Principals' Perceptions of Factors Affecting Middle Schools

Clarence E. Pegues

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PRINCIPALS' PERCEPTIONS OF FACTORS AFFECTING MIDDLE SCHOOLS

BY
CLARENCE E. PEGUES
B.S., Huston-Tillotson College, 1953
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DISSERTATION
Submitted in Partial Fulfillment of the Requirements for the Degree of
DOCTOR OF EDUCATION
in the Graduate School of
The University of New Mexico
Albuquerque, New Mexico
May, 1977
ACKNOWLEDGMENTS

The author cannot present a fair account of his indebtedness to the members of his committee for their wise counsel, direction and willing assistance during the course of this study. Without the assistance and guidance of Dr. Bonner Crawford, Dr. Howard McConeghey, Dr. Sigmund A. Mierzwia and Dr. Roderic L. Wagoner, this study would have founded. I am particularly indebted to Dr. George C. Stoumbis, chairman, who provided encouragement, direction and leadership following the tragic death of Dr. Alvin W. Howard, who guided the course of this study from its inception. I make deep-felt acknowledgement to the members of my committee for their editing, encouragement, and contributions to this study.

To acknowledge the aid of every junior high school and middle school principal in the Albuquerque Public School System would require a small directory. I am permanently indebted to hundreds of people for information, help, and guidance. Those whom I do not mention are not forgotten.

To my first teachers, Mattie G. and Eugene: I am grateful for their faith and encouragement over the past years to pursue and complete the doctorate. I am forever indebted to them for implanting in me the will to succeed in spite of insurmountable obstacles.
To my children Clarence Jr., and Tsiosdia, I am deeply indebted for their patience, understanding, and willingness to give of themselves so that the doctorate could be accomplished. Their faith in dad's ability to achieve the highest step of the ladder one rung at a time is appreciated.

To all those named here, and to those not mentioned specifically, my most profound gratitude.
THIS STUDY IS DEDICATED
with affectionate memory,

to

DRS. ALVIN and JOAN HOWARD
PRINCIPALS' PERCEPTIONS OF FACTORS AFFECTING MIDDLE SCHOOLS

BY
Clarence E. Pegues

ABSTRACT OF DISSERTATION

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Clarence E. Pegues, Ed.D.
Department of Secondary Education
The University of New Mexico, 1977

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Procedures and Findings

A questionnaire was used to collect responses from junior high school and middle school principals. The questionnaire, designed to elicit data, was mailed to twenty-two junior high school and middle school principals employed in the Albuquerque Public Schools system. The respondents were divided into two groups: (1) junior high school principals, and (2) middle school principals. The latter were further divided to identify middle school principals who had been involved in a conversion from junior high school to middle school and those middle school principals who were not involved in the process of conversion.

The comparisons, when tested by chi-square, showed that significant differences existed in several categories. The findings were:

1. No significant difference existed between the principals' responses to their perceptions of qualifications and
attitudes of administrators.

2. No significant difference existed between the principals' responses to their perceptions of professional development programs.

3. No significant difference existed between the perceptions of junior high and middle school principals concerning in-service programs. However, middle school principals involved in the conversion process, were more concerned about in-service programs than were the principals of middle school not involved in the conversion process.

4. Principals of junior high schools were less concerned about middle school objectives than were principals of middle schools. There was no significant difference in the perceptions of the two middle school sub-groups.

5. No significant difference existed between the perceptions of junior high school principals and middle school principals concerning curriculum development programs. Middle school principals involved in the process of conversion were less concerned about curriculum than were principals of middle schools who had not yet been involved in the conversion process.

6. No significant difference existed between the principals' responses to perceptions of planning in middle schools.
7. No significant difference existed between the principals' responses to their perceptions of teacher responsibilities.

8. Junior high school principals were less concerned about problems affecting middle schools than were principals of middle schools. There was no significant difference between the two middle school sub-groups.

9. Junior high school principals were less concerned about progressive reorganization than were middle school principals. There was no significant difference between the two middle school sub-groups.

10. Significant differences existed between the junior high and middle school principals concerning aspects of evaluation affecting middle schools. There was also significant difference between the two middle school sub-groups.

It was concluded that the ten categories listed in this study were recognized by the respondents as ones of considerable importance to the conversion process. Differences that existed between the groups of principals were differences of degrees of concern rather than concern versus non-concern.
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CHAPTER I

THE PROBLEM AND DEFINITION OF TERMS USED

The Problem

There was a steady increase in the number of junior high schools converted to middle schools in the decade of 1967-1977. This signified a definite trend toward the new organizational pattern. The middle school represented a new provocative and controversial trend in education for the middle or intermediate years. There were approximately 3,000 middle schools throughout the country in 1977.

The problem was, however, that no definite statement of the most important aspects of the middle school existed for those who were involved in, or contemplated being involved in, the conversion to and/or operation of a middle school.

The junior high school came into existence in the general reorganization of secondary education at the turn of the century. Charles W. Eliot, the president of Harvard University, was, more than any other man, the herald of the movement. Concerned over the increasing age of college freshmen, Eliot proposed in a speech before the National Education Association in 1888 that secondary education absorb the last two years of elementary school, thereby lowering the age at which students would enter college.\textsuperscript{1} The public school system in the United States evolved
without benefit of an educational "master plan"; instead, the three major divisions in American education—elementary, secondary, and higher—developed, to a great extent, independently.

In the fall of 1909, Columbus, Ohio, established a three-year intermediate school, calling its new institution a "Junior High School." The following January, Berkeley, California, opened two three-year intermediate schools that introduced a program specifically intended to meet the needs of young adolescents. These were called "Introductory High Schools," a name that never caught on. Columbus was the first city to use the name "Junior High School," but Berkeley's schools became widely known as the first junior high schools because Frank F. Bunker, the superintendent of Berkeley's schools, wrote and spoke so enthusiastically about the new institution. The idea of the junior high school spread quickly, and in 1911-1912 Los Angeles, California; Grand Rapids, Michigan; Concord, New Hampshire; Evansville, Indiana, and several other communities organized junior high schools. For what was a radical innovation in school organization, early acceptance and growth was surprisingly strong.

The middle school, described officially as a school which straddles the primary/secondary age ranges, was a relative newcomer to the educational scene in this country, gaining real momentum in growth in the 1960's. It provided a comprehensive education for pupils within the middle ages of schooling, defined as those from ten to fourteen.
In an attempt to define the functions of the junior high and middle schools a number of statements have been made, most of which find it necessary to discuss purposes and characteristics as part of the functions of this organizational pattern. Many such statements promise such a variety of benefits as to lead one to believe that the adoption of the middle school concept will solve most, if not all, of the educational ills from which a school district may suffer. Other statements of functions are of so general and amorphous a nature that it is difficult to know precisely what is meant. Such statements can apply equally to schools and children of all grade levels and, therefore, are not valid reasons for establishing any particular kind of school organization. It has been said that the junior high school will develop physical and mental fitness; so should any well-run school, whether 8-4, 6-3-3, 5-3-4, or 6-6. Neither is it reasonable to assume, as a function peculiar to the middle school, the development of appreciation of moral and ethical principles, as is frequently claimed.

If the middle school has any real and valid reason for existence, it must be based upon the ability to do something for the children of this age group that cannot be done as well by other organizational patterns or cannot be done at all. At its inception, the junior high school was expected to reduce the number of dropouts, push the academic disciplines downward, increase departmentalization, provide an economy of time in total years of instruction, and permit
some prevocational and vocational training.

It had become apparent that middle schools can and do provide a kind of atmosphere, guidance, and instruction for the adolescent which had been slighted previously. To the extent that the adolescent is a unique person, the middle school can provide something for him—attention to his particular needs not usually found in either the high school or the elementary school.

This study was conducted to identify significant activities/aspects affecting middle schools. The process of conversion to the new concept was examined to identify those aspects that can be anticipated in making the change.

Reactions from principals of junior high schools and middle schools in the Albuquerque Public School system were sought to statements relative to ten categories associated with middle school activities and aspects. Those categories were:

1. Qualifications and Attitudes of Administrators
2. Professional Development Programs
3. In-Service Programs
4. Objectives
5. Curriculum
6. Planning
7. Teacher Responsibilities
8. Problems
9. Progressive Reorganization
10. Evaluation
The questions asked in the study were:

1. Are there differences in the perceptions of middle school principals and principals of junior high schools of aspects affecting middle schools?

2. If there are differences in the perceptions of middle school principals and junior high school principals of aspects affecting middle schools, in which of the ten categories were the differences most pronounced?

3. Are there differences in the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion of aspects affecting middle schools?

4. If there are differences in the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion of aspects affecting middle schools, in which of the ten categories were the differences most pronounced?

The opinions of the school principals were secured as to what problems might be anticipated, if any, in the process of establishing a middle school program. In this examination an effort was made to identify significant aspects and activities of middle schools which might serve as a foundation from which a model set of criteria could be developed.
Purpose of the Study

The purpose of this study was to compare perceptions of principals of junior high schools who, in converting to middle schools, experienced difficulties; and to determine what factors affecting conversion were anticipated by principals who have not yet made this change to the new organizational pattern. A questionnaire was constructed to ascertain the opinions of principals of junior high schools and middle schools relative to problems of conversion to middle school. The questionnaire was developed from reactions from middle school experts from throughout the country who responded to questionnaire items based on claimed advantages and disadvantages of middle schools.

Claimed advantages of the middle schools are that they:

1. create more opportunities for staff utilization, flexible scheduling with modules, independent study, and team teaching;

2. allow other forms of ability grouping;

3. encourage the elimination of activities and attitudes which are too mature;

4. permit departmentalization and instruction by specialists in the lower grades of the middle school and at the same time reduce somewhat the fragmentation into which some junior high schools have wandered;

5. create a new status of their own through elimina-
tion of the "junior" classification;

6. permit a school to work into ungraded classes—by subject, if desired;

7. allow a more logical grouping in terms of social maturity and sophistication;

8. encourage creativity in developing new techniques in both administration and teaching. This in turn contributes to higher teacher morale;

9. permit enrichment of the sixth grade program as well as the fifth if it is included in the middle school by introduction of areas such as foreign language, science, art, shop, homemaking, music, and physical education;

10. provide a better guidance program for fifth and sixth graders and improved discipline because there is a lessened conflict of interest;

11. provide far better facilities for use with sixth grades—library, shops, homemaking and art rooms, language labs, science labs, gymnasium, locker, and shower rooms.

Claimed disadvantages are:

1. sometimes middle schools are handicapped by inherited building facilities which are unsuited to the program;

2. if each child is given individual attention within an ungraded situation, grading and reporting become an aggravated problem;

3. girls in the middle school still mature more rapidly
than the boys;
4. while students apparently mature at an earlier age and are often capable of doing more than they are accustomed, it is easy to overload them;
5. if the school works toward upgrading, more time is required of the teachers to devise new teaching techniques, select materials, and evaluate the program;
6. it is difficult to drop the habit of rigid scheduling, particularly if it involves grouping and an ungraded school.

The questionnaire was administered to all the middle school and junior high school principals in a large urban school district. Appropriate null hypotheses were posed and tested for each of the four questions asked.

Rationale for the Study

For some time there has been developing an increasing challenge to the basic assumption that eleven was a suitable age for the transfer of pupils from the primary to the secondary stage of education. As a group, junior high school pupils have become more mature both physically and psychologically than they were in previous decades. Their adolescence frequently began before eleven and there was much evidence available to suggest that the age of eleven should be disregarded as the beginning of a definite phase in a child's development. The traditional dividing line between the primary and secondary school stages had become an
administrative rather than an educational barrier.

There could be many advantages in an intermediate type of organization for pupils in the ten to fourteen year age groups which combined the new primary school approach with the greater degree of specialization associated with the secondary school. On the other hand, the striking progress made in teaching techniques in the infant school during recent years justified the pupils' being retained there for a longer period. This would be of particular benefit to the slow learners and to other handicapped children who would be able to spend an extra year or possibly an extra two years mastering the basic skills of reading, writing, and numbers before moving to a higher school.²

The middle school represented the second phase of the reorganization movement in secondary education and provided a unique opportunity for school systems to plan programs for all children as part of a continuous curriculum from nursery school through the 12th grade. Before such programs were undertaken, however, attention had to be focused on the growth and development of children and youth during the years from 10 to 14 marked by dramatic physical, social and emotional change.³

The junior high school, an educational development of the early 1900's, appeared to have acquired its most prevalent type of grade organization, 7-8-9, more by accident than by design. Increasing criticism and the dissatisfaction with the junior high school brought about a number of reorganiza-
tions of the grade patterns of the American schools. These reorganizations involved a variety of different grade arrangements; the most common changes were to 5-3-4, with grades 6-7-8 in the middle school, or 4-4-4, with a middle school of 5-6-7-8. Many school districts adopted the middle school concept, planned and built schools specifically for these grades, and revised and adapted their curricula accordingly. Large scale reorganization appeared possible, perhaps even probable, with accompanying curricular innovations and revisions.

There were educators who argued that curriculum design is not really important. They pointed out that teaching goes on in individual classrooms and, regardless of curriculum organization or suggested course content, the educational enterprise stands or falls with the quality of the teacher. Certainly it is true that curriculum design alone will not automatically, nor of itself, result in good teaching. Yet, it remains basic. Too often educational progress has been hindered by the naive belief that a good teacher will achieve "optimum" results under any organizational plan.

After more than 60 years, only a handful of states had recognized the junior high school as worthy of separate teacher certification. A review of the literature on middle schools revealed that no studies had been conducted on problems of middle school programs and the process of transition of junior high schools to middle schools or establishing new programs. It was hoped that this study would
become the foundation from which other studies and model criteria could be developed.

**Population and Sample**

The population for the study consisted of principals in large urban school districts who met these criteria:

1. they were middle school principals, or
2. they were principals of junior high schools involved in or likely to be involved in conversion to middle schools.

The sample for the study consisted of all twenty-two junior high and middle school principals in the Albuquerque, New Mexico, Public School system.

In 1977 the Albuquerque Public School system ranked twenty-seventh in size nationally, making it comparable to school districts such as Denver, Colorado; San Francisco, California, and Cincinnati, Ohio, all of which had experimented with the middle school concept.

The Albuquerque Public School Board of Education, on June 18, 1973, adopted the 5-3-4 grade level organization. The middle school was to encompass grades 6-7-8. All schools were to be on this grade level plan by the school year 1979-80.

The conversion plan was to involve three junior high schools each year, in a year long conversion process, from junior high to middle school. (See Appendix F.) At the time of this study, twelve of the junior high schools had been converted to the middle school concept. Ten were still
junior high schools.

The Albuquerque School District provided an ideal sample for this study. This sample eliminated differences that might occur due to local policies or regulations that might affect the sampling. Albuquerque junior high schools were at the mid-point in the complete conversion of all junior high schools. This fact provided an excellent opportunity for conducting a study such as this, because the sample contained approximately one-half of the total which had experienced the conversion process and one-half that had expected to be involved at a later date.

**Limitations of the Study**

This study was limited to the perceptions of principals of middle schools and junior high schools in a selected geographical area. No principals of high schools or elementary schools were consulted, nor were any teaching personnel. There were no junior high school or middle school students contacted. Opinions from parents, or parent organizations were not solicited as part of the study.

**Definitions of Terms**

To promote a better understanding and interpretation of the study the following terms were defined:

*Middle School:* An organizational structure focused upon education of children during the transition from childhood to adolescence, and concerned with children approximately ten to fourteen years of age.
Junior High School: An organizational structure designed to educate early adolescents usually encompassing grades 7, 8, and 9.

Transescent: A child in that state of development two years before and after puberty or roughly ages 10-14. Transescents are the age group served by the middle school.

In-Service Programs: School or community teacher-training plans that may include such activities as seminars, workshops, bulletins, television, or films for individuals who are already teaching. The program is designed to increase their competency or to bring them abreast of new developments.

Staff Development Programs: All efforts of school officials to recruit, select, orient, assign, train, or reassign staff members so as to provide the best possible staff for the operation of the schools. "Generally used to include both staffing and in-service education."
FOOTNOTES


CHAPTER II
REVIEW OF THE LITERATURE

Introduction

In order to fully understand the new middle school, it is necessary to examine the development of the junior high school, since proposals for the middle school are based largely on the contention that existing junior high schools have not lived up to their promise.¹

In the fall of 1909, Columbus, Ohio, established a three-year intermediate school, calling its new institution a "Junior High School."² The following January, Berkeley, California, opened two three-year intermediate schools that introduced a program specifically intended to meet the needs of young adolescents. These were called "Introductory High Schools," a name that never caught on. Certainly, the Ohio capital was the first city to use the name "Junior High School," but Berkeley's schools became widely known as the first junior high schools because Frank F. Bunker, the superintendent, wrote and spoke so enthusiastically about the new institution. Long after the academic year 1909-1910 had been popularly accepted as the birth date of the junior high school, N. C. Heironomus, writing in 1940, asserted that perhaps the year should be 1895. He reported that Richmond, Indiana, had established an "Intermediate School" in that year "when a new school building was erected to house a distinct unit of the city school, made
up of pupils of the seventh and eighth grades," for which school authorities made a "deliberate, purposeful attempt to change to a fuller, more vital offering of work for these pupils."³

Other cities can claim, with some degree of justification, that they too pioneered in the junior-high school movement. In the early 1890's, Kalamazoo, Michigan, departmentalized the 7th and 8th grade curriculum and introduced Latin, German and algebra.⁴

In his annual report to Harvard College for 1872-1873, President Charles W. Eliot indicated that he was troubled over the increased age of entering students. Can school programs, he inquired, "be both shortened and enriched?"⁵ Though at first little attention was paid to his question, Eliot was persistent in seeking a solution to the problem. In 1888, speaking before the Department of Superintendence of the National Education Association in Washington, D.C., he said:

The average age of admission to Harvard College has been rising for sixty years past, and has now reached the extravagant limit of eighteen years and ten months. The average college graduate is undoubtedly nearly twenty-three years old at graduation; and when he has attained his B.A. he must nowadays allow at least three years for his professional education. . . . The average college graduate who fits himself well for any of the learned professions, including teaching, can hardly begin to support himself before he is twenty-seven years old.⁶

President Eliot's remarks touched off serious discussion, and the resulting debates had far-reaching effects. Other college presidents were equally convinced that secondary
schools, rather than their respective colleges, should do something about the delay of self-support until the age of twenty-seven. A college-conceived and college-led movement for shortening and enriching secondary education soon was under way.

The history of the first middle school, the junior high school, indicated that it was conceived not as a movement to introduce something new into American education but as an expedient endeavor to ease several supposed deficiencies. Because it was thought that the cause of these deficiencies was inherent in the 8-4 organizational pattern, the pattern was questioned. This questioning intensified and multiplied during the last decade of the previous century and first decade of this century. In the forefront of the criticism were such noted educators as William T. Harris, Charles W. Eliot, and G. Stanley Hall.

William T. Harris criticized the eight-year elementary school because of the absence therein of any provision for individual differences, use of ability grouping and developmental teaching, i.e., teaching without repetition. As was common among the three educators mentioned, Harris did not call for a specific new organizational design. He merely made educators aware of the weaknesses of the existing system and the imperative need for change.7

G. Stanley Hall, because of his scientific study of the child, provided protagonists with physical, emotional, and social evidence of these respective differences among the
Charles W. Eliot, in his work for the Committee of Ten, continually pointed out what he felt to be the inadequacies of the existing system of elementary education. Eliot found the years at the end of the elementary experience to be wasted years (some Massachusetts communities at this time had a nine-year elementary school). He lamented this in his speeches and endeavored to correct it through the Committee of Ten recommendations, suggesting a six-year elementary school and the introduction of secondary subjects into grades seven and eight. His arguments were continued in the Committee on the Economy of Time, but, as was true with others mentioned, he never advocated outright an institution similar to the present junior high schools. Eliot's purposes throughout his efforts for economy of time and improvement of the 8-4 system were directed at enriching the secondary school and strengthening the base for college preparation. The fact that his arguments coincided with those of the junior high school advocates added prestige to their contentions.

Reasons for Junior High School

In a brilliant epigram, George Bernard Shaw once declared, "Nothing that is admittedly horrible matters much in this world if it frightened people into seeking a remedy." The pioneers of the junior high school movement, facing the difficulties of transition from elementary school to senior high school under the 8-4 plan, might have sought
solace from this dictum, for judged by failure to meet interests and needs of pupils, the conditions which arose from this transition were indeed frightening. During the last half of the nineteenth century, dissatisfaction with the weakness of the traditional system grew in volume and strength, and under the impact of the resultant criticism, the junior high school was born.

After the battle for the public support and control of schools was won, critical attention of students of education and active leaders in the various fields of education was directed to the new creation, the American public school system. Since the support of the schools came from public funds, and since the control was in the hands of public officials, it behooved them to scrutinize with the utmost care both the theory and the practice of the system. Much study and critical discussion soon were focused, not only upon the constituent parts of the system, but also upon the interrelationship of the parts of our "educational ladder" to each other. It early became apparent that the public school system, with the 8-4 arrangement, was not meeting certain demands that society had placed upon it.

At first the remedies proposed and tried were superficial; they were attempts to patch up the old structure, instead of efforts to find the fundamental cause of the troubles and the failures. These patching-up efforts belonged to the last half of the nineteenth and the first decade of the twentieth century. All that could be claimed
for even the most successful attempts to remedy the situation was a slight degree of alleviation at a few points.

During this precarious period of our educational history, the critics within the system were as numerous as those without; and neither group lacked definite evidence with which to substantiate its contentions. Although this evidence has been cited many times in educational literature, it is needed to give concreteness to an account of the causes leading to the organization of the latest unit of our school system.

One of the most distressing charges brought against the workings of the 8-4 plan was the leakage in the seventh and eighth grades. The results of studies by Thorndike, Ayers, and Strayer attracted the attention of both educators and laymen and added force to the propaganda for the junior high school movement. Thorndike studied the school systems of twenty-three cities with a population of 25,000 or over. He reported 46 per cent elimination from the seventh grade and 60 per cent from the eighth grade; this included losses due to deaths, transfers, economic conditions, and lack of ability to continue.11 Ayers studied fifty-eight cities and reported the results. He indicated an elimination of about 30 per cent from the seventh grade and 50 per cent from the eighth grade. Strayer reported conditions in 319 cities. He found 37 per cent elimination in the seventh grade and 49 per cent in the eighth grade.12 When these figures are combined with others relative to elimination in the lower
grades, one is led to the conclusion that only about one-third of the pupils who entered school reached the ninth grade.

The way in which the reasons for junior high schools are stated and interpreted depends upon whether these reasons are to be based on the activities of life or on the traits that educators seek to develop in pupils.

When Inglis formulated the aims of secondary education, he named three that he deemed fundamental, all based on the activities of life. His statement was clear, and it was thorough, because it covered and classified accurately all the activities of life. The fundamental aims were: (1) the preparation of the individual as a prospective citizen and cooperating member of society; (2) the preparation of the individual as a prospective worker and producer; and (3) the preparation of the individual for those cultural activities which make for the best use of leisure time and the development of personality. Although the last-mentioned aim primarily involved individual action, as Inglis contended, it, too, was of great importance to society. These, Inglis calls respectively the social-civic, the economic-vocational, and the individual-avocational aims.13

"Education for citizenship" sounds well from public platforms; and the one who proclaims the doctrine is always safe from criticism; hence aspirants for public office use it as padding in their speeches. But the pragmatist may well demand what is meant by citizenship in education. Some
English critics asserted that the greatest danger from which the United States suffered was the absence of any vivid sense of citizenship on the part of a large proportion of its inhabitants. Anyone willing to support this gloomy view of the matter would find no dearth of concrete arguments. In brief, the worthy reason, education for citizenship, has not been realized when judged by positive results. It would appear that a fruitless reason was chosen or that it was proven that we did not know how to realize the reason for junior high schools.

"The reason for the junior high school was to develop and train to their highest capacity the physical, mental, social, moral, and aesthetic powers of the immature, maturing, and matured pupils of the seventh, eighth, and ninth grades."14

**Purposes of the Junior High School**

In 1924, Davis described the junior high school as a school unit designed for children between twelve and fifteen years old, designed to fit each individual pupil's needs.15 Although Davis mentions grades seven, eight, and nine, his ideas pointed more toward needs of students of this age and away from grade structure.

Koos, in 1920, established definite functions for the junior high school:16

1. Retention of pupils--reduce dropout, facilitate continuation, bridge gap between grades 8 and 9, render smoother transition.

2. Economizing time--begin some high school subjects earlier, do away with unnecessary repetition and
reviews of common branches, and adjust courses of study to differences in ability.

3. Recognizing individual differences in ability, interests, environment, age, and rate of development.

4. Exploring for guidance through occupational information, enriched program of studies, objective testing, and wide range of student activities.

5. Providing the beginnings of vocational education—variety of vocational activities, general vocational training, terminal experience.

6. Providing conditions for better teaching—decrease one-teacher regimen, begin departmentalization, attract teachers with more training, correlation of related subjects.

7. Recognizing nature of child at adolescence—study nature and rates of changes, provide sex education, recognize approaching maturity, functionalize program.

8. Securing better scholarship through supervised study, fewer failures, longer periods, vital subjects, election of courses.

9. Improving the disciplinary situation and socialization opportunities through: greater homogeneity, more self-direction, increased staff specialization, more pupil activity—physical, social recreative, athletic.

In this same year Briggs stated five main objectives of the junior high school:

1. To continue in so far as it may seem wise and possible, and in a gradually diminishing degree, common integrating education.

2. To ascertain and reasonably to satisfy pupils' important immediate and assured future needs.

3. To explore by means of material in itself worthwhile, the interests, aptitudes, and capacities of pupils.

4. To reveal to them, by material otherwise justifiable, the possibilities in the major fields of learning.
5. To start each pupil on the career which, as a result of the exploratory courses, he, his parents, and the school are convinced is most likely to be a profit to him and to society.17

Thomas Sears Montgomery examined the accepted purposes of the junior high school between the period of 1928 and 1937. As a result of this study, Montgomery stated that vocational training was no longer a function of the junior high school, but that this function should be placed in the more advanced areas of education.18 He believed that emphasis should be placed in the intermediate school on exploring students' interests and on general education. His beliefs about the needs of early adolescents were based upon the information that children were staying in school longer, child labor was decreasing and social changes were leading to an increased desire for more education for the average man.

In 1942, Gruhn and Douglass established six functions for junior high schools in their book, *The Modern Junior High School:*19

Function I: Integration

To provide learning experiences in which pupils may use the skills, attitudes, interests, ideals, and understandings previously acquired in such a way that they will become coordinated and integrated into effective and wholesome pupil behavior.

To provide for all pupils a broad, general, and common education in the basic knowledges and skills which will lead to wholesome, well-integrated behavior, attitudes, interests, ideals, and understandings.

Function II: Exploration

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

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

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

Function III: Guidance

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

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

To stimulate and prepare pupils to participate as effectively as possible in learning activities, so that they may reach the maximum development of their personal powers and qualities.

Function IV: Differentiation

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

Function V: Socialization

To provide increasingly for learning experiences designed to prepare pupils to adjust themselves and contribute to future developments and changes in that social order.

Function VI: Articulation

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

They stated that these functions were similar to those established in the mid-twenties, but that the difference was based upon emphasis, changes in interpretation, and methods
of implementation. These broad interpretations of the functions of the junior high school by Gruhn and Douglass completely eliminated early ideas of needs of adolescents based upon economy of time, vocational training and retention of students that had been used early in the century in the founding and early growth of the junior high school.

Problems With Junior High Schools

One of the most serious problems with the 6-3-3 system and the junior high school concept was that it had been a junior high school. In many instances it had been a minia-
ture of the high school in the same system. Cheerleaders, marching bands, night interscholastic sports, night dances, and many other high school activities were conducted on a slightly junior scale. This type of program did not always allow for the difference in needs of the young adolescents and especially for the older members of this classification.

There was a need for an intermediate school to meet the needs of young adolescents. The children of this age needed an opportunity to search out their own interests and to investigate new areas of exploration in a school that was not restricted by college entrance requirements and high school programs, and not denigrated by getting those teachers who may have been unsuccessful at other levels in the system, as well as the left-over building. 20

Many junior high schools were forced to limit offerings and the variation of schedules to seventh and eighth grades by the needs of the ninth grade programs. These ninth grade
programs were often restricted by high school programs, college entrance requirements and the requirements of 200 minutes of weekly class time to satisfy the Carnegie unit. The non-restricted seventh and eighth grade programs were often forced to take what was left of facilities and staff after ninth grade needs were met.

Many educators believed these younger adolescents also should have the opportunity to leave the confines of the self-contained classroom for certain portions of the school day; and in a developmental way adjust to the complete mobility of the junior high school.21

The 6-3-3 system, as any organizational pattern should be, will be subject to modification in present and future educational development. Research is needed to determine which system will best meet the educational needs of young adolescents. Should the fifth and sixth grade be in the middle segment or part of the high school? Choices should be made in terms of needs of the children and a sound educational program and not in terms of tradition, number of students, or availability of buildings.

Securing teachers for these young adolescents also has been a problem. Junior high school teachers in most cases seem less enthusiastic and less satisfied with their assignments than are teachers with a promise of later promotion to high schools. Mauritz Johnson, Jr. cites a study of 600 teachers at Cornell22 that showed that junior high school teachers were less satisfied with assignments than
the teachers in the other two divisions of the 6-3-3 system.

Judith Murphy stated:

There is, of course, no guarantee that the kind of middle school will find it easier to attract and hold good teachers than the traditional junior high school. There is, however, reason to hope for progress in this direction, to the extent that the new schools redress curriculum, diversify their programs, and offer stimulating opportunities to teachers and students alike.23

A major problem in reorganization seems to have been the ninth grade. Colleges wanted transcripts on four years of high school. This would indicate that these four years should be planned in one curriculum unit.

Removing the ninth grade and adding grade six and perhaps five, creating a middle school with no forced ties with the high school, was not the only goal of middle school advocates. It involved the examination of children in this age group and the designing of a curriculum that allowed the young adolescent to explore and develop in a program that answered fifty years of criticism of the junior high school system.

Evolution of the Middle School

In the late 1950's and the early 60's, the issue began to become more critical in regard to the identity of young adolescents. Should the fifth and sixth grade student be included in this middle group and should the ninth grade move into the high school structure? This conflict over the value of the junior high school and its program for young
adolescents substantially increased the number of educators who believed that a middle school concept was the answer to the problem of providing a meaningful education for the children between the ages of ten and fourteen. Williams noted that over 1,100 middle schools were reported in a 1967-68 survey and that ninety per cent of those schools were established in the last decade. He also reported that many more middle schools were in the planning stage.

In addition to many journal articles, monographs, and booklets that appeared after the early sixties, there was a mounting number of books that dealt with the middle school.

There was also an effort being made to modify teacher education programs at several colleges for the preparation of middle school teachers. Institutes of a year's duration were funded by the United States Office of Education and were conducted at the University of Florida and at Temple University to prepare middle school teachers.

Havighurst, Mead, and Wattenberg all indicated that children were reaching adolescence at an earlier age. Evidence seemed to indicate that society was producing a child who reached earlier social, physical, and emotional maturity. The middle school advocate believed that "new types" of school experiences were needed for the "new type" of early adolescence.

Havighurst observed:
In awareness of these changing growth patterns, the middle school idea is based on the concept that the pre-adolescent in today's society is capable of more mature behavior than was thought possible 30 years ago.

In other words, we no longer treat the child's mind as a storehouse of knowledge but rather as an instrument for learning. Consequently, the new approach to the teaching of such subjects as mathematics, science, history, and geography is to teach the child to 'think like an expert.' That is, to think like a mathematician, historian, etc.30

Grooms reported:

... the students in the 10-14 age group are described in the literature as being: vigorous, inquisitive individuals on the threshold of adulthood; sometimes awkward and uncertain, sometimes facile and adept, often troubled by self-assessment; frequently astonished by newly evolving powers; assiduously requiring proper occasions for exploration and venture; now and then capable of adult behavior and responses; often in need of opportunities for trial and error in situations where mistakes are admissible.

Learning responsibility is shifted to the student during middle school years. The student becomes ever more responsible for his self-development.31

Murphy stated:

The middle school will exist as a school in its own right, free of the image of the senior high school and free to serve as an educational laboratory for the early adolescent. It would serve as a transitional phase between the paternalism of the neighborhood elementary school and the varied departmentalization environment of the senior high school.32

Flexibility to meet the needs of young adolescents was an important part of the program of the middle school. It was felt that schools should not be directed toward the most able students in any particular area, but that all interested children should be provided with the opportunity for meaningful experiences.

Howard commented:
These children are mentally developing the ability to work with abstractions, to conceptualize. The implications for teaching are clear. Many experiences must be provided with this in mind; there must be a variety of experiences and teaching methods; teaching and curricula must be such as to take advantage of student interests, curiosities, and abilities. Teaching and learning will require maximum access to and use of the entire school situation—learning centers, laboratories, resource centers, and language laboratories. Teaching should involve a minimum of lecture and exclusively teacher-centered methods, and should provide for student interaction and independent study. ..

The literature on middle schools seems to have had many areas of agreement. Judith Murphy, a member of the planning committee for the Pittsburgh Public Schools, commented on differences in middle school philosophy and practices in the junior high school. "The school would depart fundamentally from elements of the present junior high school which contributes to early sophistication and its undesirable by-products." The Pittsburg committee also discussed the desirability of the development of individual responsibility. Flexible scheduling was suggested by this committee as a means to the development of the individual student.

Middle school advocates often recommended that ability or achievement grouping be used in various academic areas. This allowed schools to offer advanced courses to interested and capable students at an earlier grade level than most junior high schools could.

Howard stated:

It is usually recommended that ability groupings be used in the academic areas, and opportunities provided for accelerated programs for those students who are capable and interested, such as algebra in grade eight.
or even sooner. Foreign language, ideally open to all who wish it, is usually available beginning at the lowest grade of the middle school. Industrial arts, homemaking, art, music, arts and crafts, and typing should be offered at each grade level, varying from grade to grade and school to school. Usually electives are open, at least in a limited way, at all grade levels. 35

Howard also quoted letters from administrators of middle schools. 36 In the early grades of middle school, these educators reported use of flexible scheduling. They also reported a wide base of exploratory experiences, varying amounts of time, a block time type of teacher, and other subjects studied on a departmentalized basis.

Even junior high school literature referred to the need of flexible scheduling for this age group.

Van Til, Vars, and Lounsbury stated:

It is to be expected that most students will progress normally from grade level to grade level during junior high school years. Yet some individuals would be better served by a more leisurely pace, taking four years to complete the usual junior high school grades, while others may be ready for senior high school in less than three years. Schedules should be flexible enough so that a student might conceivably be enrolled in an eighth grade core class, study mathematics in a non-graded class made up primarily of seventh year students, and do advanced work in art with ninth and tenth year students. Placement should be in terms of the individual's total development, not just academic ability. 37

At an earlier date Gruhn and Douglass observed:

... the rigid class schedule with relatively short periods, which is so common in the junior high school, makes it difficult to carry on some desirable activities. Laboratory activities, field trips, the use of certain audio-visual materials, and cooperative group activities make it desirable at times to have longer periods than are now provided in most schools. It is not only the length of class periods, but also flexibility in class periods which is important. There needs to be experimentation with the
junior high school schedule to see how such flexibility may better be provided.\textsuperscript{38}

Although there seemed to be a strong trend toward ability grouping in academic subjects, middle school advocates appeared to favor heterogeneous grouping in homerooms and in non-academic subjects, with flexible schedules used to help students in both academic and non-academic explorations.

An effort in the middle school seemed necessary to assure that a lock step system did not stifle the children by making each child study the same subject for the same length of time. Technical aids, increased facilities, and extended days needed to be used to increase the opportunities for children to explore, discover, and grow—both socially and academically in the middle school.

School activities needed to be aimed at the children in this age group, rather than be smaller copies of the activities in the local high school. Experts said that there should be a basic club program, a highly representative simplified student government, a concert band instead of a marching band, intramural sports instead of interscholastic athletics, a non-selected cheering section of interested students instead of selected song leaders and/or cheerleaders, and an unsophisticated, inexpensively printed periodic newspaper instead of a yearbook.

Howard stated:

The middle school is not the place for dinner dance, a formal dance, or a night dance. Nor is 10-14 the age for night athletic contests with the attendant trappings and excitement: pep band, cheerleaders, and a drill
team. As professional people it is the responsibility of the teacher and the principal to keep the proper balance and perspective in school activities.\textsuperscript{39}

Eichorn suggested:

\ldots an Interest Activity Program schedule as part of the school day. In this program, a wide range of interest activities can be conducted. Again, students, in association with faculty members, would be responsible for planning and conducting the program.

A gamut of activities can be devised, based on student interests and suggestions. This program might include any of the following types of activities: social work group, such as the Junior Red Cross; nature programs, such as a botany nursery; physical activities, such as games and intramurals; mathematical activities, such as surveying; science endeavors, pursuing rocketry or model airplane construction and operation; quiet activities such as chess; fine and practical arts group activities in arts and crafts; social science endeavors, such as reenactment of famous battles; language activities, such as dramatics or newspaper publication. There are, of course, many other diversified interest activities which may be suggested by the transescents themselves.\textsuperscript{40}

Howard\textsuperscript{41} was convinced that a strong intramural program was a necessary part of the middle school. He believed that too little was being done in schools for young adolescents to insure children the chance to compete in sports where they were equal in weight and height. He said that these intramurals should not be of an elimination type where only a small per cent of the school participated in one game, but should be a full season schedule where each interested child is able to develop in the sports that most interested him.

The middle school did no better with discarded high school buildings and expanded elementary school buildings than did its predecessor the junior high school. The success of schools depends heavily upon adequate buildings that allow educators to provide enriching educational experiences.
Educators in Saginaw, Michigan, designed and constructed a middle school especially for the curriculum planned for middle school students;

Howard stated:

Saginaw school district built its classroom three to a side; the rooms being three sided with openness, freedom, spaciousness, and much glass. There is a raised 'Mall' down the center of the wing between the classrooms, three on each side. The mall has sinks and storage and may be used for large group instruction since the classrooms are open on the side facing it. The mall is a common work area, multipurpose, and is used for homemaking, arts and crafts, and industrial arts. Quiet spaces for individual study carrels are available. The children eat in a 'dining room,' not a cafeteria, which has booths, round tables, and chairs. There is a library, gymnasium, and a social center. Teachers for grades five and six plan together for team teaching although fifth and sixth grades are essentially self-contained. Grades seven and eight are blocked for language arts and social studies. . .

These middle schools were departmentalized for foreign languages, science, mathematics, arts and crafts, homemaking, health, physical education, music, and industrial arts. Special classrooms were available for all departmentalized subjects. In addition, individual work was conducted in an instructional materials center. Student achievement grouping was done in terms of performance achieved in reading tests.

Many well-designed middle schools were constructed and actually operated on middle school principles. Examples of these were the two located at Amory, Mississippi, and Mt. Kisco, New York.

Ann Grooms, in Perspectives on the Middle School, placed great emphasis on the importance of the school plant
planning in the success of the middle school.

Grooms stated:

Educational innovation is moving forward on many fronts: non-grading, variable grouping, independent study procedures, new staff utilization plans, and curricula organized for continuous student progress. The Institute for Development of Educational Activities (I.D.E.A.) of the Kettering Foundation is encouraging systematic evaluation of innovation through support to schools where innovation is presently exercised. Planning must provide a school plant capable of utilizing those innovations which improve efficiency in the learning situation. 44

In her planning group she suggested that the team that plans the middle school consist of school board members, superintendents of schools, citizens groups, teachers, educational consultants and architects. This team should have a detailed plant design before the school construction people are consulted for suggestions and cost.

According to many, the assignment of space in the new middle school should be pointed toward the goals of the curriculum. Facilities are needed for team teaching, science laboratories, spaces for independent study, and small and large group centers in addition to the traditional type facilities existing in junior high schools. The main direction of the new plant should be toward flexibility in size of area where new media in education could be used by students and faculty to its full potential.

In the individual study sections, all efforts should be made to place the student in the position to make decisions that would lead to exploratory learning. Carrels should be available to students for individual study. From these
carrels, laboratories, and learning centers, resources can be made available by a dial-select system in which the student can dial for the play-back of tapes, recordings, and films.\textsuperscript{45}

Grooms stated that, "The middle school is the school of change and innovation."\textsuperscript{46} It should be apparent, then, that the middle school plant should be designed for the type of administration that takes advantage of all educational and technical progress of the time and is flexible enough to exploit the trends and innovations of the future that could provide meaningful experiences for early adolescents.

**Reasons for Middle Schools**

Because of the junior high school's deficiencies, the middle school began to emerge in the late 1950's. The middle school organization provided a concentrated effort to meet the special growth and development needs of youth from 10 to 14 years old. Justification for housing students in this age group in a separate building lies in the concept of transescence.

There was a growing body of research evidence\textsuperscript{47} to substantiate the transescent designation. The researchers concluded that no major line separates the child and the adolescent but rather that a gradual change takes place, involving physical, mental, and social elements.

Transescence is a period of physiological change. The changes are peculiar to this level of development, producing a common set of social and emotional reactions which are different from those represented in children of the elementary or high school years. Biological
changes taking place alter not only the physical child but also his social and emotional status.

Mental maturation, like physical development, is in transition during the middle school years. Stage level psychologists present strong arguments that during transescent years, youngsters move from a cognitive modus operandi involving concrete operations to a level characterized by their ability to interact in the abstract.

Transescence is also marked by the youngster's transition from dependence upon the family for security to a similar dependence on the peer group. Prior to transescence, the elementary child heavily relies on the family for interests, attitudes, and values, and after, on the peer group subculture.⁴⁸

The middle school attempted to provide for the stage of development (transescence) which begins prior to the onset of puberty and extends through the early stage of adolescence by:

1. developing a unique program adapted to the needs of prepuberty and early adolescent students;
2. providing a wide range of intellectual, social and physical experiences;
3. providing opportunities for exploration and for development of skills involved in individual learning patterns;
4. maintaining an atmosphere of basic respect for individual differences;
5. creating a climate that enables students to develop abilities, to find facts, to weight evidence, to draw conclusions, to determine values, and to keep their minds open to new facts;

6. recognizing and understanding the students' needs, interests, backgrounds, motivation, goals, and especially their stresses, strains, frustrations and fears;

7. providing smooth educational transition from the elementary school to the high school while recognizing the physical and emotional changes taking place;

8. providing an environment where the child, not the program, is most important;

9. providing an environment where the opportunity to succeed is insured for all students;

10. offering guidance to the pupil in the development of mental processes and attitudes needed for contributing, constructive citizenship and in the development of life-long competencies and appreciations required for effective use of leisure;

11. providing competent differentiated instructional personnel who will strive to understand the students whom they serve and who will develop professional competencies which are both unique and applicable to the transcendent student; and

12. providing facilities and a flexible use of time to
allow students and teachers to achieve the goals of the program to their fullest capabilities. 49 Education had seen many changes in America after the days of the Latin Grammar school and the American academies. The middle school concept was one of those. Because society changed, children changed--particularly middle school aged children. Each child progressed through school with different abilities, different backgrounds, and different needs. A direct focus on these needs (in the affective and psychomotor domains as well as the cognitive domain) through the middle school concept was said to provide a way to humanize education and to meet the unique requirements of each student.

The early adolescent was seen as a complex creature with worries, fears, and concerns that caused him to be insecure and temporarily disoriented psychologically. The intensity of the concerns and fears varied with each adolescent. Adolescence was defined as a period of pronounced individual differences in physical, mental, and social development, as well as in individual interests and abilities. It was not difficult to contend that a unique school was needed for this age group with specific attention paid to the curriculum and instruction of the adolescent. Without the proper training, the subject might easily be considered to be more important than the individual and the educator in the middle may neither understand nor respect the adolescent.
Though differences are pronounced, adolescents were seen to have some common characteristics:

1. A resentment of authority, especially if it appears to be arbitrary.
2. A craving for acceptance and approval by their peers which was formerly satisfied by adult approval.
3. As a further illustration of the adolescent paradox, adolescents are likely to be extremely idealistic at the same time that they are easily influenced by undesirable elements.
4. By adult standards, the early adolescent is extremely emotional.
5. Although inclined toward idealism, the early adolescent will probably become quite self-centered and selfish.
6. The interests of early adolescents are rapidly broadening but change frequently, few being more than superficial.
7. This is a time of developing and changing values, so that long anticipated experiences may not be all that they are hoped and expected to be.
8. Early adolescents share a common concern with physical growth.
9. The physical growth of adolescence is accompanied by intellectual expansion.50

These characteristics, held in common by early adolescents, serve not only to point up the really impressive variabilities and ranges of differences seen to be found in students, but also the definite need for a "special kind of educator" who had undergone specific training to enable him to work successfully with the students of the junior high and middle school.

In the opinion of many educators, a separate and specific program which was developed for the purpose of training junior high educators was not only desirable, but had become essential; yet for several reasons such programs were but few in number. Some institutions offered such programs and after a short time were forced to discontinue them because of
a lack of student interest and low enrollment. Other colleges and universities felt that a third division in teacher education would require specialization and course development out of proportion to the benefits to be derived.\textsuperscript{51}

Popper, noting the lack of specific preparation for personnel who work with children of this age, remarked that,

... because the professional preparation of middle school teachers is still a 'no-man's-land' in American teacher education, most middle school teachers are neither equipped with the required skills for the role nor have they internalized an institutional commitment to the role.\textsuperscript{52}

As the elementary school was designed for the young child and the senior high school for the late adolescent youth, so the middle school was intended to provide the best educational program for the pre-adolescent and early adolescent; roughly those children from ten to fourteen years of age. How could this function be fulfilled if the teachers were not prepared for this age level?

The Upper Midwest Regional Conference on Junior High School Education\textsuperscript{53} met at Cedar Falls, Iowa, in 1960 and brought to focus the need for specific teacher education programs for the junior high school. Their recommendations included courses in the teaching of reading, instruction in guidance, information on conducting practical experience projects: courses that met the needs of the junior high school functions. Considered to be essential were the study of psychology, with emphasis upon the adolescent, plus the experience of student-teaching at the junior high school level.

In the first few years of the 20th Century, writings were appearing with the emphasis on adolescence. In G. Stanley Hall's book, \textit{Adolescence}, he observed:
Adolescence is a new birth, for the higher and more completely human traits are now born. The qualities of body and soul that now emerge are far newer. The child comes from and harks back to a remoter past; the adolescent is neo-atavic, and in him the later acquisitions of the race slowly become prepotent. Development is less gradual and more saltatory, suggestive of some ancient period of storm and stress when old moorings were broken and a higher level attained. The annual rate of growth in height, weight, and strength is increased and often doubled, and even more. Important functions previously non-existent arise. . . . The youth craves more knowledge of body and mind, that can help against besetting temptations, aid in the choice of a profession, and if his intellect is normal he does not vex his soul over much about the logical character of the universe or the ultimate sanction of either truth or virtue. He is more objective than subjective, and only if his lust to know nature and life is starved does his mind trouble him by ingrowing.54

E. L. Thorndike commented in the Elimination of Pupils from Schools that many of these dropouts were caused by failure of our schools to meet the needs of these adolescents.55

Although Hall and Thorndike were instrumental in increasing the interest among educators and citizens in developing a different education for young adolescents, neither seemed to identify the different needs of young adolescents as opposed to the needs of older adolescents.

**Purposes of the Middle School**

The overall goal of the middle school, like any other unit of the school system, was seen to be serving the needs of students and society. As the elementary school was concerned with children, and the high school focused on adolescents, the middle school was designed specifically to meet the needs of pre-adolescents. To this end, it was said, the middle school should foster:
1. the individual physical well-being of the student during late childhood and early adolescence. Health and physical education activities should be designed which are unique to this period of rapid physical growth and dramatic bodily change.

2. individual mental health through a continuous program of sex education aimed at understanding the many epochal changes taking place during the years 10-14.

3. learning specifically geared to immature and maturing students in an atmosphere which challenges but does not pressure the individual. Such programs recognize that there are many different learning styles and that large numbers of this age group cannot tolerate huge doses of subject matter because of their rapid physical metamorphosis.

4. a continuous program of educational guidance based on the concept that guidance belongs in all classrooms, but utilizing specially-trained guidance counselors as resource personnel. Thus all middle school teachers should be "guidance oriented," working with specialists as members of a professional team. Vocational and career guidance (including college counseling) belong in the high school, not the middle school.

5. a curriculum that is part of a continuous nursery through 12th grade programs but that takes cogniz-
ance of the purposes listed above. Such a program provides for articulation with the elementary school and with the high school.

6. Activities related to the interests and needs of middle school students. These recreations are a natural outgrowth of classroom activities and take the form of special interest clubs and intramural sports. Elaborate graduation ceremonies, evening dances, cheerleaders and marching bands do not belong in the middle school.

Similar objectives could be listed for elementary and high schools. But these purposes are distinct from such broad objectives in that they are based on the unique characteristics of 10-14 year-olds. These objectives were formulated as a challenge to all interested middle school participants to ponder their purposes in order to evolve a statement of objectives to guide the future development of the middle school, lest it become the "middle school" critics said it was.56

Regardless of which discussion of the function and purposes of the junior high school one read, he found that the conclusions reached were usually stated in broad generalizations. Many of them were hypothetical since the fields of guidance and adolescent psychology were as new and as unproven as the institution itself. Often one had the impression that the activities and curricula of grades seven, eight, and nine, if not in an 8-4 administrative design,
could do all things equally well for all students. Most of the arguments were presented in such a way as to seem based on the assumption that the first six years of the elementary school and the last three years of the high school were, by comparison, without fault. One also had the obviously erroneous impression that all a school system needed to do was to create the ideal program for grades seven, eight, and nine (junior high school, 6-8, or whatever), incorporate it with the existing K-6 and 10-12 program, and all educational ills would be solved. In general, educational theorists tried to apply all desirable attributes in an effort to give a positive philosophy to these schools which often had resulted out of mere expediency.

Purposes should evolve from rationale and the literature on the intermediate school did contain statements of purposes. But they were too often ill-defined and disappointing. One educator claimed that the objectives of the middle school were similar to those of the junior high school, but that the middle school had a new opportunity to achieve these goals more effectively than did its predecessor.57 Perhaps it was still too early to expect clearly defined purposes for the middle school and for the appearance of the first junior high schools. Both first came into existence as administrative organizational devices, before purposes had been clearly articulated.

In an attempt to define the functions of the junior high school and middle schools a number of statements were
made, most of which found it necessary to discuss purposes and characteristics as part of the functions of this organizational pattern. Many statements promised such a variety of benefits as to lead one to believe that the adoption of the middle school concept would solve most, if not all, of the educational ills from which a district suffered. Other statements of functions were either of so general and amorphous a nature that it was difficult to know precisely what was meant, or could apply equally to schools and children of all grade levels and, therefore, were not valid reasons for establishing any particular kind of school organization.58

**Transition to Middle School**

A professional development program has been said to have as its theme the self-fulfillment of the individual. As such, a number of general objectives were identified as appropriate:

1. The achievement of a quality of instruction in which the idea of individual instruction becomes more than just rhetoric but reality in terms of the interests, needs, and lives of pre- and early adolescents.
2. The identification of the constantly changing needs in the operation of the middle school.
3. The expansion of the insight and understanding of teaching middle school children, and identification of the gaps of knowledge and the program areas which need to be dealt with in a self-renewal program.
4. The development of a model educational program which can serve as a vision for the staff.59

Upon the completion of a professional development program, it was stated, each participant should be able to perform the following specific tasks:

1. Write a philosophy that shows a commitment to educational innovation and change.
2. Identify the characteristics of the pre- and early adolescent in social, physical, and psychological terms.
3. Develop a learning program which is based on the principles of child growth and development.
4. Construct a curriculum which breaks out of the confines of departments and combines basic academic skills and basic human relations skills in one learning package or unit.
5. Select appropriate prepared learning materials which will facilitate individualized instruction.
6. Evaluate learning materials from commercial sources by using guidelines shown to be successful in the field.
7. Develop in-class learning materials which will facilitate individualized instruction.
8. Evaluate in-class learning materials by using guidelines shown to be successful in the field.
9. Identify various ways in which community resources can enhance the curriculum themes.
10. Construct instruments and design procedures which will give data about a teacher's ability to teach and a student's ability to learn.
11. Construct instruments and design procedures which will give data about the capability of the program as a whole.
12. Use prepared instruments to get data about teaching, learning, and program.
13. Translate the findings derived from various data gathering sources about teaching, learning, and programs into procedures aimed at bringing about change in these areas.⁶⁰

A number of areas of study have been identified as components of an effective professional development program. The following list provides guidelines for focusing the training program on professional and institutional self-renewal:

1. The nature of the pre- and early adolescent.
2. Teacher awareness and fostering positive self-perception on the part of students.
3. Communicating with pre- and early adolescents.
4. Uses of community resources in curriculum development.
5. Developing and writing interdisciplinary themes.
6. Helping teachers develop their own appropriate teaching materials.
7. Evaluating teaching, learning, and programs.
8. Simulation and role-playing in interdisciplinary teaching.
9. Diagnostic and prescriptive teaching to achieve individualization.
10. Writing behavioral objectives.
11. Verbal and non-verbal interaction.
12. Methods of individualizing instruction.61

There were some who felt that a change process can be successfully accepted and implemented without the involvement of the entire staff. Some educators argued that aggressive leadership by the middle school principal, central office personnel, or an outside change agent was the quickest and most feasible way to bring about desirable alterations in a middle school program. Other educators encouraged, instead, an open system where modification was produced through experiences which developed new understandings, new perceptions, and new skills for all concerned. Teachers would participate on a voluntary basis in workshops focusing on such topics as how students learn. Other experiences might include viewing demonstrations by outstanding teachers and working with consultants. In order to establish a healthy climate for innovation and change, it was stated that one must first develop ways for individual teachers to share new ideas with other teachers and gain support for worthwhile change. Further, there is a need to make teachers feel that they have had some influence in developing change by adopting new administrative styles which decentralize decision-making.

In the past, most high schools have experienced changes that have been initiated at the superintendent's level. The alterations then have flowed from the top to the team of
teachers expected to make the change effective. The middle school philosophy encouraged that rearrangements flow from the teaching team. Middle school teachers were to look at their jobs creatively and were to be receptive to new ways to do their work more effectively. Given support, staff members could develop creatively within a school that was consistent with the middle school philosophy. When transformations originated with teachers, they could make the alterations successful. The middle school that could involve its teachers and encourage them to initiate change in the middle school would become and could continue to be dynamic and exciting.62

Summary

The literature reviewed indicates that there has been little published in regards to the actual problems encountered in the process of converting from junior high school to the new middle school concept. Unfortunately, because the middle school movement was very recent, little research has yet been published to aid the objective reader. It was hoped that this study will help clarify the claims of the middle school.

It was intended that this study would assist teachers, administrators, students, parents, and others who would become involved in this new unit of school organization. Principals and teachers preparing for the conversion should find this study helpful as a model from which they may benefit when the process of transition becomes a
This chapter has traced the history of the reorganization movement in secondary education which has led to the establishment of junior high schools. Approximately half a century later, middle schools evolved from the junior high school movement. Because there has been little discussion of the problems of converting to middle school, the writer proposed his own objectives as a point of departure in the hope that his formulations will stimulate discussions regarding conversion. Principals who are to make the transition cannot do their best without clearly defined guidelines.

Some educators have criticized the junior high school as being too imitative of the senior high school. A four-year sequence of college entrance requirements tended to inhibit curriculum development in the three-year junior high school. These factors combined with the earlier onset of puberty among children contributed to the establishment of middle schools containing grades 5 or 6 through 8.

There were, in 1977, approximately 1,000 middle schools throughout the country. The development of middle schools probably represented the second phase of the reorganization movement in secondary education. At the time of writing, the greatest weakness of existing middle schools seemed to be the lack of clearly defined purposes.
This study attempted to ascertain what principals of junior high schools and middle schools believed were the greatest difficulties encountered in completing the transition to the new middle school concept.

During the sixty-year genesis of the junior high school, marked changes took place in society. Migration increased, among both the affluent middle class and the economically disadvantaged, in the era following World War II. Developments in technology and communications wrought major changes in daily living. Improved health standards and diet lowered the age of the onset of puberty. Sociologists, cultural anthropologists, psychologists, and educators exhaustively documented these changes, and offered suggestions for assisting youth to cope with resulting problems.

School districts in all parts of the United States weighed the decision of whether they should change from a junior high school to a middle school plan. Organized information on processes and procedures for doing so was sadly lacking. The task was quite different for those inheriting an existing organization than it was for those planning new schools with a choice of staff, materials, facilities, and administrative leadership.

When changing from junior high to a middle school, necessary in-service training and retraining of personnel require time and thorough planning. These can best be done on-the-job in the evolving middle school.
The assistance of a knowledgable professional to serve as a coordinator to promote middle school thinking and to encourage change toward a school more appropriate to the pre-adolescent is helpful. His research findings, readings, and visitations should be shared with everyone.

Middle schools attempted to create an environment natural for the age level, one which did not force pre-adolescents to take part in sophisticated activities. The rush of early teens to adult interests can be slowed by an institution specifically planned for pre- and early teen-age children. The children's developmental growth patterns demanded an environment that was free from tension, understanding in its practices, and enhancing to the sensitive emotional and social behavior of children. Those involved in middle school development should find ways in which children can identify with the school and in which they can become more excited about school. One must avoid taking everything away from the environment and leaving a vacuum. Children need activity. Hobby shows, pet shows, talent shows, dramatic performances, games, and the like were identified as events that middle school children enjoyed.

These points show the need for a district to make professional decisions when considering a change to a middle school plan. There was no dogmatism in the middle school movement. These were, at best, ideas to be tried.
Some have been arbitrarily forced on it by those who accepted criticism of the junior high. Each district is free to, and of necessity must, develop a middle school that will best serve the youth of its particular community.

Is the middle school the most effective organizational structure in which to educate early adolescents? The Saginaw, Michigan, school system, in an attempt to answer this question, conducted an in-service assessment of the social, physical, mental, and emotional characteristics of children from kindergarten through grade 12. Over 300 growth patterns were identified. The staff concluded that children in kindergarten through grade 4 possessed many of the same traits; that children in grades 5 through 8 had similar characteristics, and that 9th through 12th graders shared many common attributes.63

Middle schools did not just happen; they evolved from the junior high school movement. Dissatisfaction with many junior high schools and the earlier onset of puberty among students appear to be major factors in the creation of the new intermediate units.64 The 9th grade curriculum was closely related to the senior high school program because of the four-year sequence of college entrance requirements, and many educators believed the 9th grade should be returned to the high school. While the years served by the middle school varied considerably,
there was a consensus among writers that the 9th grade did not belong in the intermediate unit. Whether 4th and 5th graders should be included in the new organizational plan depended on the school system's entire educational program from nursery school through grade 12.

"The adage, 'the shoe should be made to fit the foot', perhaps applies more aptly to organization than to any other phase of social and educational engineering." 65
FOOTNOTES


2Ibid., p. 3.

3N.C. Heironomus, "Is This the Earliest Known Junior High School?," The Clearing House (May, 1940), p. 518.


6Ibid, pp. 151-152.


8Ibid., p. 436.

9Ibid., p. 206.

10Ibid., p. 438.


14Parker, loc. cit., p. 445.


Gruhn and Douglass, op. cit., pp. 31-32.

Ibid., p. 195.

T. C. Moss, op. cit., p. 241.


Emmett L. Williams, "This Issue," Theory Into Practice (Columbus, Ohio: Ohio State University Press, June, 1968), p. 105.

Ibid., p. 75.

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Robert J. Havighurst, "The Middle School Child in Contemporary Society, Theory Into Practice (Columbus, Ohio: Ohio University Press, June, 1968), p. 120.

M. Ann Grooms, Perspective on the Middle School (Columbus, Ohio: Charles E. Merrill Books, Inc., 1967), pp. 4-5.


Alvin W. Howard, Teaching In the Middle School (Scranton, Pennsylvania: International Textbook Company, 1968), p. 11.
34 Murphy, loc. cit.


36 Ibid., p. 40.


39 Howard, Teaching in Middle Schools, p. 110.


42 Ibid., p. 42.

43 Grooms, op. cit., p. 115.

44 Ibid., p. 109.

45 Grooms, op. cit., p. 115.

46 Ibid., p. 127.


49 Ibid., p. 25.


51 Ibid., p. 273.


60 Ibid., p. 120.

61 Ibid., p. 121.

62 Ibid., p. 125.


64 Ibid., p. 72.

65 Abel A. Hanson, "Evaluating the Effectiveness of Types of Organization," *The School Executive*, 68 (October, 1948), 76.
CHAPTER III

METHOD OF CONDUCTING THE STUDY

The purpose of this study was to analyze the extent to which principals of junior high schools who have converted to middle schools experienced difficulties in doing so, and to determine what factors affecting conversion are anticipated by principals who have not yet made this change to the new organizational pattern.

The method used to collect and analyze data are presented in this chapter. In this chapter are described: (1) the population and the sample providing the data for the study; (2) the questionnaire used to collect the data; (3) the procedures for employment of the questionnaire; and, (4) the treatment of the data.

Population and Sample

The population for the study consisted of principals in large urban school districts who met these criteria:

1. they were middle school principals, or,
2. they were principals of junior high schools involved in or likely to be involved in conversion to middle schools.

The sample for the study consisted of all twenty-two junior high and middle school principals in the Albuquerque, New Mexico, Public School system.
The Questionnaire

Requests to contact personnel in the Albuquerque system were sent to Albuquerque administrative officials (Appendix A). A sample of the instrument to be used was included. To those principals who did not respond within thirty days, a follow-up letter was sent. (See Appendix B.)

The questionnaire used to gather data contained 108 items which were related to the transitional process. For example, "Middle school administrators should:

1. know the background and development of the high school;
2. be aware of needs and problems;
3. endeavor to articulate the high school program with that of the middle school."

These items referred to major types of activities involved in making the transition to middle school, and were drawn from the following sources:

1. the writer's own experience and observations of factors affecting the transition from the junior high concept to the new middle school concept;
2. materials published by the National Study of School Evaluation.¹

Item Selection

The first step in designing the questionnaire was to develop a foundation from which a discriminating set of items could be developed. A list of more than 150 state-
ments about conversion to middle school was refined to 108 by selecting those rated as "Most Important" by a jury. The statements were divided into ten categories:

1. Professional Qualifications and Attitudes of Administrators
2. Professional Development Programs
3. In-Service Programs
4. Objectives
5. Curriculum
6. Planning
7. Teacher Responsibilities
8. Problems
9. Progressive Reorganization
10. Evaluation

Scaling

A five interval qualitative scale was adopted to determine the expectations of each respondent for the attribute or activity indicated. In answer to each statement the respondent had these alternatives:

1. Not Important At All
2. Not Too Important
3. Fairly Important
4. Highly Important
5. Most Important

These categories were selected not only because of the success with which they were employed in other, similar,
studies, but because they permitted the respondent to express his expectations along a continuum ranging from positive to negative agreement through a "neutral" midpoint.

A jury of experts consisting of four University of New Mexico, Secondary Education Department faculty members, five Albuquerque Public School Administrators, and eleven middle school consultants from outside the state, all of whom had experience in the transitional process, was selected.² (See Appendix C.)

A cover letter was written which explained to each juror the nature of the instrument. It requested the respondent to rate the items as to their importance in establishing anticipated difficulties in converting to the new concept. (See Appendix D.) Several important corrections were made, and valuable suggestions were incorporated into the final questionnaire. Only those items identified by the jury as "Most Important" were included in the final document.

After incorporation of the suggestions made by the jury, the revised list of 108 items was submitted to the author's advisory committee which gave suggestions for preparation of the final draft. The final draft of the data gathering instrument contained the 108 items, a cover letter which explained the purpose and intent of the instrument, and personal data questions.

**Procedures for Employment of the Questionnaire**

The questionnaires were mailed to all subjects during the third week of April. It was felt that by this time all
middle school principals and teachers would have had experience with the new concept so that their reactions to the items would be more meaningful than if they had received the questionnaire earlier in the school year.

In order to assure anonymity and efficient follow-up, the following procedures were used:

1. A code was assigned to each of the respondents and placed on each of the questionnaires. This code number identified the classification of the respondent—e.g., principal middle school, principal junior high school—and his number within the classification.

2. The name of each respondent and the code number assigned to him was recorded. No one except the investigator had access to this information.

3. A legal-size envelope was addressed to each respondent containing the following materials:

   (a) A cover letter which identified the investigator and the purpose of the investigation as well as procedures to be followed.

   (b) The questionnaire which also had provisions for collecting personal data necessary for the study.

   (c) A stamped self-addressed envelope.

Treatment of the Data

To answer the questions asked in the study, appropriate null hypotheses were posed and tested. Frequencies of
responses for each of the five points on the scale were entered into contingency tables for testing. The chi-square test for significance was used, with the rejection level for the null hypotheses set at .05. Where frequencies, for a point on the scale, were so low as to make chi-square unstable, those points were collapsed into adjacent points.4 (See Appendix E.)

The questions asked in the study, and the null hypotheses tested, were:

1. Are there differences between the perceptions of middle school principals and principals of junior high schools concerning aspects affecting middle schools?

**Null hypothesis 1.1:** There is no significant difference between the perceptions of junior high school principals and of middle school principals in identifying aspects affecting middle schools.

2. If there are differences between the perceptions of middle school principals and junior high school principals concerning aspects affecting middle school, in which of the ten categories were the differences most pronounced?

**Null hypothesis 2.1:** There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 1.
Null hypothesis 2.2: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 2.

Null hypothesis 2.3: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 3.

Null hypothesis 2.4: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 4.

Null hypothesis 2.5: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 5.

Null hypothesis 2.6: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 6.

Null hypothesis 2.7: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 7.
Null hypothesis 2.8: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 8.

Null hypothesis 2.9: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 9.

Null hypothesis 2.10: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 10.

3. Are there differences between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion concerning aspects affecting middle schools?

Null hypothesis 3.1: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion in identifying factors affecting middle schools.

4. If there are differences between the perceptions of middle school principals involved in the conversion process and middle school principals not involved
in the process of conversion concerning aspects affecting middle schools, in which of the ten categories were the differences most pronounced?

Null hypothesis 4.1: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 1.

Null hypothesis 4.2: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 2.

Null hypothesis 4.3: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 3.

Null hypothesis 4.4: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 4.

Null hypothesis 4.5: There is no significant difference between the perceptions of middle school
principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 5.

Null hypothesis 4.6: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 6.

Null hypothesis 4.7: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 7.

Null hypothesis 4.8: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 8.

Null hypothesis 4.9: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 9.

Null hypothesis 4.10: There is no significant
difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 10.

Frequencies of scores were entered into contingency tables. The chi-square test was used to determine probabilities of such distributions occurring by chance.
CHAPTER IV
PRESENTATION OF THE FINDINGS

The findings presented in this chapter are a result of the comparisons of the responses of the twenty-two junior high school and middle school principals who returned the questionnaires. Before testing to determine if differences existed, between the groups of principals, on each of the ten categories, it was necessary to determine if the groups differed on the totals of the categories. If not, a difference found in any one category might well have been a spurious difference. The categories referred to in the null hypotheses and the text are these:

Category 1: Qualifications and Attitudes of Administrators
Category 2: Professional Development Programs
Category 3: In-Service Programs
Category 4: Objectives
Category 5: Curriculum
Category 6: Planning
Category 7: Teacher Responsibilities
Category 8: Problems
Category 9: Progressive Reorganization
Category 10: Evaluation

The first question asked therefore was, are there differences between perceptions of middle school principals and principals of junior high schools concerning aspects
affecting middle schools? To answer the question, null hypotheses were posed and the data tested for significance. The data are given in Appendix E; the hypotheses and results of the test were:

Null hypothesis 1.1: There is no significant difference between the perceptions of junior high school principals and of middle school principals in identifying items affecting middle schools.

Result of the test: The value of P is significant past the .001 level; the null hypothesis was therefore rejected. There is a significant difference in the perceptions of junior high school principals and middle school principals in identifying items affecting middle schools.

The second question asked was: if there are differences between the perceptions of middle school principals and junior high school principals concerning aspects affecting middle schools, in which of the ten categories were the differences most pronounced? The data which were tested to answer this question are given in Appendix E; the null hypothesis and results of the tests were:

Null hypothesis 2.1: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 1.

Result of the test: The value of P is not significant;
the null hypothesis is therefore sustained. The difference between middle school and junior high school principals is not significant on Category 1.

**Null hypothesis 2.2:** There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 2.

**Result of the test:** The value of $P$ is not significant; the null hypothesis is therefore sustained. The difference between middle school and junior high school principals is not significant on Category 2.

**Null hypothesis 2.3:** There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 3.

**Result of the test:** The value of $P$ is not significant; the null hypothesis is therefore sustained. The difference between middle school and junior high school principals is not significant on Category 3.

**Null hypothesis 2.4:** There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 4.

**Result of the test:** The value of $P$ is significant and the null hypothesis therefore is rejected. There is a significant difference between perceptions of middle school principals and junior high school principals on
Category 4.

**Null hypothesis 2.5:** There is no significant difference between the perceptions of junior high school principals and middle school principals on Category 5.

**Result of the test:** The value of $P$ is not significant; the null hypothesis is therefore sustained. The difference between middle school and junior high school principals is not significant on Category 5.

**Null hypothesis 2.6:** There is no significant difference between the perceptions of junior high school principals and middle school principals in Category 6.

**Result of the test:** The value of $P$ is not significant; the null hypothesis is therefore sustained. The difference between middle school and junior high school principals is not significant on Category 6.

**Null hypothesis 2.7:** There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 7.

**Result of the test:** The value of $P$ is not significant; the null hypothesis is therefore sustained. The difference between middle school and junior high school principals is not significant on Category 7.

**Null hypothesis 2.8:** There is no significant difference between the perceptions of junior high school prin-
cipals and of middle school principals on Category 8.

Result of the test: The value of P is significant and the null hypothesis is therefore rejected. There is a significant difference between perceptions of middle school principals and junior high school principals on Category 8.

Null hypothesis 2.9: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 9.

Result of the test: The value of P is significant and the null hypothesis therefore rejected. There is a significant difference between perceptions of middle school principals and junior high school principals on Category 9.

Null hypothesis 2.10: There is no significant difference between the perceptions of junior high school principals and of middle school principals on Category 10.

Result of the test: The value of P is significant and the null hypothesis therefore rejected. There is a significant difference between perceptions of middle school principals and junior high school principals on Category 10.

In answer to the question posed, middle school principals and junior high school principals do differ in their
perceptions of several of the categories presented in the data gathering instrument. On categories 4, 8, 9 and 10 the differences between middle school principals and junior high school principals were large enough to be significant.

The third question asked was: are there differences in the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion of aspects affecting middle schools? To answer this question, null hypotheses were posed and the data tested for significance. The data are given in Appendix E; the hypotheses and results of the tests were:

Null hypothesis 3.1: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion in identifying factors affecting middle schools.

Result of the test: The value of P is significant and the null hypothesis is therefore rejected. There is significant difference between perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion in identifying factors affecting middle schools.

Because of the small number of responses in certain categories, it was necessary to combine frequencies before the data could be tested for significance. In answer to the
the question posed, middle school principals involved in the conversion process do differ in their perception of aspects affecting middle schools when their responses were compared to principals of middle schools not involved in the conversion process.

The fourth question asked was: if there are differences in the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the conversion process of aspects affecting middle schools, in which of the ten categories were the differences most pronounced? To answer the question, null hypotheses were posed and the data tested for significance. The data are given in Appendix E; the hypotheses and results of the tests were:

**Null hypothesis 4.1:** There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 1.

**Result of the test:** The value of $P$ is not significant; the null hypothesis is therefore sustained. The difference between middle school principals involved and middle school principals not involved is not significant on Category 1.

**Null hypothesis 4.2:** There is no significant differ-
ence between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 2.

**Result of the test:** The value of P is not significant; the null hypothesis is therefore sustained. The difference between middle school principals involved and middle school principals not involved is not significant on Category 2.

**Null hypothesis 4.3:** There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 3.

**Result of the test:** The value of P is significant and the null hypothesis is therefore rejected. There is a significant difference between perceptions of middle school principals involved and middle school principals not involved on Category 3.

**Null hypothesis 4.4:** There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 4.
Result of the test: The value of P is not significant; the null hypothesis is therefore sustained. The difference between middle school principals involved and middle school principals not involved is not significant on Category 4.

Null hypothesis 4.5: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 5.

Result of the test: The value of P is significant and the null hypothesis is therefore rejected. There is a significant difference between perceptions of middle school principals involved and middle school principals not involved on Category 5.

Null hypothesis 4.6: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 6.

Result of the test: The value of P is not significant; the null hypothesis is therefore sustained. The difference between middle school principals involved and middle school principals not involved is not significant on Category 6.
Null hypothesis 4.7: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 7.

Result of the test: The value of P is not significant; the null hypothesis is therefore sustained. The difference between middle school principals involved and middle school principals not involved is not significant on Category 7.

Null hypothesis 4.8: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 8.

Result of the test: The value of P is not significant; the null hypothesis is therefore sustained. The difference between middle school principals involved and middle school principals not involved is not significant on Category 8.

Null hypothesis 4.9: There is no significant difference between the perceptions of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 9.
Null hypothesis 4.10: There is no significant difference between the perception of middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 10.

Result of the test: The value of P is significant and the null hypothesis is therefore rejected. There is a significant difference between perceptions of middle school principals involved and middle school principals not involved on Category 10.

Significant differences existed between middle school principals having been involved in the conversion process and middle school principals who have not yet experienced the process of conversion in three categories. Those categories were 3 and 10, where those principals involved in the conversion process expressed more concern about these particular aspects than did their counterparts who had no experience in the conversion process, and in Category 5 where the trend was reversed. Test results indicated more concern on the part of middle school principals not involved in the process of conversion than on the part of middle school principals who have been involved in a conversion in Category 5. It is significant to note that, in Category 10, all responses except three (out of sixty) fell into the "Most Important" and "Highly Important" rankings.

Although they were not part of the original design of
the study, additional statistical tests were made. The tests were made to try to ascertain, in particular cases, which of the three groups of principals differed most or were most similar. Frequencies of responses for each of the three groups of principals were entered into contingency tables and tested by chi-square. (See Appendix E.) Cases where such information seemed desirable were in categories 3 (In-Service Programs), 5 (Curriculum), and 10 (Evaluation).

In category 3, although no significant difference existed between junior high and middle school principals, a difference did exist between middle school principals involved and middle school principals not involved. A pertinent question, therefore, was "Did the absence of a difference between junior high principals and middle school principals occur because junior high principals, like middle school principals involved, were greatly concerned with in-service programs? Or was the absence of a difference due to the junior high principals being, like the middle school principals not involved, less concerned with in-service programs?"

The results of the tests showed that junior high school principals have essentially the same perceptions of the importance of in-service programs as have middle school principals not involved, while middle school involved principals see in-service programs as significantly more important than either of the other two groups of principals.

Another category where further testing seemed desirable was Category 5. Although no significant difference existed
between junior high school principals and middle school principals, a difference did exist between middle school involved principals and middle school not involved principals. A pertinent question, therefore, was "Did the absence of a difference between middle school involved principals and middle school principals not involved occur due to the lack of concern about curriculum development for middle schools by principals of middle schools who have not been involved in the process of conversion?"

A difference existed between the perceptions of junior high school principals, middle school principals involved in the conversion process and middle school principals not involved in the process of conversion on Category 5.

In Category 10 there was a significant difference between the perceptions of junior high school and middle school principals not involved in the process of conversion. A pertinent question, therefore, was "Did the difference between junior high principals and middle school principals occur as a result of the lack of concern about the evaluation process in middle school principals of middle schools who have not been involved in the conversion process?"

The results of the tests showed that junior high school principals have less concern about evaluation programs than principals of middle schools. The results also indicated that middle school principals not involved in the process of conversion were less concerned about evaluation programs in middle schools.
Summary of Findings

The original design of the study was to compare the perceptions of junior high school and middle school principals on ten categories affecting middle schools and to compare middle school principals involved, with middle school principals not involved, on the same ten categories. The comparisons, when tested by chi-square, showed that significant differences existed.

Cases where such differences existed were categories 4, 8, 9, and 10. In all four cases, the test showed that junior high school principals were less concerned about these programs affecting middle schools than were the principals of middle schools.

After determining those categories where differences existed, further statistical tests were conducted to determine if these differences occurred due to differences in perceptions of middle school principals who had been involved in the process of conversion and principals who had not been involved in the conversion process.

Frequencies of responses of principals of middle schools involved in the conversion process were compared to responses from middle school principals who had not been involved in the conversion process. Results of statistical tests showed that significant differences existed in categories 3, 5, and 10.

In categories 3 and 10, middle school principals involved in the conversion process expressed more concern about these
programs than did principals of middle schools who had not been involved. Category 5 test results indicated more concern by middle school principals involved in the conversion process on curriculum development than by principals of middle schools who had not been involved in the conversion process. Category 5 results follow the trend of the original test between perceptions of junior high school principals and middle school principals. Although significance was indicated, it is important to note that all responses except three, out of a total of sixty, fell into the "Most Important" and "Highly Important" rankings.

This chapter has presented the results of the data collected from a study comparing the perceptions of junior high school principals and middle school principals to aspects significantly important in the conversion process from junior high school to the middle school concept. The conclusions, implications, and recommendations for further study are presented in Chapter V.
FOOTNOTE

\(^{1}\)p is the probability of a given chi-square value occurring by chance.
CHAPTER V
SUMMARIES, CONCLUSIONS, AND RECOMMENDATIONS

In this chapter the summaries, conclusions, and recommendations that resulted from the study are presented. The purpose of the study was to compare perceptions of principals who have converted to middle schools with those principals who have not yet made this change to the new organizational pattern.

Summary of the Study

Population Studied

The population for this study consisted of principals in large urban school districts who met these criteria:

1. they were middle school principals and/or
2. they were principals of junior high schools involved in or likely to be involved in conversion to middle schools.

The sample of the population was the principals of the twenty-two middle and junior high schools in Albuquerque, New Mexico.

Procedures

A questionnaire was administered to ascertain the opinions of principals of junior high and middle schools regarding their perceptions of factors which affect the conversion of junior high schools to middle schools. The
questionnaire was sent to the twenty-two principals of junior high schools and middle schools in the Albuquerque Public School system. The instrument was completed and returned by all twenty-two respondents. The respondents were divided into two groups: junior high school principals and middle school principals. The middle school principals were then sub-divided into: middle school principals involved in a conversion from junior high school, and middle school principals not yet involved in the process of conversion.

The responses to the questionnaire were entered into contingency tables and tested for significant differences with the chi-square test.

Summary of the Findings and Conclusions

The findings indicated the degree of importance the respondents attached to factors affecting the conversion of junior high schools to the middle school concept. The areas of examination are listed according to the ten categories of the data gathering instrument.

Qualifications and Attitudes of Administrators

Although the statistical tests showed no significant differences among the four groups studied, the findings showed that all of the principals agreed that the aspects listed under this category were either most important or highly important.

Based on these findings, it would appear that school
districts planning conversion from a junior high school to a middle school must pay particular attention to the qualifications and attitudes of the principals selected to lead the conversion process. Administrators chosen to participate in the conversion process must have a thorough understanding of the early adolescent and of child development and growth. They must be well read in educational and non-educational areas, and be aware of current trends and practices in middle schools. Although not mandatory, a background of successful teaching experience in junior high school or middle would be a valuable asset to the person selected to lead the conversion process. They must understand the functions of middle schools in order to articulate the middle school program with that of the elementary and high school.

Because this category was found to be important, a school is likely to have a successful conversion process if in-service programs are provided for the principals.

**Professional Development Programs**

The statistical tests showed no significant differences among the four groups studied with regard to the aspects of the professional development program. However, the aspects rated most highly were the encouragement of teachers: (1) to individualize instruction in terms of interests and needs and lives of pre- and early adolescents; and, (2) to identify changing needs in the operation of a middle school.
According to the responses to this category, professional development programs must be an essential part of the conversion plan from junior high school to middle school. Principals must develop model educational programs which will serve as a vision for the staff. Expansion of the teachers' insight into, and understanding of, teaching middle school children must be one of the major responsibilities of the middle school principals. They must encourage teachers to identify ever changing needs in the operation of the middle school.

In-Service Programs

The majority of the responding principals stated that those aspects of in-service programs listed on the questionnaire were most important. The statistical tests, however, showed a significant difference in the perceptions of middle school principals involved in a conversion and those middle school principals who had not been involved in the process of conversion.

From the responses given, it would appear logical to conclude that middle school principals involved in the conversion process emphasized the importance of in-service programs to a greater extent than did those principals who had not been involved in a conversion process. Having struggled through the process they recognized the value of in-service programs and advanced preparation for the conversion to the new organizational pattern. Middle school
principals who were not involved in the process of conversion escaped the task and, therefore, placed less emphasis on in-service programs.

By responding positively to this category, the principals indicated their belief in the following propositions: Middle school in-service programs must be continuous if they are to be effective. They must be activity-oriented rather than listening-oriented, and they must be models of enlightened instructional and administrative practices. In-service programs must have teacher participation in decision making, and they must allow the staff a view of the overall operation of which they are to be a part. Teachers must be provided sufficient time to visit existing middle school facilities which have completed the process of conversion, and time must be set aside for teachers having mutual concerns about students to discuss and plan ways to resolve such problems.

Objectives

While the majority of the principals indicated that the aspects of this category were most important to successfully complete the conversion from junior high school to middle school, the statistical tests showed significant differences between the perceptions of junior high school and middle school respondents. Junior high school principals had not been involved in the process of conversion to a middle school and, therefore, appeared less concerned about middle
school objectives. On the other hand, middle school principals were more concerned about objectives once they were actively involved in the task of conversion.

Based on the findings, objectives for middle schools must be child-centered rather than subject-centered; and they must provide opportunities for pupils to learn self-direction. Provisions must be made for opportunities for pupils to interact with their peers. At this level, emphasis must be placed on the individual achievement of the student. Furthermore, students in middle school must be prepared for greater competitiveness in the senior high school.

Curriculum

Although the statistical tests showed significant differences between the perceptions of middle school principals involved and middle school principals not involved in the conversion process, there was agreement among the respondents that the middle school curriculum must be planned to encourage students to become enthusiastic learners, to help students understand the dimensions of freedom and restraint, and to emphasize appreciation of esthetics.

Middle school principals who had been involved in the process of conversion were less concerned about curriculum development in middle schools, perhaps because they had completed the process of curriculum development.
for their programs. However, middle school principals, who had not been involved in the conversion, were responsible for continuous curriculum development and probably had some doubts about their ability to do so because of inexperience with the new middle school concept.

Community involvement in curriculum planning for the middle school is a must if the program is to succeed. Curriculum planning must be developed to emphasize appreciation of leisure time. The interaction of authority and the individual as well as group responsibilities must be included in the curriculum.

Planning

The respondents agreed that planning for the transition from junior high school to middle school must be an essential part of the conversion process. Middle school principals must establish a rationale for time utilization, and they must determine role specialization for the staff.

Because all of the respondents agreed that all of the aspects listed under the category of planning were highly important or most important, and because no significant difference among the groups was found, it would be reasonable to conclude that this must be a crucial area for anyone contemplating the transition from junior high school to middle school.

The respondents agreed that it is most important that middle school principals determine major units to be taught
during the year, and that they review future plans for learning experiences. They must review pupil assessment for initial assignment and determine how major objectives or outcomes can be established for proposed units. Middle school principals must identify appropriate materials based on knowledge of individual learners. They must provide programs which inform other staff members of special skills, strengths, or interests possessed by their peers.

Teacher Responsibilities

The statistical tests showed no significant differences among the four groups studied. The findings were that all of the principals agreed that the aspects of this category were most important. It can be concluded that the respondents supported these ideas. In addition, the teachers must adjust available materials, space, and equipment, as the situation mandates. This entails varying teaching techniques, materials, human resources, and time so that each student has the opportunity to learn at his own pace. Middle school teachers should meet with other staff members to discuss matters of interest to all: i.e., scheduling, curriculum, facilities, equipment, assessment procedures and community involvement. Teachers in middle school programs must be able to identify problems which require team decisions and must structure their daily activities with consideration given to individual differences.
Problems

While the majority of the principals rated most aspects of this category as most important, the statistical data showed a significant difference between the perceptions of junior high school principals and middle school principals.

From the responses of junior high school and middle school principals, it appears that junior high school principals were less aware of problems associated with middle schools. This may have been because they had no experience with the middle school concept. On the other hand, middle school principals in the process of resolving current problems were greatly concerned about this aspect. It seems reasonable to assume that junior high school principals will become increasingly concerned about problems affecting middle schools as their deadlines for making the transition grow nearer.

Teachers of middle school children are likely to experience difficulty in adjusting their programs to the new flexible and modular schedules. These schedules require more teacher planning and work. Problems are likely to arise due to lack of continuity when several different teachers work with the same subject and the same group of students. Problems with regard to space, teaching stations, and meeting places are also possible. The middle school may be required to utilize existing junior high school facilities and problems may occur due to inadequacy of these facilities for the new concept. Due to confusion
on the part of teachers, teacher aides and assistants may be misused.

**Progressive Reorganization**

The majority of the respondents indicated agreement that the middle schools must provide opportunities for all students to participate in a wide variety of exploratory activities that include such programs as art, music, home economics, industrial education, consumer education, and physical education. However, the statistical tests showed a significant difference between the perceptions of junior high school and middle school principals.

It is reasonable to assume, from the responses given, that middle school principals are more concerned about progressive reorganization because of their involvement in the conversion process and the experiences gained from this involvement. Conversely, junior high school principals are less concerned because of lack of experience and the fact that progressive reorganization is not of immediate concern. There may be greater concern as the date for their respective schools to complete the transition grows nearer.

The middle school must maintain a strong program of remedial education and have a continuous program in health, physical education, and recreation for all students. Programs must be reorganized to take full advantage of the special abilities of teachers assigned to the middle school.
Evaluation

Although the statistical tests showed significant differences among the perceptions of the groups, there were strong feelings among junior high and middle school principals that middle schools must not be carbon copies of the programs of other schools. They agreed that middle schools must be concerned with program effectiveness in terms of such aspects as philosophy and staff qualifications, as well as facilities and materials.

From the responses given to this category, the conclusion can be made that middle school principals involved in conversion are more concerned about middle school evaluations. Perhaps this is because of the experiences gained in working in middle schools. Junior high school principals and middle school principals not yet involved in the conversion process were less concerned about the evaluation of middle school programs; probably because of their lack of experience with the new organizational pattern. It is likely that, as the remaining junior high schools are converted to middle schools, the process of evaluation will become increasingly more important to those who have not had experience in working in middle schools.

Periodically, principals must request teachers to evaluate their programs toward accomplishment of goals, and teachers must request their students to do the same for their respective programs.

It can be generally concluded that the ten categories
used in this study were recognized by the respondents as ones of considerable importance to the conversion process. Differences that existed between the groups of principals were differences of degrees of concern, rather than differences of concern versus non-concern. In the following section, recommendations based upon the conclusions are presented.

**Recommendations**

When a large urban school district contemplates adopting a middle school concept, an overall plan with a position paper should be developed. The plan should answer at least the following questions:

1. What should be the function of a middle school? How is it to be different from a junior high school?
2. What should be the focus of a middle school program?
3. What should be the minimum time required to make the conversion process?
4. What resources are to be allocated, both material and human?
5. How can parents, students, and local citizens be best utilized to the fullest extent?
6. Will consultant services of middle school experts be needed?
7. To what extent will teachers and principals be provided with opportunities to visit other middle schools?
8. How will the middle school be evaluated?

Because there were significant differences in the perceptions of the two groups of principals, it is strongly recommended that large urban school districts planning a conversion from junior high schools to middle schools should provide opportunities for in-service programs for principals and staff. These in-service programs should be planned to answer the following questions:

1. What are the characteristics of the pre- and early adolescent?
2. What should be the philosophy of the middle school?
3. What should be the objectives of the middle school?
4. What should be included in the curriculum?
5. What kinds of teaching strategies are best suited for the middle school student?
6. What kinds of procedures are best for evaluating the teaching-learning process?
7. How shall the schools to be visited by administrators and staff be selected?
8. What kinds of problems have others had in making a conversion to a middle school?

Professional development programs are a must when planning a conversion from a junior high school to a middle school. These programs should be addressed to the following questions:

1. What kinds of consultants will be needed:
2. How can consultant services best be used?
3. How can a teacher advisory guidance program be
implemented?

4. How can a new teacher orientation program be implemented?

5. How can paraprofessionals and aides be best utilized?

6. Will differentiated staffing, modular scheduling, and team teaching be utilized in the school?

7. How will the total school program be evaluated?

Recommendations for Further Research

It is recommended that further study and research be conducted in analyzing and comparing the different evaluation methods used by middle schools, and a properly designed procedure be disseminated for implementation.

It is recommended that research be conducted in analyzing and comparing the different transition models and plans used throughout the country (if any) with the possibility of developing a systems model for schools making a transition from junior high school to middle school.

Because some school districts throughout the country are converting to middle schools due to declining enrollments and financial constraints, it is recommended that research be conducted in analyzing and comparing such middle schools with school districts who have adopted the middle school concept because of educational value.

It is recommended that research be conducted in analyzing and comparing transition models and plans used throughout the country with the possibility of developing a systems
model for middle schools in small school districts.

It is recommended that research be conducted to compare attitudes of parents and community members toward middle schools.

It is recommended that research be conducted to analyze student attitudes toward middle schools.
APPENDIX A

LETTER
Dear

The enclosed questionnaire is part of a study of middle school characteristics being conducted by Mr. Clarence Pegues, originally under the direction of Dr. Alvin Howard.

This is part of a study to compare perceptions of principals who have gone through the conversion process from a junior high to middle school with those who plan to convert to a middle school.

By identifying significant factors which affect the conversion of junior high schools to the middle school concept, a model set of criteria can be developed which could be of use to other schools.

Mr. Pegues will be contacting you shortly to arrange an opportunity for a personal interview concerning the major areas of this study.

Will you please assist by completing the questionnaire at your earliest convenience?

You will note that a stamped return envelope is included to facilitate return.

Sincerely,

George Stoumbis  
NCA State Chairman  
College of Education  
University of New Mexico

GS/rln
APPENDIX B

QUESTIONNAIRE
CAUTION! This questionnaire was last seen in the vicinity of your mailbox and is considered extremely important.

QUESTIONNAIRE!
If Found In Your Possession
Please Fill Out, And Return To

CLARENCE E. PEGUES
2709 UTAH N.E.
ALBUQUERQUE, NEW MEXICO
87110

* Size: 8½ x 11 inches
* Weight: Under five ounces
* Age: About one month

SERIOUSLY SPEAKING I need your help. My questionnaire was sent to other professionally oriented people like yourself. The importance of this doctoral study will be in direct proportion to the amount of cooperation received. The end-product will be an extremely practical aid for all those interested in middle schools. If you misplaced your copy, another copy is enclosed. Thanks.

Clarence E. Pegues
APPENDIX C

JURY
JURY

University of New Mexico Faculty

Dr. George Stoumbis  
Professor, Secondary Education Department

Albuquerque Public School Administrators

Charles Barnard  
South Area Coordinator

Jack Bobroff  
East Area Coordinator

Orlando Esparza  
North Area Coordinator

Stan Rarich  
Director of Middle Schools

Dr. John Mondragon  
Area East Superintendent

Experts from Throughout the Nation

Edith Belden  
Brunell College, Gainsville, Georgia

Gaylen Crowder  
Cherry Creek Schools, Denver, Colorado

Scotty East  
Azalia Middle School, St. Petersburg, Florida

Jim Elliot  
Northern Colorado State University, Greeley, Colorado

Newton Fink  
Superintendent of Schools, Fort Lupton, Colorado

Mark Glynn  
Principal, Commerce City, Colorado

Dr. John H. Hansen  
Professor, Florida State University, Tallahassee

Norman Harris  
Principal, Taylors, South Carolina
Experts from Throughout the Nation (Continued)

Jean Maroni
Professor, Florida State University, Tallahassee

Nelle Wright
Professor, Florida State University, Tallahassee

R. Clifford Young
Principal, Fort Lupton, Colorado
APPENDIX D

INSTRUMENT TO IDENTIFY FACTORS AFFECTING CONVERSION TO MIDDLE SCHOOL
THE IDENTIFICATION OF FACTORS AFFECTING MIDDLE SCHOOLS

The purpose of this instrument is to identify significant items affecting Albuquerque Middle schools which will form a foundation for a study of factors affecting middle schools.

The following items were designed to cover a sample of the major types of activities/aspects involved in making the transition to middle schools. Some of the items tend to be general statements about conversion, whereas others are much more specific. They all deal, however, with procedures involved in establishing or making the change to the new Middle School concept.

Show how important each activity/aspect should be by circling the number which most nearly shows how you feel. Please respond to all functions.

5. Most important
4. High important
3. Fairly important
2. Not too important
1. Not important at all

CLARENCE E. PEGUES
PRINCIPALS OF JUNIOR HIGH AND MIDDLE SCHOOLS

PLEASE CHECK THE APPROPRIATE RESPONSE

1. Principal Junior High School ______________

2. Principal Middle School ______________

3. I was originally trained and certified in the following areas:
   - Elementary ______________
   - Junior High/Middle School _____
   - Secondary ______________

4. Have you been involved in a conversion from junior high school to middle school?
   - Yes __________
   - No __________

5. Do you anticipate being involved in a conversion from junior high school to middle school?
   - Yes __________
   - No __________

6. Was your facility designed for the middle school concept?
   - Yes __________
   - No __________

7. Would you desire a copy of the findings and results of this study?
   - Yes __________
   - No __________

PLEASE FILL IN APPROPRIATE BLANKS

1. I have been a principal for ____ years in the Albuquerque Public School system.

2. The position I held before becoming a junior high or middle school principal was ________________________.
### CATEGORY I -- QUALIFICATIONS AND ATTITUDES OF ADMINISTRATORS

**MIDDLE SCHOOL PRINCIPAL MUST:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Most Important</th>
<th>Highly Important</th>
<th>Fairly Important</th>
<th>Not too Important</th>
<th>Not Important at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>have a thorough understanding of the early adolescent.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>read widely in educational areas.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>read widely in non-educational areas.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>be aware of current trends and practices in middle schools.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>have a thorough knowledge of child growth and development.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>have had experience in junior high activity programs.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>have had experience as a junior high/middle school counselor.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>articulate the middle school program with that of the high school.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>articulate the middle school program with that of the elementary school.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>have a background of successful teaching experience in the junior high/middle school.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>know what is involved in curriculum construction.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>know the functions of middle schools.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>have a background in adolescent psychology.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>have a background of elementary administrative experience.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>be concerned with the need for achievement of students of all levels of ability.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
**MIDDLE SCHOOL PRINCIPAL MUST:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Most important</th>
<th>Highly important</th>
<th>Fairly important</th>
<th>Not too important</th>
<th>Not important at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>develop a model educational program which can serve as a vision for the staff.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>expand the teacher's insight and understanding of teaching middle school children.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>identify problem areas which need to be dealt with in a middle school program.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>encourage teachers to individualize instruction in terms of interest, needs and lives of pre and early adolescents.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>encourage teachers to identify changing needs in the operation of a middle school.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>encourage teachers to develop in-class learning materials which will facilitate individualized instruction.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
**Category III--Inservice Programs**

**Inservice Programs Must:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be continuous if they are to be effective.</td>
<td>5</td>
</tr>
<tr>
<td>Be activity-oriented rather than listening oriented.</td>
<td>4</td>
</tr>
<tr>
<td>Allow personnel involved to be able to discover for themselves the advantages of the new idea rather than have it handed to them.</td>
<td>3</td>
</tr>
<tr>
<td>Be clearly defined in behavioral terms.</td>
<td>2</td>
</tr>
<tr>
<td>Allow the staff to see the purpose of the ideas being promoted.</td>
<td>1</td>
</tr>
<tr>
<td>Allow the staff a view of the overall operation in which they will be a part.</td>
<td>5</td>
</tr>
<tr>
<td>Be models of enlightened instructional and administrative practices.</td>
<td>4</td>
</tr>
<tr>
<td>Develop in the staff positive professional attitudes towards innovation and change.</td>
<td>3</td>
</tr>
<tr>
<td>Have teacher participation in decision making.</td>
<td>2</td>
</tr>
<tr>
<td>Include visits to existing middle school facilities which have completed the process of conversion.</td>
<td>1</td>
</tr>
<tr>
<td>Include one afternoon a week to be used by teachers who have mutual concerns about students so they can discuss and plan ways to resolve such problems.</td>
<td>5</td>
</tr>
</tbody>
</table>
**CATEGORY IV—OBJECTIVES**

**MIDDLE SCHOOL OBJECTIVES MUST:**

<table>
<thead>
<tr>
<th></th>
<th>Most important</th>
<th>Highly important</th>
<th>Fairly important</th>
<th>Not too important</th>
<th>Not important at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>provide opportunities for pupils to learn self-direction.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>provide opportunities for pupils to interact with their peers.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>stress individual achievement at the student's own level.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>attempt to lessen competition.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>5.</td>
<td>not be carbon copies of objectives established for junior high school.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6.</td>
<td>emphasize personal guidance services.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>7.</td>
<td>be student-oriented rather than subject-oriented.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>provide for exploratory opportunities for the students.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>9.</td>
<td>be child-centered rather than subject-centered.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>aid the development of self-image.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>11.</td>
<td>prepare pupils for greater competitiveness in the senior high school.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
### Category V—Curriculum

The Middle School Curriculum Must:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Least Important</th>
<th>Not Important</th>
<th>Fairly Important</th>
<th>Highly Important</th>
<th>Most Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>be planned to allow students to understand themselves.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>be developed to emphasize the clarification of values.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>be developed to assist students in understanding the relationship between environment and knowledge.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>be developed to teach students the inter-relationships of disciplines.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>be developed to emphasize appreciation of esthetics.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>be developed to stress appreciation of leisure time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>be developed to assist students to become enthusiastic learners.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>be developed to help students understand the dimensions of freedom and restraint.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>be developed to help students to appreciate the interaction of authority and individual and group responsibilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>be developed to assist students in understanding the tentativeness of knowledge.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>be developed to help students understand that learning is not preparing for life but life itself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
### Category VI--Planning

**Middle School Principals Must:**

<table>
<thead>
<tr>
<th></th>
<th>Most Important</th>
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<th>Fairly Important</th>
<th>Not Too Important</th>
<th>Not Important at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>determine major units to be taught during the year.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>establish a rationale for time utilization.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>review plans for future learning experiences.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>allow each student to progress as rapidly as he is able or as slow as he must.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>5.</td>
<td>provide programs which inform other staff members of special skills, strengths or interests possessed by their peers.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6.</td>
<td>evaluate the teaching-learning process.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>7.</td>
<td>review pupil assessment for initial assignment.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>identify appropriate material based on past knowledge of individual learners.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>9.</td>
<td>determine role specialization or division of labor for the staff.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>establish tentative grouping patterns.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>11.</td>
<td>determine and plan how objectives can be translated into an operational program.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>12.</td>
<td>determine and assign writing of learning activity packages.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>13.</td>
<td>determine and/or establish major objectives or outcomes for proposed units.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
### Category VII - Teacher Responsibilities

**Middle School Teachers Must:**

<table>
<thead>
<tr>
<th>Most important</th>
<th>Highly important</th>
<th>Fairly important</th>
<th>Not too important</th>
<th>Not important at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>determine when additional teacher input would enhance a student's learning effectiveness.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>adjust material, space, equipment or individual student objectives as the situation mandates.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>identify problems which require team decision.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>vary teaching techniques, materials, human resources and time so that each student has the opportunity to learn at his own pace.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>structure daily activities considering individual differences.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>make operational decisions about daily confrontations between the teacher, the student and the curriculum.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>meet with other staff members to discuss matters of interest to all; i.e., scheduling, curriculum, facilities, equipment, assessment procedures and community involvement.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
### PROBLEMS ASSOCIATED WITH MIDDLE SCHOOLS ARE:

<table>
<thead>
<tr>
<th></th>
<th>Most important</th>
<th>Highly important</th>
<th>Fairly important</th>
<th>Not too important</th>
<th>Not important at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>students may not have enough identification with the teachers.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>flexible and modular scheduling require more teacher planning and work.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>schedules possibly do not give enough time to a subject area.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>teachers are required to change their teaching patterns.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>5.</td>
<td>programs require more equipment or equipment of a different type.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6.</td>
<td>flexible schedules may require staff overload and inequities.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>7.</td>
<td>problems in regard to space, teaching stations and meeting areas.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>there is a lack of sufficient time for planning, for evaluation and for all phases of joint efforts.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>9.</td>
<td>there is a lack of community understanding and support.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>students are inadequately prepared for the middle school concept.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>11.</td>
<td>teacher aides and assistants are misused.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>12.</td>
<td>programs lack continuity when several different teachers work with the same subject and the same group of students.</td>
<td>5</td>
<td>4</td>
<td>3</td>
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</tbody>
</table>
**Category IX—Progressive Reorganization**

**Middle School Programs Must:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Most Important</th>
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<th>Fairly Important</th>
<th>Not Too Important</th>
<th>Not Important at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>have a strong program of remedial education.</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>have a continuous program in health, physical education and recreation for all students.</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>be designed with careful consideration of the growth characteristics of the early adolescent.</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>have a clear statement of the purpose and functions which is understood by all concerned in the education of the early adolescent.</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>include opportunities for reading, writing, speaking and listening in all subject areas.</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>have teachers trained specifically to work with early adolescent children.</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide a broad general education to all students.</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide opportunities for students to acquire an understanding of the basic principles of modern science and of the world in which we live.</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>provide opportunities for all students to participate in a wide exploratory program that includes at least:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Industrial Arts</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Art</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Music</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Foreign Languages</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Consumer Education</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Business Education</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Home Economics</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Physical Education</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Science</td>
<td>5 4 3 2 1</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
### CATEGORY X -- EVALUATION

**MIDDLE SCHOOL EVALUATION MUST:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Most Important</th>
<th>Highly Important</th>
<th>Fairly Important</th>
<th>Not Too Important</th>
<th>Not Important at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>be in terms of judging the type of school desired, not in terms of comparison with existing schools.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>be made in terms of change and extent of change.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>not be a carbon copy of the evaluative programs of the other school levels.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>have adequate methods of evaluation devised and implemented.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>be concerned with program effectiveness in terms of such aspects as philosophy, facilities, materials and staff qualifications.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
APPENDIX E

TABLES OF DATA USED IN
STATISTICAL TESTS
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comparison of Junior High School Principals and Middle School Principals in Response to the Entire Data Gathering Instrument</td>
<td>130</td>
</tr>
<tr>
<td>2. Comparison of Junior High School Principals and Middle School Principals to Qualifications and Attitudes of Administrators Affecting Middle Schools</td>
<td>130</td>
</tr>
<tr>
<td>3. Comparison of Responses of Junior High School Principals and Middle School Principals to Professional Development Programs Affecting Middle Schools</td>
<td>131</td>
</tr>
<tr>
<td>4. Comparison of Responses of Junior High School Principals and Middle School Principals to In-Service Programs Affecting Middle Schools</td>
<td>131</td>
</tr>
<tr>
<td>5. Comparison of Responses of Junior High School Principals and Middle School Principals to Objectives Affecting Middle Schools</td>
<td>132</td>
</tr>
<tr>
<td>6. Comparison of Responses of Junior High School Principals and Middle School Principals to Affects of Curriculum on Middle Schools</td>
<td>132</td>
</tr>
<tr>
<td>7. Comparison of Responses of Junior High School Principals and Middle School Principals to Planning Aspects Affecting Middle Schools</td>
<td>133</td>
</tr>
<tr>
<td>8. Comparison of Responses of Junior High School Principals and Middle School Principals to Aspects of Teacher Responsibilities Affecting Middle Schools</td>
<td>133</td>
</tr>
<tr>
<td>9. Comparison of Responses of Junior High School Principals and Middle School Principals to Problems Affecting Middle Schools</td>
<td>134</td>
</tr>
<tr>
<td></td>
<td>Title</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10</td>
<td>Comparison of Responses of Junior High School Principals and Middle School Principals to Aspects of Progressive Reorganization Affecting Middle School</td>
</tr>
<tr>
<td>11</td>
<td>Comparison of Responses of Junior High School Principals and Middle School Principals to Aspects of Evaluation Affecting Middle Schools</td>
</tr>
<tr>
<td>12</td>
<td>Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals not Involved in the Process to the Entire Data Gathering Instrument</td>
</tr>
<tr>
<td>13</td>
<td>Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals not Involved in the Conversion Process to Qualifications and Attitudes of Administrators Affecting Middle Schools</td>
</tr>
<tr>
<td>14</td>
<td>Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals not Involved in the Process of Conversion to Aspects of Professional Development Programs Affecting Middle Schools</td>
</tr>
<tr>
<td>15</td>
<td>Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals not Involved in the Process of Conversion to In-Service Programs Affects on Middle Schools</td>
</tr>
<tr>
<td>16</td>
<td>Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals not Involved in the Process of Conversion to Objectives Affecting Middle Schools</td>
</tr>
<tr>
<td>17</td>
<td>Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals not Involved in the Process of Conversion to Aspects of Curriculum Affecting Middle Schools</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>18.</td>
<td>Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals not Involved in the Process of Conversion to Aspects of Planning Affecting Middle Schools</td>
</tr>
<tr>
<td>19.</td>
<td>Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals not Involved in the Process of Conversion to Aspects of Teacher Responsibilities in Middle Schools</td>
</tr>
<tr>
<td>20.</td>
<td>Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals not Involved in the Process of Conversion to Problems Affecting Middle Schools</td>
</tr>
<tr>
<td>21.</td>
<td>Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals not Involved in the Process of Conversion to Aspects of Progressive Reorganization in Middle Schools</td>
</tr>
<tr>
<td>22.</td>
<td>Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals not Involved in the Process of Conversion to Aspects of Evaluation in Middle Schools</td>
</tr>
<tr>
<td>23.</td>
<td>Comparison of Responses of Junior High Principals and Middle School Principals Involved in the Conversion Process to Aspects of In-Service Programs in Middle Schools</td>
</tr>
<tr>
<td>24.</td>
<td>Comparison of Responses of Junior High Principals and Middle School Principals not Involved in the Process of Conversion to Aspects of In-Service Programs in Middle Schools</td>
</tr>
</tbody>
</table>
25. Comparison of Responses of Junior High Principals, Middle School Principals Involved in the Process of Conversion and Middle School Principals not Involved in the Conversion Process to Aspects of In-Service Programs in Middle Schools ........................................ 142

26. Comparison of Responses of Junior High Principals and Middle School Principals Involved in the Conversion Process to Aspects of Curriculum Affecting Middle Schools ........................................ 143

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### TABLE I

**COMPARISON OF JUNIOR HIGH SCHOOL PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS IN RESPONSE TO THE ENTIRE DATA GATHERING INSTRUMENT**  
(Ho 1.1)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JHS</strong></td>
<td>(364.5)</td>
<td>(496.8)</td>
<td>(168.1)</td>
<td>(41.3)</td>
<td>(9.0)</td>
<td>1080</td>
</tr>
<tr>
<td></td>
<td>295</td>
<td>540</td>
<td>182</td>
<td>54</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>MS</strong></td>
<td>(437.4)</td>
<td>(596.1)</td>
<td>(201.8)</td>
<td>(49.6)</td>
<td>(10.9)</td>
<td>1296</td>
</tr>
<tr>
<td></td>
<td>507</td>
<td>553</td>
<td>188</td>
<td>37</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>802</td>
<td>1093</td>
<td>370</td>
<td>91</td>
<td>20</td>
<td>2376</td>
</tr>
</tbody>
</table>

\[ X^2 = 40.3 \quad df = 4 \quad P = \text{significance past .001} \]

### TABLE II

**COMPARISON OF JUNIOR HIGH SCHOOL PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS TO QUALIFICATIONS AND ATTITUDES OF ADMINISTRATORS AFFECTING MIDDLE SCHOOLS**  
(Ho 2.1)

<table>
<thead>
<tr>
<th></th>
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<th>3</th>
<th>2-1</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JHS</strong></td>
<td>(42.27)</td>
<td>(60.0)</td>
<td>(29.55)</td>
<td>(18.18)</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>64</td>
<td>30</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>MS</strong></td>
<td>(50.73)</td>
<td>(72.0)</td>
<td>(35.45)</td>
<td>(21.82)</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>68</td>
<td>35</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>93</td>
<td>132</td>
<td>65</td>
<td>40</td>
<td>330</td>
</tr>
</tbody>
</table>

\[ X^2 = 1.60 \quad df = 3 \quad P = \text{not significant} \]
TABLE III

COMPARISON OF RESPONSES OF JUNIOR HIGH SCHOOL PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS TO PROFESSIONAL DEVELOPMENT PROGRAMS AFFECTING MIDDLE SCHOOLS (Ho 2.2)

<table>
<thead>
<tr>
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<th>3-2-1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(17.7)</td>
<td>(32.2)</td>
<td>(10.0)</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>33</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>MS</td>
<td>(21.2)</td>
<td>(38.7)</td>
<td>(12.0)</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>38</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>39</td>
<td>71</td>
<td>22</td>
<td>132</td>
</tr>
</tbody>
</table>

\[ X^2 = 4.73 \quad df = 2 \quad P = \text{not significant} \]

TABLE IV

COMPARISON OF RESPONSES OF JUNIOR HIGH SCHOOL PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS TO IN-SERVICE PROGRAMS AFFECTING MIDDLE SCHOOLS (Ho 2.3)

<table>
<thead>
<tr>
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<th>4</th>
<th>3-2-1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(36.3)</td>
<td>(50.4)</td>
<td>(27.82)</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>50</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>MS</td>
<td>(43.6)</td>
<td>(60.5)</td>
<td>(27.82)</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>61</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>80</td>
<td>111</td>
<td>51</td>
<td>242</td>
</tr>
</tbody>
</table>

\[ X^2 = 2.21 \quad df = 2 \quad P = \text{not significant} \]
TABLE V

COMPARISON OF RESPONSES OF JUNIOR HIGH SCHOOL PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS TO OBJECTIVES AFFECTING MIDDLE SCHOOLS
(Ho 2.4)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>41.36</td>
<td>54.54</td>
<td>14.09</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>58</td>
<td>19</td>
</tr>
<tr>
<td>MS</td>
<td>49.64</td>
<td>65.45</td>
<td>16.91</td>
</tr>
<tr>
<td></td>
<td>58</td>
<td>62</td>
<td>12</td>
</tr>
<tr>
<td>Totals</td>
<td>91</td>
<td>120</td>
<td>31</td>
</tr>
</tbody>
</table>

$X^2 = 6.64 \quad df = 2 \quad P = \text{significance at .05}$

TABLE VI

COMPARISON OF RESPONSES OF JUNIOR HIGH SCHOOL PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS TO AFFECTS OF CURRICULUM ON MIDDLE SCHOOLS
(Ho 2.5)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3-2-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>23.6</td>
<td>70.45</td>
<td>15.9</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>71</td>
<td>19</td>
</tr>
<tr>
<td>MS</td>
<td>28.36</td>
<td>84.54</td>
<td>10.09</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>84</td>
<td>16</td>
</tr>
<tr>
<td>Totals</td>
<td>52</td>
<td>155</td>
<td>35</td>
</tr>
</tbody>
</table>

$X^2 = 2.127 \quad df = 2 \quad P = \text{not significant}$
### TABLE VII

**COMPARISON OF RESPONSES OF JUNIOR HIGH SCHOOL PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS TO PLANNING ASPECTS AFFECTING MIDDLE SCHOOLS**

(Ho 2.6)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3-2-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(33.1)</td>
<td>(65.4)</td>
<td>(31.36)</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>63</td>
<td>37</td>
</tr>
<tr>
<td>MS</td>
<td>(39.8)</td>
<td>(78.5)</td>
<td>(37.64)</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>81</td>
<td>32</td>
</tr>
<tr>
<td>Totals</td>
<td>73</td>
<td>144</td>
<td>69</td>
</tr>
</tbody>
</table>

\[X^2 = 2.58 \quad df = 2 \quad P = \text{not significant}\]

### TABLE VIII

**COMPARISON OF RESPONSES OF JUNIOR HIGH SCHOOL PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS TO ASPECTS OF TEACHER RESPONSIBILITIES AFFECTING MIDDLE SCHOOLS**

(Ho 2.7)

<table>
<thead>
<tr>
<th></th>
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<th>4</th>
<th>3-2-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(30)</td>
<td>(35.9)</td>
<td>(4.09)</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>43</td>
<td>4</td>
</tr>
<tr>
<td>MS</td>
<td>(36)</td>
<td>(43.09)</td>
<td>(4.91)</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>36</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td>66</td>
<td>79</td>
<td>9</td>
</tr>
</tbody>
</table>

\[X^2 = 4.87 \quad df = 2 \quad P = \text{not significant}\]
TABLE IX

COMPARISON OF RESPONSES OF JUNIOR HIGH SCHOOL PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS TO PROBLEMS AFFECTING MIDDLE SCHOOLS (Ho 2.8)

<table>
<thead>
<tr>
<th></th>
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<th>4</th>
<th>3</th>
<th>2-1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(18.1)</td>
<td>(30.9)</td>
<td>(35.0)</td>
<td>(15.91)</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>52</td>
<td>28</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>MS</td>
<td>(21.8)</td>
<td>(61.0)</td>
<td>(42.0)</td>
<td>(19.09)</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>60</td>
<td>49</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>40</td>
<td>112</td>
<td>77</td>
<td>35</td>
<td>264</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 16.08 \quad df = 3 \quad P = \text{significance past} \ .001 \]

TABLE X

COMPARISON OF RESPONSES OF JUNIOR HIGH SCHOOL PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS TO ASPECTS OF PROGRESSIVE REORGANIZATION AFFECTING MIDDLE SCHOOLS (Ho 2.9)

<table>
<thead>
<tr>
<th></th>
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<th>4</th>
<th>3-2-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(89.1)</td>
<td>(65.9)</td>
<td>(15.0)</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>95</td>
<td>20</td>
</tr>
<tr>
<td>MS</td>
<td>(106.9)</td>
<td>(79.1)</td>
<td>(18.0)</td>
</tr>
<tr>
<td></td>
<td>141</td>
<td>50</td>
<td>13</td>
</tr>
<tr>
<td>Totals</td>
<td>196</td>
<td>145</td>
<td>33</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 50.36 \quad df = 4 \quad P = \text{significance past} \ .001 \]
TABLE XI

COMPARISON OF RESPONSES OF JUNIOR HIGH SCHOOL PRINCIPALS
AND MIDDLE SCHOOL PRINCIPALS TO ASPECTS OF EVALUATION
AFFECTING MIDDLE SCHOOLS
(Ho 2.10)

<table>
<thead>
<tr>
<th></th>
<th>JHS</th>
<th></th>
<th>MS</th>
<th></th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(26.3)</td>
<td>(18.1)</td>
<td>(5.4)</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>20</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(31.6)</td>
<td>(21.8)</td>
<td>(6.5)</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>20</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|       | 58           | 40    | 12         |       | 110    |

\[X^2 = 6.62 \quad df = 2 \quad P = \text{significance at } .05\]

TABLE XII

COMPARISON OF RESPONSES OF MIDDLE SCHOOL PRINCIPALS
INVOLVED IN THE CONVERSION PROCESS AND MIDDLE
SCHOOL PRINCIPALS NOT INVOLVED IN THE
PROCESS TO THE ENTIRE DATA
GATHERING INSTRUMENT
(Ho 3.1)

<table>
<thead>
<tr>
<th></th>
<th>In-</th>
<th></th>
<th>Not</th>
<th></th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>volved</td>
<td></td>
<td>Involved</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(340)</td>
<td>(370)</td>
<td>(120)</td>
<td>(33.33)</td>
<td>864</td>
</tr>
<tr>
<td></td>
<td>339</td>
<td>378</td>
<td>122</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(170)</td>
<td>(180)</td>
<td>(60)</td>
<td>(16.67)</td>
<td>432</td>
</tr>
<tr>
<td></td>
<td>171</td>
<td>174</td>
<td>62</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

|       | 510          | 552   | 189        | 50    | 1296   |

\[X^2 = 9.66 \quad df = 3 \quad P = \text{significance at } .05\]
TABLE XIII

COMPARISON OF RESPONSES OF MIDDLE SCHOOL PRINCIPALS
INVOLVED IN THE CONVERSION PROCESS AND MIDDLE
SCHOOL PRINCIPALS NOT INVOLVED IN THE
CONVERSION PROCESS TO QUALIFICATIONS
AND ATTITUDES OF ADMINISTRATORS
AFFECTING MIDDLE SCHOOLS
(Ho 4.1)

\[
\begin{array}{cccccc}
\text{In-} & 5 & 4 & 3 & 2-1 & \\
\text{volved} & 30 & 52 & 25 & 13 & 120 \\
\text{Not} & (17.33) & (22.67) & (11.67) & (8.33) & 60 \\
\text{In-} & 22 & 16 & 10 & 12 & \\
\text{volved} & \\
\text{Totals} & 52 & 68 & 35 & 25 & 180 \\
\end{array}
\]

\[X^2 = 7.52 \quad df = 3 \quad P = \text{not significant}\]

TABLE XIV

COMPARISON OF RESPONSES OF MIDDLE SCHOOL PRINCIPALS
INVOLVED IN THE CONVERSION PROCESS AND MIDDLE
SCHOOL PRINCIPALS NOT INVOLVED IN THE
PROCESS OF CONVERSION TO ASPECTS OF
PROFESSIONAL DEVELOPMENT PROGRAMS
AFFECTING MIDDLE SCHOOLS
(Ho 4.2)

\[
\begin{array}{cccc}
\text{In-} & 5 & 4-3-2-1 & \\
\text{volved} & (16.67) & (31.33) & 48 \\
& 18 & 30 & \\
\text{Not} & (8.33) & (15.67) & 24 \\
\text{In-} & 7 & 17 & \\
\text{volved} & \\
\text{Totals} & 25 & 47 & 72 \\
\end{array}
\]

\[X^2 = 0.49 \quad df = 1 \quad P = \text{not significant}\]
### TABLE XV

**COMPARISON OF RESPONSES OF MIDDLE SCHOOL PRINCIPALS INVOLVED IN THE CONVERSION PROCESS AND MIDDLE SCHOOL PRINCIPALS NOT INVOLVED IN THE PROCESS OF CONVERSION TO IN-SERVICE PROGRAMS AFFECTS ON MIDDLE SCHOOLS**  
*(Ho 4.3)*

<table>
<thead>
<tr>
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<th>5</th>
<th>4</th>
<th>3-2-1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In-volved</strong></td>
<td>(27.33)</td>
<td>(40.67)</td>
<td>(20.00)</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>42</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Not In-volved</strong></td>
<td>(13.67)</td>
<td>(20.33)</td>
<td>(10.00)</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>19</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>41</td>
<td>61</td>
<td>30</td>
<td>132</td>
</tr>
</tbody>
</table>

\[
x^2 = 25.12 \quad df = 2 \quad P = \text{significant past .001}
\]

### TABLE XVI

**COMPARISON OF RESPONSES OF MIDDLE SCHOOL PRINCIPALS INVOLVED IN THE CONVERSION PROCESS AND MIDDLE SCHOOL PRINCIPALS NOT INVOLVED IN THE PROCESS OF CONVERSION TO OBJECTIVES AFFECTING MIDDLE SCHOOLS**  
*(Ho 4.4)*

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3-2-1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In-volved</strong></td>
<td>(38.67)</td>
<td>(41.33)</td>
<td>(8.00)</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>42</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Not In-volved</strong></td>
<td>(19.33)</td>
<td>(20.67)</td>
<td>(4.00)</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>20</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>58</td>
<td>62</td>
<td>12</td>
<td>132</td>
</tr>
</tbody>
</table>

\[
x^2 = .26 \quad df = 2 \quad P = \text{not significant}
\]
### TABLE XVII

COMPARISON OF RESPONSES OF MIDDLE SCHOOL PRINCIPALS INVOLVED IN THE CONVERSION PROCESS AND MIDDLE SCHOOL PRINCIPALS NOT INVOLVED IN THE PROCESS OF CONVERSION TO ASPECTS OF CURRICULUM AFFECTING MIDDLE SCHOOLS (Ho 4.5)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3-2-1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved</td>
<td>(21.33)</td>
<td>(56.00)</td>
<td>(10.67)</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>55</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Not Involved</td>
<td>(10.67)</td>
<td>(28.00)</td>
<td>(5.33)</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>29</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>32</td>
<td>84</td>
<td>16</td>
<td>132</td>
</tr>
</tbody>
</table>

\[X^2 = 6.82\] \(df = 2\) \(P = \) significant at .05

### TABLE XVIII

COMPARISON OF RESPONSES OF MIDDLE SCHOOL PRINCIPALS INVOLVED IN THE CONVERSION PROCESS AND MIDDLE SCHOOL PRINCIPALS NOT INVOLVED IN THE PROCESS OF CONVERSION TO ASPECTS OF PLANNING AFFECTING MIDDLE SCHOOLS (Ho 4.6)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3-2-1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved</td>
<td>(30.00)</td>
<td>(52.67)</td>
<td>(21.33)</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>59</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Not Involved</td>
<td>(15.00)</td>
<td>(26.23)</td>
<td>(10.67)</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>20</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>45</td>
<td>79</td>
<td>32</td>
<td>156</td>
</tr>
</tbody>
</table>

\[X^2 = 4.74\] \(df = 2\) \(P = \) not significant
### TABLE XIX

COMPARISON OF RESPONSES OF MIDDLE SCHOOL PRINCIPALS
INVOLVED IN THE CONVERSION PROCESS AND MIDDLE SCHOOL PRINCIPALS NOT INVOLVED IN THE PROCESS OF CONVERSION TO ASPECTS OF TEACHER RESPONSIBILITIES IN MIDDLE SCHOOLS
(Ho 4.7)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4-3-2-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved</td>
<td>(28.00)</td>
<td>(28.00)</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td>Not Involved</td>
<td>(14.00)</td>
<td>(14.00)</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Totals</td>
<td>42</td>
<td>42</td>
</tr>
</tbody>
</table>

\[ X^2 = 0.22 \quad df = 1 \quad P = \text{not significant} \]

### TABLE XX

COMPARISON OF RESPONSES OF MIDDLE SCHOOL PRINCIPALS INVOLVED IN THE CONVERSION PROCESS AND MIDDLE SCHOOL PRINCIPALS NOT INVOLVED IN THE PROCESS OF CONVERSION TO PROBLEMS AFFECTING MIDDLE SCHOOLS
(Ho 4.8)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved</td>
<td>(17.33)</td>
<td>(40.00)</td>
<td>(32.67)</td>
<td>(6.00)</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>35</td>
<td>39</td>
<td>6</td>
</tr>
<tr>
<td>Not Involved</td>
<td>(8.67)</td>
<td>(20.00)</td>
<td>(16.33)</td>
<td>(3.00)</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>25</td>
<td>49</td>
<td>9</td>
</tr>
<tr>
<td>Totals</td>
<td>26</td>
<td>60</td>
<td>49</td>
<td>9</td>
</tr>
</tbody>
</table>

\[ X^2 = 4.88 \quad df = 3 \quad P = \text{not significant} \]
### TABLE XXI

**Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals Not Involved in the Process of Conversion to Aspects of Progressive Reorganization in Middle Schools**

(\textit{Ho 4.9})

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3-2-1</th>
<th>\textit{N}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved</td>
<td>(94.00)</td>
<td>(33.33)</td>
<td>(8.67)</td>
<td>136</td>
</tr>
<tr>
<td></td>
<td>97</td>
<td>30</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Not Involved</td>
<td>(47.00)</td>
<td>(16.67)</td>
<td>(4.33)</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>44</td>
<td>20</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>141</td>
<td>50</td>
<td>13</td>
<td>204</td>
</tr>
</tbody>
</table>

\[X^2 = .93 \quad \text{df} = 2 \quad \text{P = not significant}\]

### TABLE XXII

**Comparison of Responses of Middle School Principals Involved in the Conversion Process and Middle School Principals Not Involved in the Process of Conversion to Aspects of Evaluation in Middle Schools**

(\textit{Ho 4.10})

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4-3-2-1</th>
<th>\textit{N}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved</td>
<td>(24.67)</td>
<td>(15.33)</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Not Involved</td>
<td>(12.33)</td>
<td>(7.67)</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>37</td>
<td>23</td>
<td>60</td>
</tr>
</tbody>
</table>

\[X^2 = 9.79 \quad \text{df} = 1 \quad \text{P = significant past .001}\]
### TABLE XXIII

**COMPARISON OF RESPONSES OF JUNIOR HIGH PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS INVOLVED IN THE CONVERSION PROCESS TO ASPECTS OF IN-SERVICE PROGRAMS IN MIDDLE SCHOOLS** *(Ho 5.1)*

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3-2-1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(42.22)</td>
<td>(51.11)</td>
<td>(16.67)</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>50</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Involved</td>
<td>(33.73)</td>
<td>(40.89)</td>
<td>(13.33)</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>42</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>76</td>
<td>92</td>
<td>30</td>
<td>198</td>
</tr>
</tbody>
</table>

\[ X^2 = 3.14 \quad df = 2 \quad P = \text{not significant} \]

### TABLE XXIV

**COMPARISON OF RESPONSES OF JUNIOR HIGH PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS NOT INVOLVED IN THE PROCESS OF CONVERSION TO ASPECTS OF IN-SERVICE PROGRAMS IN MIDDLE SCHOOLS** *(Ho 5.2)*

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3-2-1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(30.71)</td>
<td>(49.29)</td>
<td>(30.00)</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>50</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Not Involved</td>
<td>(12.29)</td>
<td>(19.71)</td>
<td>(12.00)</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>19</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>43</td>
<td>69</td>
<td>42</td>
<td>154</td>
</tr>
</tbody>
</table>

\[ X^2 = 17.32 \quad df = 2 \quad P = \text{significant past .01} \]
### TABLE XXV

**Comparison of Responses of Junior High Principals, Middle School Principals Involved in the Process of Conversion and Middle School Principals Not Involved in the Conversion Process to Aspects of In-Service Programs in Middle Schools**

(Ho 5.3)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3-2-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(36.36)</td>
<td>(50.45)</td>
<td>(23.18)</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>50</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-volved MS</td>
<td>(29.09)</td>
<td>(40.36)</td>
<td>(18.55)</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>42</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not In-volved</td>
<td>(14.55)</td>
<td>(20.18)</td>
<td>(9.27)</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>80</td>
<td>111</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>242</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ X^2 = 30.104 \quad df = 4 \quad P = \text{significance past } 0.01 \]
### TABLE XXVI

**COMPARISON OF RESPONSES OF JUNIOR HIGH PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS INVOLVED IN THE CONVERSION PROCESS TO ASPECTS OF CURRICULUM AFFECTING MIDDLE SCHOOLS**  
(Ho 6.1)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3-2-1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(21.11)</td>
<td>(70.00)</td>
<td>(18.89)</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>71</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>MS Involved</td>
<td>(16.89)</td>
<td>(56.00)</td>
<td>(15.11)</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>55</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>38</td>
<td>126</td>
<td>34</td>
<td>198</td>
</tr>
</tbody>
</table>

\[X^2 = 14.56 \quad df = 2 \quad P = \text{not significant}\]

### TABLE XXVII

**COMPARISON OF RESPONSES OF JUNIOR HIGH PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS NOT INVOLVED IN THE CONVERSION PROCESS TO ASPECTS OF CURRICULUM AFFECTING MIDDLE SCHOOLS**  
(Ho 6.2)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3-2-1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(24.29)</td>
<td>(71.43)</td>
<td>(14.29)</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>71</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>NS Not Involved</td>
<td>(9.71)</td>
<td>(28.57)</td>
<td>(5.71)</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>29</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>34</td>
<td>100</td>
<td>20</td>
<td>154</td>
</tr>
</tbody>
</table>

\[X^2 = 10.69 \quad df = 2 \quad P = \text{significant past .01}\]
### TABLE XXVIII

**COMPARISON OF RESPONSES OF MIDDLE SCHOOL PRINCIPALS INVOLVED IN THE CONVERSION PROCESS AND MIDDLE SCHOOL PRINCIPALS NOT INVOLVED IN THE CONVERSION PROCESS TO ASPECTS OF CURRICULUM AFFECTING MIDDLE SCHOOL**

(Ho 6.3)

<table>
<thead>
<tr>
<th></th>
<th>Involved</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(10.67)</td>
<td>(56.00)</td>
<td>(10.57)</td>
<td>88</td>
</tr>
<tr>
<td>MS Not</td>
<td>18</td>
<td>55</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>MS Not</td>
<td>(10.67)</td>
<td>(28.00)</td>
<td>(5.33)</td>
<td>44</td>
</tr>
<tr>
<td>Involved</td>
<td>14</td>
<td>29</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>32</td>
<td>84</td>
<td>16</td>
<td>132</td>
</tr>
</tbody>
</table>

\[ X^2 = 11.42 \text{    } df = 2 \text{    } P = \text{ significant past .01} \]

### TABLE XXIX

**COMPARISON OF RESPONSES OF MIDDLE SCHOOL PRINCIPALS INVOLVED IN THE CONVERSION PROCESS AND MIDDLE SCHOOL PRINCIPALS NOT INVOLVED IN THE PROCESS OF CONVERSION AND JUNIOR HIGH PRINCIPALS TO ASPECTS OF CURRICULUM AFFECTING MIDDLE SCHOOLS**

(Ho 6.4)

<table>
<thead>
<tr>
<th></th>
<th>Involved</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Involved</td>
<td>(18.91)</td>
<td>(56.36)</td>
<td>(12.73)</td>
<td>88</td>
</tr>
<tr>
<td>MS Involved</td>
<td>18</td>
<td>55</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>MS Not</td>
<td>(9.45)</td>
<td>(28.18)</td>
<td>(6.36)</td>
<td>44</td>
</tr>
<tr>
<td>Involved</td>
<td>14</td>
<td>29</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>JHS</td>
<td>(23.64)</td>
<td>(70.45)</td>
<td>(15.91)</td>
<td>110</td>
</tr>
<tr>
<td>JHS</td>
<td>20</td>
<td>71</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>52</td>
<td>155</td>
<td>35</td>
<td>242</td>
</tr>
</tbody>
</table>

\[ X^2 = 12.65 \text{    } df = 4 \text{    } P = \text{ significant past .02} \]
### TABLE XXX

**COMPARISON OF RESPONSES OF JUNIOR HIGH PRINCIPALS AND MIDDLE SCHOOL PRINCIPALS NOT INVOLVED IN THE PROCESS OF CONVERSION TO ASPECTS OF EVALUATION AFFECTING MIDDLE SCHOOLS**

(Ho 7.1)

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4-3-2-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>JHS</td>
<td>(20.00)</td>
<td>(30.71)</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>MS Not Involved</td>
<td>(8.00)</td>
<td>(12.29)</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

**Totals**

<table>
<thead>
<tr>
<th></th>
<th>28</th>
<th>43</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>

\[X^2 = .32 \quad df = 1 \quad P = \text{not significant}\]
### TABLE XXXI

**SUMMARY OF CONTINGENCY TABLE RESULTS**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>JHS</th>
<th>MS INVOLVED</th>
<th>MS NOT INVOLVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Qualifications and attitudes of administrators</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Professional development programs</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. In-service Programs</td>
<td>0</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>4. Objectives</td>
<td>-</td>
<td>+</td>
<td>0</td>
</tr>
<tr>
<td>5. Curriculum</td>
<td>0</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>6. Planning</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7. Teacher Responsibilities</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8. Problems</td>
<td>-</td>
<td>+</td>
<td>0</td>
</tr>
<tr>
<td>9. Progressive Reorganization</td>
<td>-</td>
<td>+</td>
<td>0</td>
</tr>
<tr>
<td>10. Evaluation</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

+ = more concerned  
0 = no difference  
- = less concerned
APPENDIX F

MIDDLE SCHOOL PLAN
Middle School Plan

The Albuquerque Public Schools Board of Education in June 1973 adopted the 5-3-4 grade level organization. The Middle School is to encompass grades 6-7-8. All schools are to be on this grade level plan by the school year 1979-80.

The middle school program focuses upon education of children during the transition from childhood to adolescence and is concerned with children approximately ten and one-half to fourteen years of age. These children, currently described in the literature as transescents, need an education that is neither that of the elementary school nor of the high school. The early American junior high school has been typically an introductory high school with subject matter, scheduling practices, student activities and overall curriculum and instructional methods similar to and often identical to those of the senior high school. One of the most significant aspects of the middle school movement has been the increased emphasis on the student and his needs, academic, social, and physical. The children served by middle schools are in the middle, between childhood and adolescence and the schools serving them should be in the middle, between schools for children and high schools for adolescent education. The middle school, therefore, is a school providing a program for a range of older children, preadolescents, and early adolescents.
Since the middle school is a distinct and different entity serving a distinct and different population, its program should be neither a carbon of the high school nor a fancy version of the elementary school. These children need a program designed specifically for this age group as well as teachers who understand and are committed to working with the transescent. The middle school must avoid practices and curricula like those that now appear to characterize the traditional junior high school. Teachers in middle schools, to implement the best curriculum for these children, need a wide range of techniques and methods as well as being tolerant, warm, supportive, and able to realize how essential success is to the transescent.

Establishing a successful middle school with curriculum, student activities, and teaching techniques specifically designed for the transescent, has as the most important, the most critical factor, the development of different attitudes, different perceptions, different expectations, and an understanding as to what a middle school is by students, teachers, administration and community.

**Middle School Emphasizes**

- A child-centered success oriented program
- Learning how to learn
- Creative exploration
- A belief in oneself
- Guidance for student self direction
- Student-assumed responsibility for their own learning
- Student independence with guidance
- A flexible schedule and program
- Variable group size
- Use of team teaching
Students learning at different rates self pacing and mixed grade levels
Individualization of instruction
Crossing subject matter boundaries
Basic learning skills should be included for middle school thru a non-graded program

Junior High Emphasizes

Subject centered program
Acquiring a body of information
Skill mastery
Interstudent competition
Conformance to teacher plans
Student learning is the responsibility of the teacher
Strict teacher control
Six period day
Standard classrooms
One teacher per class
All students at the same place at the same time
All students with the same lesson
Compartmentalized and departmentalized instruction

Program

The academic program is aimed at helping the transescent to move away from dealing primarily with concrete operations into levels of abstracting, conceptualizing, hypothesizing, generalizing, and synthesizing. These children are experiencing a change in their perceptions of themselves and consequently, require many opportunities for self-direction, self-evaluation, and success in learning in order to develop a satisfactory self-concept.

The goal becomes that of flexible programs with varied exploratory activities and learning experiences based upon individual interests and needs. Team teaching, media centers, independent study, programmed learning, and curriculum that is not restricted by subject matter departmentalization but is interrelated—all characterize the middle school.
1. There are many opportunities for movement throughout the entire school program, treating learners as pre-adolescents who need frequent change in physical activity, not as little adults who must sit still all day.

2. Through a variety of approaches to learning, including problem solving, laboratory experiences, and independent study, each learner has the opportunity to deal with abstractions, develop and test ideas, and bring personal meaning into the world of concrete experiences.

3. Learning is individualized and academic competition de-emphasized to provide maximum successful experiences.

4. Community resources—people, institutions, organizations, and occupations—are utilized as fully as possible to break down walls between school and community and to make curriculum personal and real.

5. Gaming, role playing, and "what if" activities are frequently used along with a variety of teaching techniques to sharpen issues, reveal alternatives, and assess value choices.

6. Through exploratory courses, mini courses, activities and other arrangements each learner has the opportunity to explore a wide range of possible interests in the arts, occupations, leisure time activities, and in discussions of current developments and events.

7. Learning skills begun in the early grades need further instruction in the middle school and additional skills are required. Skills for continued learning include communications skills, such as listening, viewing, and reading; thinking skills such as questioning, remembering, comparing, contrasting, inferring, generalizing, hypothesizing and predicting; study skills such as reading directions carefully, locating information, using the dictionary, interpreting graphic materials, outlining, and summarizing; and critical thinking skills such as recognizing propaganda techniques and separating facts from fiction.

8. Through use of interdisciplinary team planning, cross subject theme units are carried on to foster understanding of the applicability and
interrelationships among the several learning areas. A planning team, for example, may consist of four teachers--math, science, social studies, and language arts working with 100 or more students.

9. Teaming students and teachers permits scheduling into large time blocks with the team responsible for scheduling within their block. Schedules may vary from day to day and team to team.

10. Assignment of students to classes becomes a placement in accord with individual student needs rather than a classification by age or grade. Use of large group, small group instruction in conjunction with upgraded classrooms makes scheduling easier and provides more flexibility.

11. The reduced pressures to conform to the high school or the junior high permit greater freedom and flexibility in curriculum development--there is a wider range of educational experiences earlier.

12. Intramural programs for girls and boys, which permit wider involvement and increased participation, replace the restrictive interscholastic junior high athletic programs.

13. Scheduling practices are critical to the success or failure of a middle school program and have done much to contribute to the problems and criticisms associated with the transitional junior high school. There needs to be a gradual transition from the self-contained elementary classroom to the departmentalized high school. Students need to be in blocks of time, not in a confining six period day.

14. The curriculum includes a wide range of exploratory learning both within the required fields and in a variety of electives.

15. Evaluation of the program and of student progress is a continued operation. No program can afford to solidify into senility and this is especially true of the middle school. Student evaluation does not make use of periodic comprehensive competitive examinations but is also a continuous appraisal of individual performance.
Staffing

Unless teachers and administrators are fully in accord with and thoroughly understand the middle school philosophy, concept, program functions, and students, the school will not succeed. The teachers needed for the middle school prefer to work with the transescent; are trained in the ability to diagnose and prescribe as well as to develop and adapt materials; have a good background in the psychology of the early adolescent; are able to modify, adapt, and develop curriculum for the middle school; like and care about children of this age; have strong guidance orientation; are trained in imaginative, creative thinking; understand tests and measurement and theories of learning; understand and use a variety of teaching techniques; and have a knowledge of trends and methods such as team teaching, individualized instruction, independent study, mini courses, and fused curricula.

Administrators for middle schools should have all of the competencies, characteristics, and training requisite for middle school teachers and; according to research, need advanced training in curriculum and instructional techniques.

The middle school movement has shown a dramatic growth in the past ten years, starting with a few hundred middle schools in the early 1960's and reaching a total estimated at over 3,000 today--of an estimated 8,000 schools between elementary and high school in the United States. The concept of the middle school is one in which there is a new
element interposed between elementary and secondary, a school in the middle with a program specifically planned for the transescent and with teachers and principals especially trained to work with this age group.

The conversion to a middle school occurs over a period of time. This is not something that will be accomplished in a week, nor a month, nor probably within a year. A reasonable expectation is that this will reach fruition in a length of time directly proportionate to the development and acceptance of these goals by those involved.

**TASK FORCE MEMBERS**

John Mondragon
Jack Bobroff
Charles Barnard
Jewell Brown
Pat Christman
Wayne Cozzens

Ralph Dixon
Allen Ferrel
Bud Howard
Joan Howard
Levi Spring
Larry Taylor
BIBLIOGRAPHY

A. Books


B. Periodicals


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... "The Middle School in Contemporary Society," Theory Into Practice, 7:120-122, June, 1968.

Heironomus, N. C. "Is this the Earliest Known Junior High School?" Clearing House, 33:518, May, 1940.


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C. Theses, Dissertations, Monographs, Bulletins, and Circulars Published and Unpublished


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PERSONAL DATA

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EDUCATION

Huston-Tillotson College, Austin, Texas
B.S. in Elementary Education, 1953
Major: Elementary Education
Minor: Art Education

Prairie View A. & M. College, Prairie View, Texas
M. Ed. in Education 1961
Major: Elementary Education
Minor: Art Education

The University of New Mexico, Albuquerque, New Mexico

PROFESSIONAL EXPERIENCE

Elementary Teacher, Nenahnezad Boarding School, Bureau of Indian Affairs, Fruitland, New Mexico, 1956-1964.

Education Specialist, Bureau of Indian Affairs, Shiprock, New Mexico, 1964-1967.

Employee Management Cooperation and Development Specialist, Bureau of Indian Affairs, Gallup, New Mexico, 1967-1968.

Classification and Wage Specialist, Bureau of Indian Affairs, Gallup, New Mexico, 1968-1969.
PROFESSIONAL EXPERIENCE (Continued)

Training Officer, Veterans Administration Regional Office, Albuquerque, New Mexico, 1969-1975.

RELATED EDUCATIONAL ACTIVITIES

School Evaluation, Member of three North Central Association School Evaluation Teams since 1973; departments evaluated: Social Studies and Art.

Member of Vocational Rehabilitation Board, Veterans Hospital, Albuquerque, New Mexico.

Member of Governor's Committee on Employment of the Handicapped, State of New Mexico, 1973-1975.

Member of Governor's Committee on Environmental Control, State of New Mexico, 1974.

PROFESSIONAL MEMBERSHIP

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