in the adolescents' life and work together with school, church, and youth groups to make the transition from child to adult as smooth as possible.

A generation gap does exist which may cause strain between adolescents and adults (Wiles & Bondi, 1961). There are few differences that are not resolved. As the pendulum swings, youth usually return to the beliefs and values of their parents.

It is often said that today's youth are becoming harder to manage. Jensen (1986) attributes this to parents relying on power
to manage their teenagers. If power is used as a control, as the adolescent gets stronger, controlling with power will become more difficult.

The youth today are plagued by many negative stereo-types. Jensen (1985) says this is because adolescents: (a) remind adults of things they would like to forget, (b) present a threat to adult security, (c) elicit jealousy and envy, and (d) cause adults to be fearful of losing control. It is difficult for adults to remember the frustration of adolescence.

A Gallup Youth Survey in 1980 found today's adolescents rank love, health and enjoyable employment as their top three needs. Many students surveyed did not think their parents were strict enough, but most thought they got along well with their parents. The research of Crowley and Shapiro (1982) found youth to have a healthy and positive attitude towards life and were strongly motivated toward education, families, and employment (Jensen, 1985).

Organization of the Middle School

Leaders in education have structured a broad and relevant middle school program, building on the philosophy and knowledge of emerging adolescent learners. The program is designed for the diverse group of students found in the middle grades. To facilitate this program, the middle school organization must present a flexible approach to instruction.
All middle schools have five components: (a) students, (b) teachers, (c) time, (d) space, and (e) media (Bondi, 1972). Through skillful organization, these components allow middle schools to provide the flexible program necessary for the students they serve.

The traditional lock-step approach to instruction is being challenged for its inflexibility (Alexander & George, 1981). In today's middle school, emphasis is being placed on team structures, designing schedules allowing for a variety of grouping patterns, interdisciplinary classes, non-grading and advisor-advisee programs.

Flexible, modular scheduling is advantageous, because it allows for some classes to run for longer blocks of time than others. It allows teachers to utilize different size group instruction for varying lengths of time (Wiles & Bondi, 1981).

Team teaching is advantageous to the middle school student because: (a) the best teachers are shared, (b) it permits greater attention to individual students in that they can be grouped according to interests, and (c) students tend to become more independent and responsible. The staff benefits from teaching in teams in different ways. It makes more effective use of the talents of staff members and enables teachers to share information and ideas. Some staff advantages of teaming are that it: (a) allows students to work across grade lines, (b) offers better
control of pupil, staff ratio, (c) provides students with several role models, (d) allows scheduling flexibility, (e) provides a wide range of grouping possibilities, (f) provides a broader source of knowledge, talent, and experiences, (g) takes advantage of more people working together, and (h) allows time for teachers to plan together, rather than separately.

Non-grading allows the idea of individualized instruction to be utilized (Wiles & Bondi, 1981). In some schools that retain grade levels, allowances have been made for students to work at their individual level, even if it crosses the grade lines. There is a continuum of learning objectives that can be mastered in each area, by most students, in a non-graded program.

Interdisciplining in the middle school promotes better communication, coordination, and cooperation among subject specialists. The interdisciplinary organization of teachers, is both the most distinguishing feature of the middle school and keystone of its structure (Alexander & George, 1981). Students benefit from instruction planned by specialists and should receive individualized instructional considerations from a team of teachers, according to Alexander and George (1981).

Teachers can better understand individual differences when more than one person is observing and evaluating the situation (Wiles & Bondi, 1981). Interdisciplinary teams should also meet the developmental needs of students, because of the flexible time
schedules, more guidance opportunities, and comparisons of students from class to class.

Wiles and Bondi (1981) list many advantages to interdisciplining teaching teams. Some additional advantages are: (a) large blocks of time for field trips, with built-in chaperons, (b) economy of learning time, (c) more teacher awareness of what their students are learning in other classes, (d) students are able to identify themselves with a smaller school, within a school, (e) provisions for assistance to the beginning teacher, (f) building utilization is improved, (g) correlated planning of content and project work is easier, student leadership is distributed among all the teams, and it promotes professional growth of teachers by encouraging the exchange of ideas.

Interdisciplinary team teaching according to Lorraine Morton (1973) requires the following components: (a) planning time, (b) staff meetings, (c) scheduling for instruction, (d) large-group instruction, (e) traditional-size group instruction and/or discussion, (f) individualized instruction, (g) independent study, (h) group guidance, (i) use of specialists, (j) auxiliary personnel, and (k) pupil-team meetings (Wiles & Bondi, 1981).

There are many ways to group students. The middle schools need to be flexible in order to allow a various number of grouping possibilities, at any given time, to accommodate the teachers' and students' best interest (Wiles & Bondi, 1981).
The best way to organize a middle school is the type that reaches the goals which fit the needs middle school students manifest. Teachers in their classrooms and counselors in their offices must find ways to treat students as individuals with special needs (Wiles & Bondi, 1981). This can be done with interdisciplinary teams, advisory groups, and alternatives to chronological age grouping.

The effective middle school should promote individual uniqueness and develop the acceptable ideals of our society. The advisor-advisee program has a valuable role in the area of appreciating and stimulating the individualized focus of the middle school. The advisor in this program is the teacher, not a counselor. These advisor groups are central to providing the structure which leads students to accept responsibility. An advisory group of about twenty students and one teacher is a good size for encouraging most to feel involved.

Advisory groups can exist without a parallel interdisciplinary team organization, but it is more difficult to withstand the flexible time modes. They are more vulnerable to shifting priorities when separated from an organized team of teachers (Wiles & Bondi, 1981).

Allotting time for the advisor-advisee program is a middle school concept (Alexander & George, 1981). Schools must be organized so that personal human communities are the goal, as well
as the process by which learning is accomplished in the middle school.

**Exploratory Education in Middle Level Schools**

One of the major distinctions between man and animal is that the man creates and the animal does not (Lowenfeld & Brittain, 1964). Adolescents are filled with emotional energy that could be channeled into a vigorous creative drive. Middle schools should offer a variety of courses, intellectual, artistic, and physical to accommodate this creative drive.

Dr. Luella Cole (1950) said that adolescents need outlets for their emotional interests and self-expression. Their constantly shifting social adjustments inevitably put considerable strain upon them. They have a real need for music, art, dramatics, sciences, and writing. The object of the work in these fields should be to provide for such self-expression as can be indulged in by the "untalented".

The concept of an exploratory program can be traced back as far as Ben Franklin's Academy in 1751 (Kindred, 1976). It developed primarily as a means of providing recreational activities for students, since schools were primarily residential. It was not until 1900 that student exploratory activities gained favor with most educators (Alexander & George, 1981). Viewpoints advanced from ignorance to tolerance, and finally to acceptance.

The middle school should provide a wide variety of
experiences called "exploratories", according to Alexander and George (1981). The characteristic exploratory courses of the junior high school were art, music, home economics, and industrial arts, and these four in some form are offered in the middle school also. The intent of the exploratory program was to have relatively brief, creative, introductory courses for beginners, with longer, more intensive courses available another year for those interested (Alexander & George, 1981). Middle level educators must become more knowledgeable and more vigilant if they wish to preserve the concept of middle level schools designed to meet the needs of early adolescents (Alexander & George, 1981).

John Goodlad (1983) showed in his study that both teachers and parents want a broad-based curricular program. The narrowly focused recommendations of a Nation at Risk (1983) are not supported by educators or parents, a fact that prompted Goodlad to state that he believes many policy makers have been misinterpreting parents' expectations for schools and overreacting to that misinterpretation (Alexander & George, 1981).

Findings reported in a Nation at Risk led to its recommendation that secondary school requirements in English, math, science, social studies, and computer science be strengthened. The elementary school and middle school curriculum should provide a sound base for these subjects and foster enthusiasm for them. The Nation at Risk report recommended that
in arts, vocational and other areas, the same level of performance as in the basics be demanded, but time spent in these areas should be shortened (Schneider, 1986).

Joan Lipsitz (1984) suggested that teachers should carefully examine any recommendation that proposes to eliminate everything but the basics. Emphasis on academics only is unresponsive to the developmental needs of middle level students and is unsubstantiated in terms of teacher and parent support. It is also insupportable in terms of opinions held by one hundred researchers and practitioners according to Lipsitz. Since people's basic adult values are set for the most part between ages ten and fourteen years, school improvement efforts need to give adequate attention to establishing "excellence" in middle level school programs (Lounsbury, Toepfer, Johnson and Arth, 1985).

Recommendations that focus on academics and higher achievement scores deny importance of educational programs that respond to the developmental needs of adolescents (D. Clark & S. Clark, 1986). Effective development activities and exploratory courses should be classified as an integral element, within the personal development domain of the middle school curriculum, according to Alexander and George (1981).

The recommendations from recent national reports and commissions to improve secondary education make it particularly important for the school improvement efforts to recognize the
essential functions of effective middle level school programs. Those programs which focus on the total growth and development of youngsters, not only on their intellectual growth are most effective (Lounsbury, et al., 1985).

George Melton (1984) stated in his account of the junior high school, that the advancement of the concept of exploration is one of the major keynotes of middle school success. As he also noted, however, there has been too much reliance on a limited set of exploratory courses and too little effort to provide exploratory experiences in every curriculum area. Alexander (1986) reported that one out of three respondents in the NASSP's 1980 survey of middle school teachers, checked exploration and experimentation as a major purpose of their school organization.

The middle school concept embraced heartily the notion of exploration according to Lounsbury (1985). The recent proposals for educational reforms, however, have tended to restrict the exploratory programs at this level, because of the time required in academic areas. This change could have serious effects on the developmental needs of adolescents. Youngsters between the ages of ten and fourteen live through the most serious and traumatic changes that humans experience (Bondi, 1987). The physiological, biological, social, emotional, and intellectual dimensions of these changes must be addressed in the school's exploratory program according to Lounsbury, et al. (1985).
Exploratory subjects such as art, music, home economics, and industrial arts are important because they allow youngsters to explore their needs, interests, talents, and skills in these areas and use them as a basis for their educational goals in high school. Adolescent students can often better understand information learned in academic classes when they apply it to learning activities in the exploratory courses. Exploration also calls for opportunities to participate in activities that interest students either academically or recreationally. Neither of these enrichment experiences should be considered unimportant. They are much more than mere educational "frills" (Lounsbury, et al., 1985).

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 occurring in their lives. Exploratory education of this kind is sound preparation for success in high school, according to Alexander (1985). Students are frustrated when high school kinds of experiences are forced on them before they have explored and developed their capacities to make the most of high school learning opportunities (Alexander, 1985).

Enough consensus was developing by the mid-1970's for an Association for Supervision and Curriculum Development Working Group on the Emerging Adolescent Learner to declare that the
middle school should have opportunities for exploration and development of fundamental skills, needed by all, while making allowances for individual learning patterns. Alexander and George (1981) said individual interests should be the basis of such curriculum specialties of the middle school as special interest activities, exploratory courses in the fine and applied arts, and elective fields.

Georgiady, Riegle, and Romano (1974) found the exploratory and enrichment program should be broad enough to meet the individual needs of the students for which it was designed. Levels of retention are increased when students learn by "doing" and understanding is more complete when viewed from a wide range of experiences. Time should be spent enriching the students' concept of himself and the world around him, rather than learning a subject matter in the traditional form. A student should be allowed to investigate his other interests on school time and to progress on his own as he is ready (Georgiady, et al., 1974).

One researcher found, since 1900, the majority of class time in American schools has consisted of teachers lecturing to the class and students working on written assignments. The passive-lecture and role learning of the typical classroom can be frustrating and discouraging (Sirotnik, 1983). Schools today put the most emphasis on the learning of factual information. The predominant mode of instruction continues to be the lecture
method. The students are expected to understand the explanation, see the applicability, and use their background knowledge all before they have a chance to test the concept of skill (Brazee, 1983).

Robert Fuller (1980) developed a learning cycle formula. It stated that the learning cycle process include steps of exploration, invention, and application. The exploration step is the "discovery" step where students are introduced to a concept, presented in a concrete manner. Students must "try out" different solutions as well as formulate questions which cannot be answered at that point. Invention commences when students are involved in the learning. The application step comes next, which allows students "practice" in using the concept.

Gail Schneider's (1986) studies indicate that what is being advocated, in recent reports, is a return to basics, a structured curriculum, and a rigorous school day for students. Such efforts may place exploratory programs within the middle school curriculum in serious jeopardy, unless middle school educators prepare for battle. Schneider pointed out that exploration became one of the original middle and junior high school bywords. Since it is directly related to many characteristics and needs of early adolescents, exploration has continued as a feature of middle school education. If exploration had stopped with formal course offerings, middle schools would not have come near to maximizing
their potential for true exploration since every student should have access to a rich variety of exploratory experiences, both required and elective (Schneider, 1986).

Students who are allowed these opportunities will interrelate the curricular areas to a greater extent than students to whom the curricular areas are presented in an isolate, discrete manner. The exploratory program satisfies these programmatic and learning needs.

Exploration is a distinguishing component of middle school education. Middle schools have given renewed emphasis to exploration and have encouraged experimentation with various nontraditional exploratory and enrichment experiences (Lounsbury & Vars, 1978). This fundamental goal of middle level education needs the support of educational groups governing curriculum.

What are the implications for exploratory programs? Due to the various interests of adolescents, exploratory programs provide an opportunity for educators to foster enthusiasm for learning. These programs provide the opportunity for bridging curricular content fields and correcting the lack of integration. Goodlad (1983) thinks problem solving and critical thinking skills logically belong within the exploratory program. Goodlad predicated that in order to initiate exploratory programs, middle school teachers must correct the apparent lack of status and rigor which presently surround these programs.
Dr. Schneider (1986) summarizes some implications for exploratory programs:

Exploratory programs are vehicles for incorporating all the major characteristics of an effective middle school. Given the inquisitive nature and divergent learning needs of early adolescents, the middle school curriculum must be relevant and satisfy student's individual needs as well as those prescribed by school officials. An exploratory program is an essential curriculum component meeting these needs. (p. 23)

If attention is placed on providing an integrated curriculum of basic skills through exploration, exploratory programs could become the cornerstone of education within the middle school, according to Schneider (1986). Paul George (1982) said, "we should offer a curriculum, more exploratory than that of the elementary school and less specialized than what comes later in the highs school" (p. 50).

John Wiles and Joseph Bondi (1981) also support a diversified curriculum of exploratory courses in the middle school. They feel that the middle school program should reflect the philosophy of the school itself. For this reason, it is difficult to find the same program offered in any two middle schools even within a single school district. There are common elements, however, in most effective middle schools. A
well-balanced program focusing on personal development, emphasizing skills for continued learning, exploration, and using knowledge to foster social competence is essential in an effective middle level school (Wiles & Bondi, 1981).

Coleman (1961) advocates a movement away from education that exclusively stresses the basics. A balance is needed in education. Balance in education is usually concerned in terms of organization, staff, teaching methods and time allocated to certain areas. Value labels are placed on certain curricular areas: "academics" or "basics" and "electives" or "exploratories". Research supports the importance of both areas, however, the later group is usually the first eliminated in order to restore fiscal balance to the system. In this day of emphasis on the basic skills, the same group is often cut in an attempt to devote increased time and effort to the academics. Even in the best of times, the academic areas have gotten the lion's share of the school day (Compton, 1983).

Alexander and George (1981) said, no educator we know seriously advocates a middle school curriculum of a completely elective or exploratory nature, nor is any public school likely to provide one. A good middle school uses its curriculum content to develop all aspects of the human being, according to James Di Virgilio (1971). All students should see themselves positively reflected in their curriculum. Students who do not, often feel
alienated from the educational process and may soon question their own worth (Department of Public Instruction, 1980, p. 5).

The exploratory areas have great potential for helping middle school students to identify their interests, to appreciate fine and applied arts, and to develop some rudimentary concepts and skills in the areas concerned (Alexander & George, 1981). In order to initiate exploratory offerings or to add credibility to existing programs, middle school teachers must correct the apparent lack of status and rigor which presently surround these programs (Goodlad, 1983).
CHAPTER 3

SUMMARY AND CONCLUSIONS

Summary

The middle school concept of school organization is to develop a program to encourage maximum intellectual, physical, and social- psychological growth the full extent of the learner's abilities (Stradley, 1971). Growth in these three areas does not occur in isolation, but in relation to the other two. The middle school bases its organizational and instructional pattern on data about growth and development in pre-adolescent children (Alexander & George, 1981).

The basic functions of schools in the middle as defined by Gruhn and Douglass, are articulation, socialization, integration, guidance, exploration, and differentiation. These have been the goals of effective middle schools since they were introduced in the 1940's (Wiles & Bondi, 1981).

There are still similarities between the junior high and middle school. Middle level schools should offer the more desirable aspects of both elementary and high school levels of education from which they were composed.

The middle school philosophy derives from the many changes occurring in pre-adolescents. Biological changes are taking place at the time when these students are expected to discard childhood
behaviors and adopt those of an adult, so this growth period is unique (Jensen, 1985).

Transition from childhood to adolescence requires an environment with an organization that is designed to meet these needs (Stradley, 1971). The transition from elementary to high school should be personalized and gradual. The objective of the middle school is to provide an educational environment designed to meet the unique needs and characteristics of emerging adolescents.

The emergence of the middle school has developed a need for teachers with unique characteristics and special training to work with early adolescents (Wiles & Bondi, 1981). The middle school personnel should have adequate, in depth preparation for teaching the early adolescent.

A variety of characteristics can be used to identify an effective middle school teacher. Researchers have recommended using the lists provided as a guide for current teachers in analyzing their performance. Wiles and Bondi (1981) use this analogy: the teacher we are looking for in the middle school is less the sage on the stage and more the guide on the side.

Many questions remain about adolescence, with research providing only hints, suggestions, contradictory answers, or additional questions. Research seems to indicate that this is still a period of confusion both on the part of the adolescent and the significant adults.
Experience and research indicate that middle schools must be organized in a way that our students succeed in developing a sense of solidarity with the values of our society. Staff usage, schedules, and organizational patterns of middle schools can be very flexible. There are many creative ways that time, space, and teacher time can be structured to provide the best learning experience and environment for students (Wiles & Bondi, 1981).

Educational programs have been inundated with recommendations for improvement and reform. A cursory review of the recommendations indicates that what is being advocated is a return to the "basics". These efforts may place exploratory programs, in the middle school curriculum, in jeopardy.

Recommendations that focus on the academic areas deny the importance of educational programs which encourage the personal development of the students. Strong emphasis on academics is unresponsive to adolescent needs, according to many educational researchers (Lounsbury, 1984).

Conclusions

The middle school is often erroneously equated as another name for the junior high school. In reality it offers a philosophical alternative to the traditional junior high.

Middle schools have evolved because of our changing society. They have emerged from the upper elementary and junior high structures. The fact that it has emerged indicates
weaknesses in the other two structures.

The true middle school is not bound by tradition. Its basic premise is change, it is concerned with both individuals and groups in transition.

The objective of the middle school is to meet the needs and interests of the early adolescent. An adequate definition of the middle school and its functions is as complicated as the early adolescents the school is designed to serve.

There is danger in arbitrarily trying to classify the middle school. When classified, the result may be a static program for flexible students. The middle school must offer a balanced, flexible program if it is to remain a valuable alternative to the junior high school.

Middle school teachers must constantly be aware that middle level is a stage, and time of transition for students, socially, physically and academically. The elementary and high school teachers are not directly concerned with each other in program sequence and articulation. The middle school teachers should be directly concerned with both levels.

The adequately prepared middle school teacher should be trained in both elementary and secondary methods because of the curricular overlapping. Specific preparation should be concerned with students. Knowledge of subject matter is important also, in order to present material in breadth and depth as demanded by
student needs. The middle school teacher needs to be student-oriented rather than merely a subject area specialist.

Middle level educators are becoming more aware of the special needs of adolescents and are attempting to implement programs that are developmentally responsive, but they are facing more pressure to concentrate on the academic preparation of the students. The mission of middle school educators should be to make sure all students have a developmentally encouraging program which will inspire them and give them success.

Educators and researchers continue to analyze the middle school philosophies as they learn more about the adolescent student. The scope of the school's responsibility in educating children is expanding and the diversity of our school population is growing. Middle schools must keep changing to accommodate the academic and developmental needs of its students. The name on the building should not make the difference between a junior high and middle school, it is what happens inside the classroom.

We are learning more about the complexity of the individual we variously call the transescent, middlescent, early adolescent, or emerging adolescent. Researchers need to continue to explore the questions about this unique individual and his/her learning. Hopefully, educators will be motivated to consider these characteristics as they design appropriate educational practices.

The education of middle school students has long been based
on the principles of their physical, social, and cognitive uniqueness. It is a logical and proven foundation for this level of education.

The middle school curriculum should offer exploratory classes in addition to strong general education courses. Exploratory classes should help widen the range of alternatives learners experience, rather than specialize their education. They should provide pre-adolescents an opportunity to develop self-discipline, self-motivation, and self-evaluation.

Curriculum development specialists, in different content areas, should develop specific philosophies, goals, objectives, learning alternatives, and evaluation techniques that are consistent with the middle school philosophy and the unique needs of pre-adolescents. The learner must be the focal point of curriculum planning, if instruction is to be successful in the middle school.

The personal development or exploratory area has been proposed as a basic part of the middle school curriculum, however, in practice this component, which is of equal importance as the academic areas, is seldom given an equal block of time during the school day. In our present educational system emphasis is now on the learning of factual information. Attention needs to be placed on an integrated curriculum of basic skills through exploration.

Times are difficult for middle level educators because much
of what we believe is being challenged by the increased emphasis on academics and test scores. It is reassuring to know that in the work of many top middle school researchers, we can find support for the important issues related to middle level education.
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