

INTERDISCIPLINARY PHYSICAL EDUCATION IN  
KANSAS MIDDLE SCHOOLS

by

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## ABSTRACT

The Middle School Physical Education Curriculum Questionnaire (MSPECQ) was answered by 78 public school personnel from 32 accredited Kansas middle schools to determine the current status of physical education in Kansas middle schools and the difference in attitudes between administrators, team leaders, and physical education instructors toward an interdisciplinary physical education curriculum.

The current status of physical education curricula in Kansas middle schools in 1983 was described as follows. All responding schools had a gymnasium and an outdoor play area. Nearly all disseminated lesson information by units in classes which were required to meet all year.

A substantial majority organized their physical education curriculum independent of other school subjects, meeting every other day for the same time span each period; had coed classes; reported skill development continuous grade level to grade level; and supported their programs by the general school budget.

Nearly half who reported having interdisciplinary programs chose health as its counterpart. Principals were responsible for curriculum development half of the time while principals and physical education instructors were responsible the other half. In addition, nearly half used the same teacher in a class design where separate grade levels were involved, while the other half

used one teacher for a combination of grade levels.

The difference in attitudes between administrators, team leaders and physical education instructors was determined using ANOVA and indicated that although there was a significant difference between the attitudes of principals and physical education instructors on two objectives, "Attitudes Toward Balanced Attention to Personal Development", and Attitudes Toward Effective Use of Related Knowledge", all respondents mostly agreed that the objectives were met in their schools. All respondents mostly agreed that the objectives "Skills of Continued Learning", and "Instructional Systems Focused on Individual Progress" were met in their middle school physical education curricula.

All respondents consistently held that they were not sure that the middle school objectives, "Instructional Systems With Many Curricular Options", "Instructional Systems With Individual Instruction", "Interdisciplinary Team Arrangement For Evaluation", or "A Wide Range of Exploratory Activities" were met in their physical education curricula.

All respondents were consistent in mostly disagreeing that the middle school objectives "Interdisciplinary Team Arrangement For Instruction", or "Interdisciplinary Team Arrangement for Evaluation" were met in their physical education curricula.

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## CHAPTER 1

### Introduction

With the onset of declining elementary enrollments, program cutbacks, criticism of junior high schools, and proposed elementary school closings, some cities in Kansas saw the opportunity to try a "new" organization and curriculum for transescent aged youth, that is, students in middle schools. James Bird (7), in considering an appropriate curriculum for budding adolescents explained,

"Philosophically, the charge was to examine the needs, interests, and desires of the individual student and from such analysis design an educational environment which would elicit the greatest growth increment possible within the capabilities of that particular student."

An interdisciplinary team of four or five teachers (such as English, math, science, and social studies) would design and implement the daily educational experiences for this new process of building a middle school curriculum. "Integrated educational experiences offered an attempt to decompartmentalize education by recognizing that life's experiences cross subject matter parameters." (7)

Physical education was either continued as a separate entity, or was teamed with other "academic" subjects, such as science, history, or foreign language, for example. Interdisciplinary physical education was one way to show the "academic" community that physical education had some "academic" value as well as physical value. It was an unique experience, because it repre-



sented a potential for the highest quality of learning, combining firsthand experiences and book knowledge.

Physical educators have complained that their subject is not recognized as an integral portion of the "academic" subjects, but instead it has been considered an exploratory lesson, an extra long recess, or a subject to be cut back when time is short. There is a good reason for concern, since many school board members, administrators, other faculty members, and parents do not perceive physical education as possessing the content or capacity for equal status in the "academic" community.

This does not mean that physical education should be only verbally oriented, (reading and writing), but should be a combination of the two types of learning, mental and physical. Obviously, physical education is basically an activity program, and therein lies its unique contribution as a school subject and a teaching tool. Physical education teachers can show the "academic" community that young people using their mental capacities along with their physical abilities is a positive step towards happy, healthy, and wholesome living by promoting "academic" achievement within physical education classes.

#### Statement of the Problem

The purpose of this study was to determine the current status of physical education curricula in Kansas middle schools and the differences in attitudes between administrators, team leaders, and

physical education instructors toward an interdisciplinary physical education curriculum.

### Scope

Seventy eight public school personnel served as subjects for this study. One (1) administrator, one (1) team leader, and two (2) physical education instructors from each of the 43 accredited Kansas middle schools answered the Middle School Physical Education Curriculum questionnaire concerning interdisciplinary physical education curriculum. All of the middle schools listed in the Kansas Education Directory in 1981-1982, which was published by the Kansas State Department of Education, were contacted.

### Assumptions

The design of this study was based on the following assumptions: 1) the sample of the total population was representative of the total area, 2) all Kansas middle schools were assumed to include some type of physical education program within their curriculum, and 3) administrator's, team leader's, and teacher's opinions were assumed to be fairly honest and unbiased.

### Limitations

The design of this study indicated three limitations at this time. They were: 1) the study involved only Kansas middle schools, 2) middle school concepts were new to Kansas, therefore presenta-

tions and understanding of these concepts might have been obsolete in some areas, and 3) sample groups were not represented by the same schools.

### Significance of the Study

The study of interdisciplinary physical education curricula in Kansas middle schools is significant not only for physical educators in Kansas, but for those involved with middle school curriculum development in Kansas. Bird (7) has contended that with the increase of accountability pressuring school administrators and faculties, the need to look at types of programs which further the "academic" level of individual students increases. Hopefully, by looking at an interdisciplinary physical education program, many issues may be addressed, such as: 1) change is necessary for the development of better programs, 2) the planning, implementing and evaluating of such programs, 3) coordinated planning time, 4) facilities conducive to this type of program, 5) types of interdisciplinary units presented, and 6) outside resources available to help with those units.

"No one can dispute the tremendous importance of physical activity in childhood as the source of knowledge of the world around us," according to Bird (7). The need for teaching a body of knowledge in physical education appears indisputable also. If this can be done through a multi-subject area type of program, then the idea of life's experiences crossing and relating to each other

can be better understood.

### Definitions

**Administrator:** The administrator could have been the principal, vice-principal, associate principal, assistant principal, curriculum coordinator, or activities coordinator.

**Interdisciplinary Curriculum:** An interdisciplinary curriculum is a group or sequence of courses in which the field of study is made up of different subject areas relating a certain topic or unit.

**Interdisciplinary Team:** An interdisciplinary team is a combination of teachers from different subject areas who plan and conduct instruction for particular groups of students. The aim of this group is to promote communication, coordination, and cooperation between students, teachers, and different subject areas.

**Middle School:** A middle school is a school which combines into one organization certain intermediate grades, usually 7-8 and possibly 5 and/or 6, which offers a program of organization, curriculum, and instruction that is a combination of some elementary and some secondary school program components. Above all, it is expected to better serve the expressed needs, purposes, and desires of the pre-adolescent.

**Physical Education:** Physical education is the study and planned educational application of the cognitive, affective, psychological, motor, and sociological principles of and related to purposeful physical activity, be it play or work. As a discipline it is concerned with the mechanics of human movement, stress, sports, exercise, dance, the immediate and lasting effects of physical activity, the historical and aesthetic aspects of physical activity, and the necessity of team and individual interactions in games, sports, and dance.

**Physical Education Instructor:** A physical education instructor is a member of the school faculty who teaches physical education.

**Team Leader:** A team leader was a member of the unified studies team who was "elected" to lead the groups. "Election" could have been by the group itself or by an administrator.

## CHAPTER 2

### REVIEW OF LITERATURE

#### Introduction

The review of literature includes the development and description of a middle school, an overview of the Kansas requirements of middle school accreditation and teacher certification, and the development of the physical education curriculum in America.

The middle school in Kansas is still in a developmental stage; so the concepts of how it began, and how it is changing, are documented in literature, but the concepts of evaluation have not been dealt with yet. It will be important to look at the middle school student, curricula, team teaching, interdisciplinary units, and how physical education fits into this type of program.

The Kansas requirements for middle school accreditation and teacher certification will be reported as stated by the Kansas Department of Education and the Kansas Legislature. It is important to know that these requirements have continually changed and could, therefore, be outdated by the time the next study of middle schools is completed.

Physical education itself has had a long history of development, change, and continual evaluation. Because of this, the review will only concern the development of physical education curricula from the time the pilgrims landed in America to the present to relate how this process may have influenced the contents of middle school

physical education curricula.

### The Middle School

The middle school model for intermediate education evolved from the earlier programs of the junior high school. Although the expressed goals of the junior high and middle school are similar, the middle school represented a new and different way of working with emerging adolescent youth.

Originally, the junior high school was established to imitate the curriculum of the senior high school. By contrast, the middle school was established as a school with its own special identity and organization. "The social changes of the 1960's and 1970's such as fluctuating enrollments, desegregation, and other factors, provided the right opportunities for educators to launch this new school form." (41) Because of its unique structure, the middle school could achieve the early junior high school's goals.

### Characteristics of the Middle School

The current concept of the middle school began developing in the 1950's. The common organizational patterns we know today had come into evidence by 1963. "Studies done from 1963 to 1974 indicated a movement away from the traditional six-three-three organization for school district organization. The two most common patterns of grade organization were the three year unit encompassing grades six through eight and a four year unit including grades five

through eight." (29)

In a study of Kansas middle schools by Thomas Erb (14), middle schools mainly contained grades six through eight (40%) and grades five through eight (23%). However, the middle schools showed more diversity of grade level organization, as one fourth of them were either seven and eight or seven through nine schools.

The middle school educational program focused on the period of growth and development occurring between childhood and adolescence and was characterized by:

a home base and teacher for every student to provide continuing guidance and assistance;

a program of learning opportunities offering balanced attention to personal development, skills of continued learning, and effective use of appropriate knowledge;

an instructional system focused on individual progress, with many curricular options and individualized instruction;

the use of interdisciplinary team arrangements for cooperative planning, instruction, and evaluation; and

a wide range of exploratory activities. (18)

"The primary functions of the middle school were based upon the assumptions of complete personalization of purposes, of criteria for achievement, and of instructional procedures for the emerging adolescent." (11) In addition, it was necessary to

"...kill some 'sacred' cows by realizing that every class did not have to meet every day for the same length of time, that teachers might not necessarily be most effective in their major areas,



and that it was all right to take a new look at all of the teaming possibilities, and scheduling possibilities using blocks of time for each team." (17)

The success of these primary functions was dependent upon creative involvement and cooperation of administrators, teachers, parents, students, and community resources.

"Successful middle schools, regardless of their grade structures or methods for organizing students, are responsive to the wide range of characteristics and needs of 10 to 14 year olds." (8) Bondi (41) in 1978 wrote that "at no time in the schooling of our children do we find greater differences in the physical, social, emotional, and intellectual development of children." In any given grade in middle school (fifth through eighth grades), some children seem fully developed physically, some are at an in between stage, and others look as if the progress of physical maturation has not started. At the same time, children of the same age can be far apart in intellectual and social development.

To complicate matters, social, emotional, and intellectual levels of maturity do not always keep pace with physical development in any given child. "Although there is no evidence that problems of early adolescence are any more insurmountable than they used to be, facts show that early adolescence begins sooner these days. Since 1830, primarily because of better nutrition, children have matured four months earlier with every passing decade." (8) Exposure to television has also sped their social development and knowledge of the world.

According to Dr. Brazee (8), "the middle level school curriculum should reflect the research data that show how pre and early adolescents are different from younger and older youngsters." They should be creative in the presentation of subject matter, using interdisciplinary units, thematic units, and an experienced-based curriculum and not emphasizing the same content and lecture-assignment-recitation strategy found in high school.

"Topics such as the nature of adolescence itself, its manifestations in various cultures, sex, and sex roles, rules and authority, competition and cooperation and conflict resolution were usually mentioned only as possibilities for brief minicourses. These topics should be explored throughout the curriculum." (3)

In addition, these topics must be developed to give students the opportunity for useful service and "real world" experience.

"Achieving a balance between the demands of general education and the function of exploration for the emerging adolescents, the needs and desires of pupils, and disciplines, is an important concern to educators responsible for program development." (11) The development of interdisciplinary learning experiences seems to be one of the most effective means by which curriculum might be developed. Such experiences are expected to better serve the expressed needs, purposes, and desires of the clientele which are in many cases more global in nature than those which can be met if learning is that strictly related to individual disciplines.

The interdisciplinary team is a combination of teachers from

from different subject areas who plan and conduct instruction for particular groups of pupils. The aim of interdisciplinary teaming is to promote communication, coordination, and cooperation among subject matter specialists. According to Jon Wiles and Joseph Bondi (41), the five basic premises of interdisciplinary teaming were: 1) it is a way of organizing the school in terms of curricula, instruction, and resources, both human and material, 2) disciplines do not lose their integrity through a team approach. Rather, the interdisciplinary approach clearly demonstrates the uniqueness of each discipline's contribution to the solution of problems, 3) the interdisciplinary approach is ideally suited to the middle school student because it provides many and varied opportunities for success, exploration, and growth; 5) all disciplines need not combine for all interdisciplinary teaming.

In addition, Wiles and Bondi (41) felt that there were four essential requirements for the interdisciplinary units of instruction to be successfully developed. They were: "1) a staff committed to the interdisciplinary approach as a means of serving the needs of students, 2) positive interpersonal and professional relationship among all members of the staff, 3) common team planning time, and 4) sufficient planning time."

"Good middle schools deemphasize the acquisition of subject matter and emphasize the learning strategies students will need for the rest of their lives." (8) (Examples of interdisciplinary topics

are imagination and discovery, bicentennial, sports and you, the concrete jungle, international trade, rural life, you are what you eat, be it ever so humble, take me out to the ball park, and the Olympics.) Young people will identify with these types of programs because they allow them to explore and feel the forces around them.

"Jerome Bruner relates that in the schools today there is very little organized cooperative activity in which students can really interact with each other. Most joint enterprises are extracurricular-social, political, or artistic--and do not really challenge the fiber of individuals." (43)

Physical education, however, allows not only for this organized cooperative adventure, but for the way to satisfy all of the characteristics of a middle school.

"Physical education was made for youth. It is the one subject in the curriculum that appeals to large numbers of children chiefly because of the chance to run, jump, dance, and express themselves through movement." (43) A good physical education program is one that is conceived as an integral part of the total educational effort of a school. "It is well rounded to provide experiences that will stimulate growth and development in the physical, psychomotor, cognitive, and affective domains." (4)

Physical education is unique because it represents a potential for the highest quality of learning, combining firsthand experiences and book knowledge. One way of fitting physical education into the

interdisciplinary team plan is to relate it to foreign language thus making it a multicultural program. It can be oriented toward the enrichment of youth through the preservation of cultural diversities. This concept has the advantage of holding the student's interest, as well as developing strong school, community, and family bonds. Although other types of interdisciplinary physical education programs were found in review of literature, such as "physical education and metrics" (44), "physical education and writing" (9), and "physical education and history" (41), there were three concepts that should be present in any middle school physical education program. According to James Bird (7),

"No child should fear coming to the gymnasium, failure occurs when all the options to success have been removed, and finally, if enjoyment of physical activity is a worthwhile goal, then it seems appropriate to have students participate in those activities which provide for them the greatest amount of vertigo, catharsis, fitness, aesthetic or social experiences."

During the more than 4,000 year history of physical education, almost every age and race has agreed on the importance of physical education, although the emphasis has varied in degree and kind of exercise. Well rounded programs are necessary to maintain fitness and hopefully carry its benefits, concepts, and ideas into adult life. Middle schools allow the objectives to meet these goals of well rounded programs to expand through the avenues of interdisciplinary teaming.

### Middle School Curriculum

The roots of the middle school curriculum field go back to the theories of Johann Friedrich Herbart (1776-1784). He taught that learning required an orderly attention to the selection and organization of subject matter. Definitions of curriculum as "consisting of all experiences conducted under school auspices" (25) became established in the 1930's. They were generally not questioned until the 1960's. In 1966, however, Hollis Caswell (43) called for three important considerations: "1) the establishment of a consistent relationship between general goals and specific objectives to guide teachers, 2) a sound sequence of continuity in the curriculum and 3) the provision for balance in the curriculum." By the 1970's, a genuine controversy existed concerning the definition of the term. The predominant current view of curriculum encompasses both "the operational statement of the school's goals and the operational consequences of the school's goals." (25) In short, "curriculum was the plan for instructional action based on a set of decisions intended to be reflected in the actions of learners." (25)

The requirements for the middle school curriculum seemed to intensely echo the factors affecting curriculum planning in general. For example:

"...personal and group factors, such as growth characteristics, health status, pupil interests, individual capacities, and the general requirements of society..." (43) "in relation to the middle school

functions of complete personalization of purposes, criteria for achievement and organizational procedures for the emerging adolescent" (11); "...school factors such as education objectives, local curriculum research, organization of total school curriculum in terms of specifics, such as time allotment and the scheduling of activities, and the availability of qualified staff, resource personnel, equipment, and facilities..." (43); "in relation to interdisciplinary teams in charge of the specifics of school curriculum, such as time allotments in blocks of time, rotating students for various activities, qualified staff making up the unified team, using anyone in the building or community for resource personnel, and using all available space for small and large group activities" (11); and "...non school factors such as influence of government bulletins issued by state and federal agencies, state and local courses of study, parental and community wide opinion, and evidence of significant curriculum trends..." (43); "in relation to extreme involvement of parents and community including their opinions and talents, and the extreme use of all types of activity-oriented programs." (11)  
 (Notice that the influence of government agencies has not really affected the middle school in Kansas since it is so new.)

The middle school curriculum is definitely a domain that can be characterized by expansion. Hopefully it would contain programs which would provide awareness of human problems, produce students who could perform activities that contribute to what they determined was successful living, and perpetuate individual and democratic growth by having students resolve problems that inhibited meaning and direction in their lives; all of which are conducive to middle school curricula.

Accreditation Regulations Applicable to  
Kansas Schools and School Districts

Since middle schools in Kansas are so new, the Kansas State Department of Education does not have a separate section for accreditation, certification, or curriculum requirements. Instead, regulations to be followed are listed under Junior High Schools, 91-31-13.

"91-31-13. Accreditation regulations applicable to junior high schools. (a) Organization. (1) A junior high school shall be organized to include at least two consecutive grades and may include grades six through nine. Any closing or change in the use of a school building shall be conducted in compliance with the provisions of K.S.A. 1982 Supp. 72-8213.

(b) Staff.

(2) Teachers. All teachers shall hold valid certificates with the appropriate endorsements for their level of assignment. (Authorized by Article 6, Section 2 (a) of the Kansas Constitution; effective May 1, 1983.)" (28)

In addition, length of the school year and the school day were covered in section 91-31-6. Administration.

"91-31-6. Administration

(p) Length of School Year. The length of the school year shall be at least 180 days taught or 1080 hours taught as provided by K.S.A. 1982 Supp. 72-1106 (a) (2).

(q) Length of School Day. The length of the school day shall be at least six hours except as provided by K.S.A. 1982 Supp. 72-1106. (Authorized by Article 6, Section 2 (a) of the Kansas Constitution; effective May 1, 1983.)" (28)

Note that physical education requirements for the junior high school level (as well as any other subject area) were not outlined



in Bulletin 701 of the Kansas Department of Education. The only requirements listed were for elementary schools, which said,

"91-31-14 1(g) The curriculum of an elementary school shall meet the provision of K.S.A. 72-1101 and 72-1103 and requirements of the state board. Each elementary school shall have an organized physical education program. (Authorized by Article 6, Section 2 (a) of the Kansas Constitution; effective May 1, 1983.)

93-31-14c. (5) (e) Physical education. Inter-scholastic team practice shall not be conducted during physical education classes. (Authorized by Article 6, Section 2 (a) of the Kansas Constitution; effective May 1, 1983.)" (28)

and for high schools, which said:

"91-31-12h. (5) one unit of physical education which may include one-half unit of health, safety, first aid, or physiology. This requirement shall be waived:

(A) upon a statement by a licensed physician that a pupil is mentally or physically incapable of participation in a regular or modified physical education program; or

(B) when the requirement is contrary to religious teachings of the pupil..." (28)

#### Development of Physical Education Curriculum

Historical studies are important to any discipline in that they attempt to provide new insight and understanding for planning the future. Therefore, an overview of the history of physical education curricula in America will be included in the review of literature in order to predict the content of middle school physical education curricula.

### The Early Years (Pre 1900)

The early colonists brought with them the desire to play and certain religious tenants which were a hindrance to the development of sport, recreation, and free play. The dominance of one or the other varied in accordance with circumstances of the times. There was, however, little formalized physical education in the schools.

In the 18th and 19th centuries when physical education was evolving in the United States, there were many international forces influencing the formulation of curricula.

"The Puritans, with their strong religious guidelines, settled in Massachusetts Bay Colony and other parts of New England. The Dutch brought their love of skating and sledding to the area that is now New York. The Germans brought with them their gymnastics and the Turnverein; the Swedes and the Danes continued to teach their version of gymnastics and the scientific aspects of physical education. The British colonists imported their sports traditions and the French their appreciation for the aesthetic, their rhythmic calisthenics, and their dances." (16)

In the middle of the 19th century, educational institutions began to take physical education seriously. "In 1837, Catherine Beecher included physical education in the curriculum at the Hartford Female Seminary." (16) From the 1850's on, events relating to physical education were occurring so rapidly that they can be categorized by the decades in which they occurred.

Although from 1850-1859, Boston led the way requiring daily physical education classes for school children, it is hardly the case today. Requirements for middle school physical education

vary as much as nine weeks, 18 weeks, one year, or two years.

"1860-1869. Education by means of play was stressed in the Kindergarted School in Boston. Amherst College, under the leadership of Edward Hitchcock, required physical education for all students. Dio Lewis established the Normal Institute for Physical Education, which held coed preparatory classes. Amy Morris Homan established the first preparatory classes for young women. The Morrill Act creating land-grant colleges was passed in 1862 whereby an institution must agree to teach military tactics and conduct standard ROTC programs." (16)

As in 1866 when California passed the first state law requiring physical education in the public schools, Kansas currently has physical education as part of the curriculum requirements for middle schools. (Amounts vary from school district to school district at this time.)

"1870-1879. Physical training for military purposes VS a return to gymnastics. Dr. Dudley A. Sargent of Harvard led the battle for gymnastics. This was the decade of building, new gymnasiums, programs, and leaders.

1880-1889. This was a developmental period for physical education. The American Association for the Advancement of Physical Education (forerunner of the AAHPER) was founded. The Christian Workers School was founded in Springfield, Massachusetts, in 1885. This later became the International YMCA College and then Springfield College. They inaugurated the first professional education course for the preparation of physical education teachers in this decade." (16)

Most colleges and universities in the state of Kansas today still have courses which prepare teachers for teaching physical education. They are usually divided into elementary and secondary levels. The trend to have a separate level for middle school is apparent in some of the schools of education, but not usually in

the physical education departments.

"1890-1899. The 'Battle of the Systems' occurred. Calisthenics, formality, command-response, mass activity, drill, and marching were found in most programs where physical education had been formally recognized. Amateur Athletic Union was founded, and the American Physical Education Review was first published. Fourteen state universities established departments of physical education: Illinois (1894), Iowa (1896), Indiana (1890), Kansas (1893), Michigan (1894), Ohio (1897), Oregon (1894), Utah (1894), Washington (1894), and Wisconsin (1899)." (16)

#### The Formative Years (1900 to W.W. II)

Unlike the period of history 1900-1909 where sports, inter-school competition, and stress on winning took on such importance that educational outcomes were often obscured, today's middle school deemphasizes "winning at any cost", intense competition, and awarding of medals to first place teams. This is done through intramurals instead of interscholastic sports, advisory base activities related to intramurals with the emphasis on everyone participating, and awarding ribbons or whatever to everyone who participated rather than just to those who took first place.

As preached in the history from 1910-1919, mass participation and recreation are still emphasized. "A game for every boy and girl and every boy and girl in a game" is even more the slogan for the middle schools today. In addition the lack of programs which encouraged development of strength, endurance, and skill during this time are contrary to today's program where all areas of fitness are

included.

During the 1920's to 1929, physical education became fairly eclectic. Gymnastics, military drills, motivating and true-to life situations found in sports, dance, and rhythmic gymnastics were part of the program. Educators felt that there was still one area lacking: health education. This area today is still lacking in some middle schools, where in others it is taught as a separate subject, is part of the science curriculum or is part of the physical education program. In short, health education is an area of concern.

"1930-1939. Great stress on analyzing goals, aims, and objectives. The Great Depression was detrimental to the development of physical education programs. The recreational facilities constructed, repaired, or prepared by the WPA or PWA programs helped considerably to meet the needs of the increasing school population. Many playgrounds and athletic fields came into being under these programs. Standards were raised. Professional preparation improved. Physical education began to be accepted as a necessary and vital part of general education." (16)

Middle schools today, as in the 1930's, stress goals, aims, and objectives. They are a very important part of curriculum development in general, and specifically to physical education, since more emphasis on accountability is needed.

"1940-1946. Physical Education had one objective--to prepare the nation for war. Combative sports, calisthenics, vigorous competition, and correcting remedial defects constituted the program until 1946." (16)

### The Current Years (Post W.W.II to present)

From 1946 on, physical education continued to be an area of expansion, growth, and improvement, especially with the race for space in the foreground. Emphasis on fitness infiltrated the physical education curriculum. Even Former President John F. Kennedy stressed the need for better fitness in his "Soft American" speech. (29)

In addition, new games, philosophies, values, and curricula were continually being questioned with the hopes of further improving the field of physical education. By 1972, Title IX of the Amendments Act of 1972 required equality of programs for men and women. This aspect is still obvious in many middle school programs.

Since the introduction of sport to America in the 19th century, formalized instruction in 1823, and attempts to prepare teachers of physical education, American physical education has undergone many changes. Programs have changed from improving youth for war to the development and maintenance of a healthful populace.

### Summary

The emergence of the middle school has resulted in a renewed interest in the developmental characteristics of pupils between early childhood and adolescence. These common tasks of growing represent one planning base for conceptualizing the intermediate

school program; a curriculum reflecting a continuous unity of physical, mental, and social development.

"A common description of the middle school curriculum is that it must be exploratory in nature." (16) Middle school organization separates exploratory courses from the arts. The arts, when integrated with the whole curriculum can spark wide-ranging investigation and generate exciting interdisciplinary study. Physical education contains many potentialities for this type of curriculum. Werner (40) exemplified it as, "Dan Young's cooperation with the math, art, and language arts teachers to enhance student learning through self-designed games is an excellent example of this process." The physical education teacher helped them established specific rules for the game. The language arts teacher helps them write it up. The math teacher helps them draw scale drawings of boundaries, etc., and the art teacher helps them illustrate their game.

Don Hellison (24) summed the current philosophy saying, "What is needed now, at a time when change is almost commonplace and traditional values are being questioned on several fronts, is a united effort by the profession to define, adopt, and implement an approach to physical education that truly meets the needs of young and old, skilled and awkward, male and female." This change, however, is slow to progress, as seen by the lack of separate rules

and regulations established by the Kansas State Department of Education and the Kansas Legislature.



## CHAPTER 3

### Procedure

#### Research Design

The purpose of this study was to determine the current status of physical education curricula in Kansas middle schools and the differences in attitudes between administrators, team leaders, and physical education instructors toward an interdisciplinary physical education curriculum.

A descriptive survey was used as the research design for this study. The Middle School Physical Education Curriculum Questionnaire using a multiple choice (Likert) scale was mailed to administrators, team leaders, and physical education instructors in Kansas middle schools for data analyzing the present status and the potential future of the middle school physical education curriculum as assessed from the perspectives of three different orientations of school personnel.

#### Selection of Subjects

Seventy eight public school personnel from 43 Kansas middle schools served as subjects for this study. One administrator, one team leader, and two physical education instructors from each of the 43 accredited Kansas middle schools listed in the Kansas Department of Education Directory for 1981-1982 had the opportunity to answer a questionnaire concerning interdisciplinary physical

education. The subjects were organized into three groups, consisting of 32 administrators, 7 team leaders, and 39 physical education instructors.

### Instrument

The Middle School Physical Education Curriculum Questionnaire (MSPECQ) was developed by the author to assess the current status of physical education curricula in Kansas middle schools and the differences in attitudes toward an interdisciplinary physical education curriculum.

#### Content of The Instrument

The 32 item questionnaire, (a copy of which may be found in Appendix A), consisted of three sections. Descriptions of the contents of each section were as follows:

Section I. Demographic Information. Items listed in this section were designed to give nominal data which would be helpful in the treatment of descriptive differences between the groups of respondents. The following information was requested of each respondent: sex, age, years of teaching experience, years of administrative experience, and highest academic degree held.

Section II. Survey. This section listed 15 multiple-choice items which requested the opinions of the respondents on their current physical education curricula.

Section III. Attitude Assessment. This section listed 10

Likert scale items which requested the opinions of the respondents on interdisciplinary physical education curricula.

Although the items on the questionnaire were identical for all subjects, for ease in grouping the data, the questionnaires were color coded in the following manner:

White Questionnaire--Administrators

Green Questionnaire--Team Leaders

Blue Questionnaire--Physical Education Instructors

There was no attempt to identify the subjects other than for the particular group he/she represented. Subjects were informed that neither they, nor their school, would be identified.

#### Validity of Instrument

The questionnaire used in this study was designed to secure administrator, team leader, and physical education instructor opinions of interdisciplinary physical education curricula in Kansas middle schools. In developing the questionnaire, a wide variety of questions were presented. In addition, a team of experts evaluated the survey for clarity, conciseness, and accuracy. This team of experts consisted of Dr. Marlene Mawson, Ph.D., Dr. James LaPoint, Ph.D., and Dr. Becky Donnatelle, Ph.D.: all of whom were professors in the Department of Health, Physical Education and Recreation at the University of Kansas during the Fall semester, 1983. This team evaluated the questionnaire by rating each item good, fair, or poor. Any item which received two poor ratings was

removed or rewritten until it was satisfactory. Thus, content validity was accepted for the MSPECQ Questionnaire.

### Reliability of Instrument

Upon completing the development and evaluation of the survey, reliability of the questionnaire was established by a pilot study of 48 subjects done with twelve middle schools; three from each of the following: Missouri, Oklahoma, Colorado, and Nebraska. Administrators, team leaders, and physical education instructors from these schools were asked to complete the same questionnaire. (See Appendix B for a copy of the cover letter). Section I and Section II relied on the credibility and truthfulness of the subjects to give accurate information. Whereas, the composite scores from Section III were grouped according to personnel expertise of the subject; and using the physical education instructors results as the criterion variable, the scores of administrators and team leaders were grouped together and compared with physical education instructors to determine the inter correlation of the pilot subjects and to establish a reliability coefficient for the MSPECQ Questionnaire.

Using the Spearman Brown Split Halves method, the overall reliability for Part III of the MSPECQ Questionnaire was determined to be .88 among middle schools administrators, team leaders, and physical education instructors.

### Measure Procedures

A cover letter, (a copy of which is located in Appendix C), accompanied the MSPECQ Questionnaire. It explained the purpose of the study and requested the participation of the people to whom it was addressed; the administrator, team leader, and physical education instructors.

The questionnaires were mailed to all 43 Kansas middle schools on September 1, 1983. Each mailing, which was distributed by an administrator of the school, included a cover letter, four copies of the questionnaire, and a self-addressed, stamped envelope for convenience in responding. Each person was asked to give 15-20 minutes of his/her time (as stated in the cover letter) to complete the questionnaire and to return it to the researcher by September 10, 1983.

### Collection of Data

Subjects were asked to mail the completed questionnaire using the enclosed self-addressed, stamped envelope. No attempt was made to identify the respondents other than by color of the questionnaires.

Once the data was collected, it was separated into three groups, administrators, team leaders, and physical education instructors, for analysis. Color coding of the questionnaires made

this process easier.

### Analysis of the Data

All data from each questionnaire was tabulated and organized into tables for comparative purposes. Demographic data from Section I and survey data from Section II were grouped by the three types of responding subjects; administrators, team leaders, and physical education instructors and analyzed descriptively. The .05 level of significance was established for the questions in Section III, from which the data was analyzed and reported in a statistical format. An analysis of variance (ANOVA) was used as the statistical procedure to determine significant differences between attitudes of the three groups toward an interdisciplinary physical education curriculum. Mean scores from a five point (Likert) scale represented the extent of the agreement or disagreement of each questionnaire item. In addition, the Scheffe post hoc test was used to determine exactly where significant differences existed. The .10 level of significance was established for this test.

## CHAPTER 4

### Results

#### Introduction

The purpose of this study was to determine the current status of physical education curricula in Kansas middle schools and the differences in attitudes between administrators, team leaders, and physical education instructors toward an interdisciplinary physical education curriculum.

The Middle School Physical Education Curriculum Questionnaire was sent to the 43 accredited Kansas middle schools, of which one (1) administrator, one (1) team leader, and two (2) physical education instructors from each school had the opportunity to reply. The questionnaire was divided into three parts: Section I. Demographic Information; Section II. Survey; and Section III. Attitude Assessment. Sections I and II were based on a multiple choice scale while Section III was based on a five point Likert scale which indicated intensity of attitudes.

The data were grouped and analyzed according to academic position (administrator, team leader, physical education instructor). Although only means and standard deviations were found for Section I and Section II, an analysis of variance (ANOVA) was used to determine any significant differences in means for Section III; and for this part, the .05 level of significance was accepted. Findings and implications of these findings were reported in the same order in

which they appeared in the questionnaire.

### Findings

Findings were divided into two categories, descriptive findings and statistical findings. The descriptive findings from Section I and Section II gave some insight about the subjects and their schools. Information in Section I. Demographic Information and Section II. Survey was presented according to the order in which it appeared in the questionnaire.

Information in Section III. Attitude Assessment was presented by question topics rather than question order. Abbreviations which were used in the graphic representations were as follows: P--Principals, TL--Team Leaders, and PEI--Physical Education Instructors. One response was provided for administrators and team leaders while two responses were provided for physical education instructors.

The statistical findings from Section III were then relayed in order of appearance on the questionnaire, which was the same order as each topic appeared in Chapter 2.



### Section I. Demographic Information

Among the subjects who responded from the 43 contacted schools, 32 were principals, 7 were team leaders, and 39 were physical education instructors. (See Figure 1)

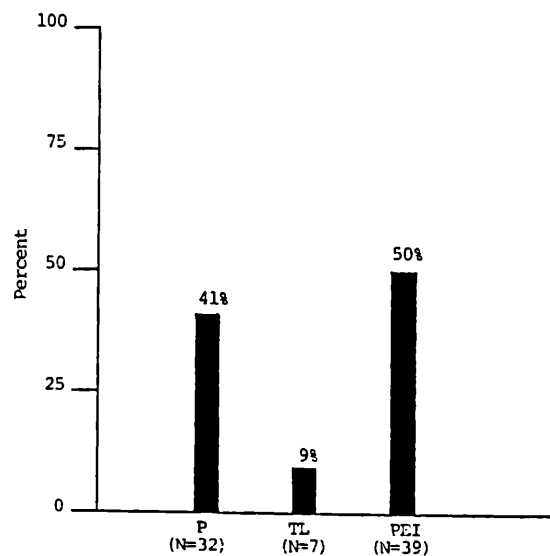


Figure 1

Question 1 (Respondents)  
N=78

The number of administrators, team leaders, and physical education instructors who were men were 31, 6, and 23 respectively. Women respondents numbered 1 for administrators and team leaders, and 16 for physical education instructors. (See Figure 2)

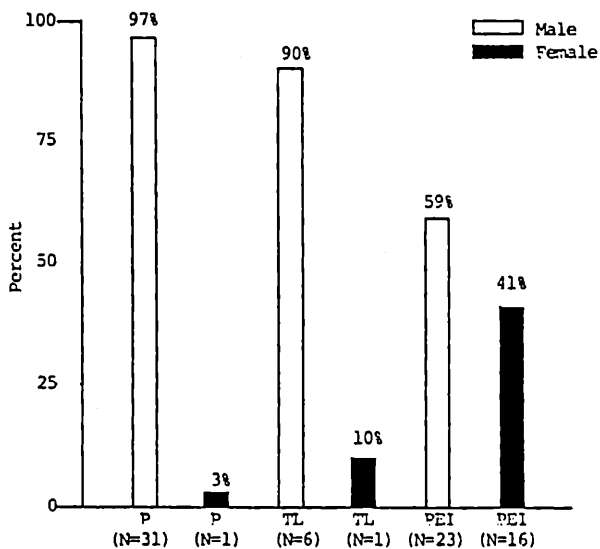


Figure 2

Question 2 (Sex)  
N=78

The greatest number of administrators were somewhere between the ages of 30 and 49. Twelve of them fell within the 30-39 range and fifteen of them fell within the 40-49 age range. Administrators who were 50-59 years of age or 60 and over numbered 4 and 1, respectively. Team Leaders had the greatest number of respondents in the 30-39 age category, 5. There were, however, 2 respondents in each of the following categories, 20-29 and 40-49. Physical Education Instructors had the greatest range of ages, varying from the 20-29 category to the 60 and over category. The number of respondents in each of the areas for physical education instructors was as follows: 13 in the age range 20-29; 15 in

the age range 30-39; 8 in the age range 40-49; 2 in the age range 50-59; and 1 in the age range 60 or over. (See Figure 3)

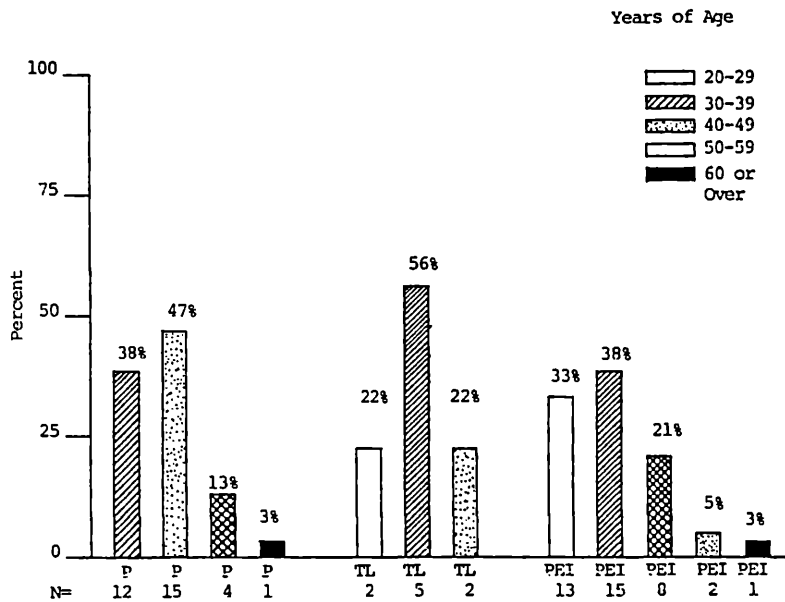


Figure 3

Question 3 (Age)  
N=78

The average number of years of teaching experience was 11 to 15 years for all three groups (See Figure 4) in contrast to average number of years of administrative experience, which was 6 to 10 years for principals and none for team leaders and physical education instructors. (See Figure 5) The number of subjects (N) for each group in response to each question are noted on each graph.

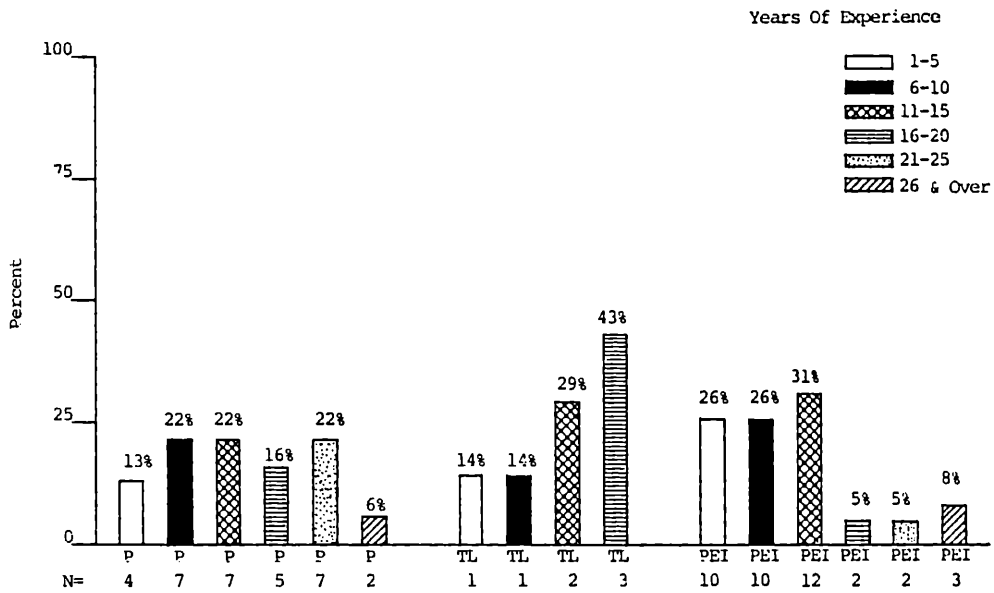


Figure 4

Question 4 (Teaching Experience)  
N=78

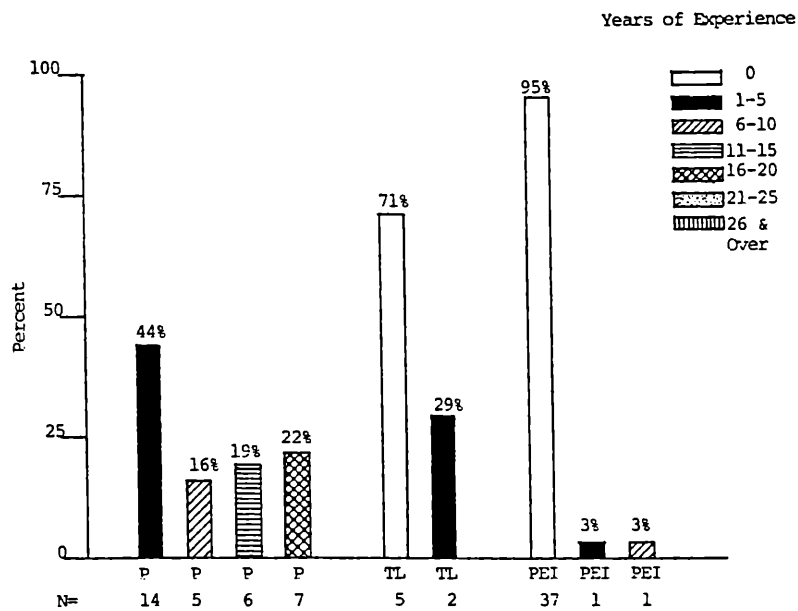


Figure 5

Question 5 (Administrative Experience)  
N=78

The most frequently taught grades for all three groups were seventh and eighth. Grade levels taught ranged from 4th through 8th for principals, 6th through 8th for team leaders, and 4th through 9th for physical education instructors. Obviously one of the physical education instructors returned a questionnaire from a school where the administrator or team leader did not. This would account for the fact that a 9th grade level appears in the one area and not another. In addition, because more than one response per person was allowed, "N" sizes increased and varied from group to group. (See Figure 6)

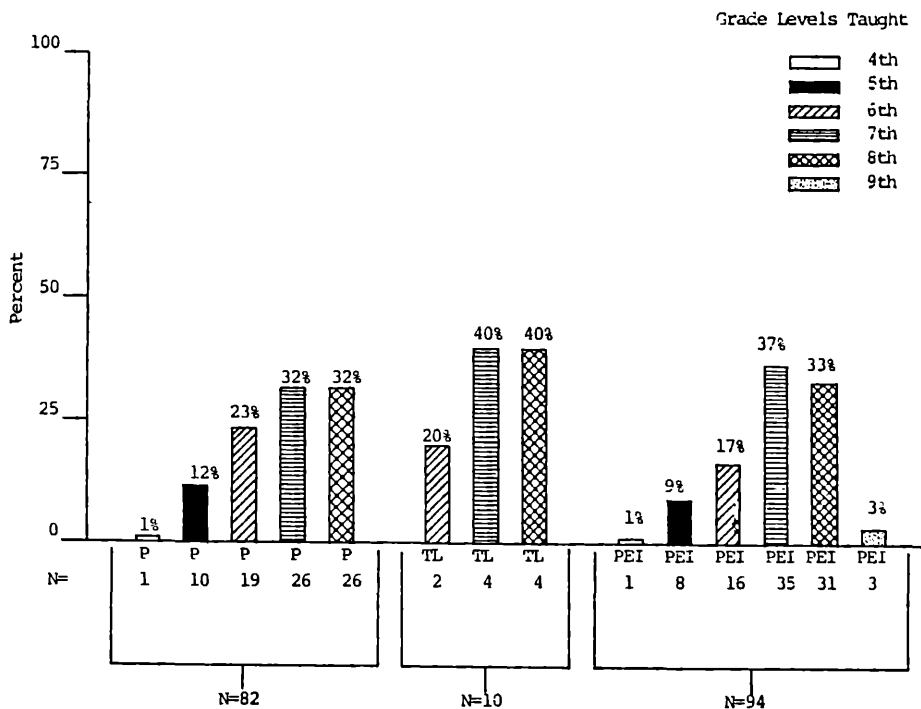


Figure 6

Question 6 (Grade Levels You Teach)

The highest academic degree for administrators was split, with 47% holding a Master's Degree and 28% holding a Specialist Degree. Seven percent more of the team leaders held Masters Degrees than Bachelors Degrees, whereas 25% more of the physical education instructors held Bachelors Degrees than Masters Degrees. It was evident that the higher the position was within the school, the higher the academic degree was for that position, whether required or obtained through personal desire. (See Figure 7)

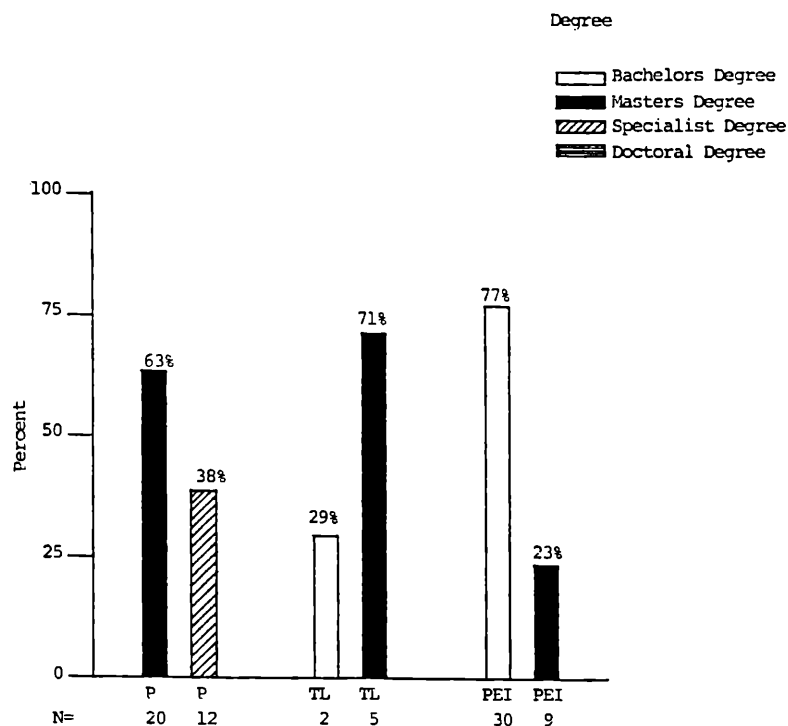


Figure 7

Question 7 (Academic Degree)  
N=78

## Section II. Survey

Based on the questions in this section of the questionnaire, a profile of the average Kansas middle school was drawn. Responses from principals, team leaders, and physical education instructors were added together to find the most frequently occurring situation. However, each question was graphically shown by each group.

The most frequent response for grade arrangement was 6-8 with 50% of the respondents stating that this was the situation where they worked. Arrangements 5-8 and 7-8 were chosen by 28% of the total group, with 10% selecting grade arrangement 4-8 and 1% selecting 7-9. None of the groups chose "other". (See Figure 8)

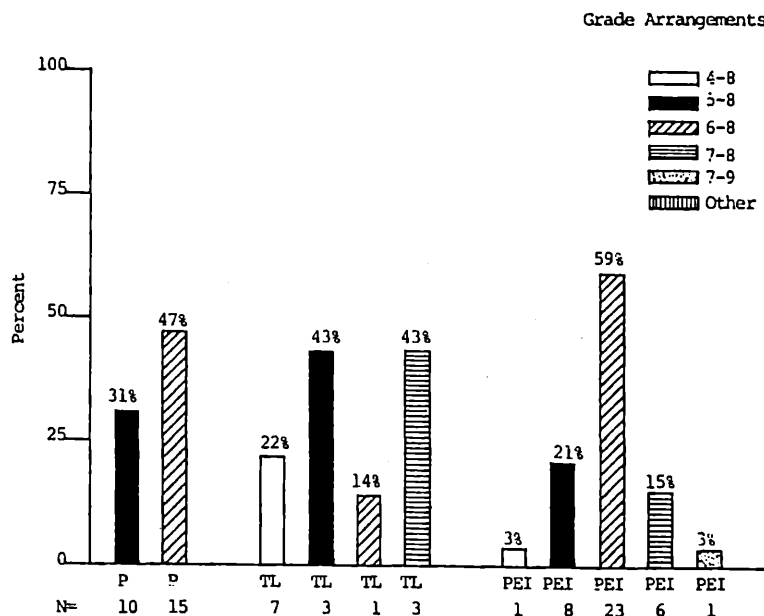


Figure 8

Question 1 (Grade Arrangement)  
N=78

Required physical education curricula were evident in 90% of the total responses. Nine percent were a combination of required and elective curricula with 1% being totally elective and represented only by the physical education instructors. (See Figure 9)

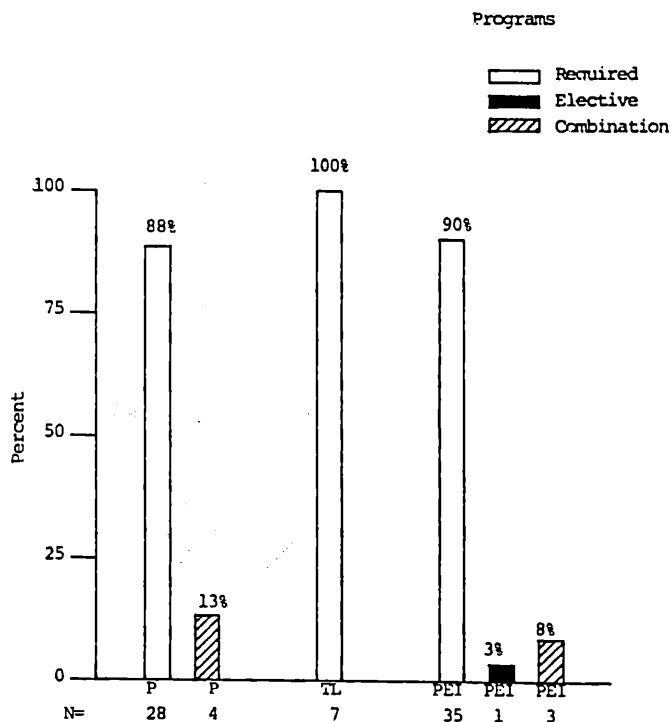


Figure 9

Question 2 (Required-Elective Programs)  
N=78

Physical education curricula which were independent of other class subjects were developed in Kansas middle schools almost three to one over interdisciplinary physical education curricula. Princi-



pals, team leaders, and physical education instructors selected independent physical education programs most frequently, however, independent programs were chosen more often by team leaders and physical education instructors than principals, those least involved in carrying out the program. (See Figure 10)

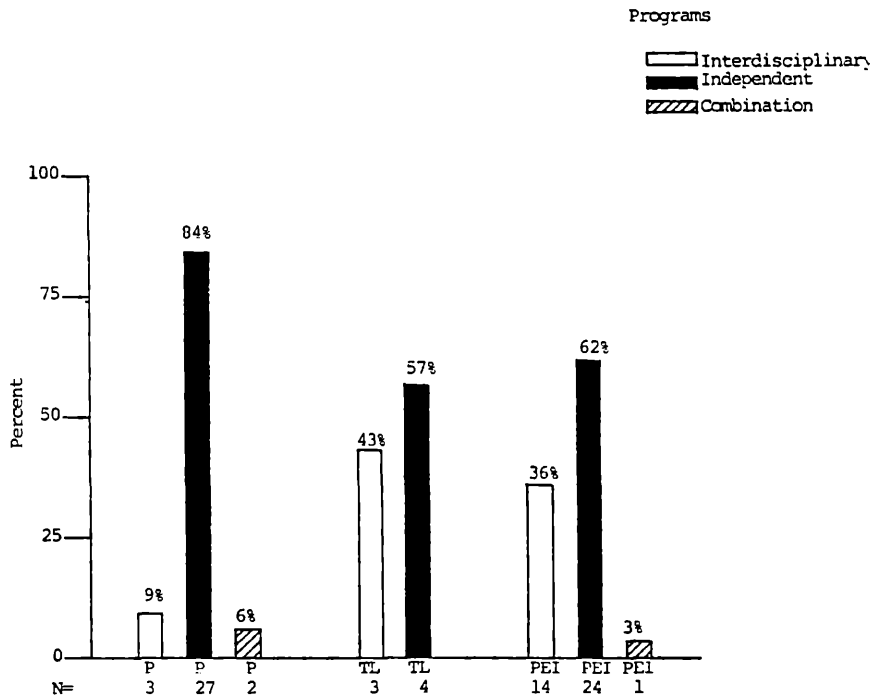


Figure 10

Question 3 (Interdisciplinary-Independent)  
N=78

Physical education curricula which was interdisciplinary were related to the following subjects in descending order of number chosen; health, general science, music, art, physical science, home economics, biology, math, reading, and social studies. It is evident that health was the most frequently chosen response by all

three groups. It was not clear, however, if this was actually a separate class in which physical education was related or just a separate topic which was related to physical education activities. Principals selected music as the second most related class; and art, general science and physical science on an equal basis for their 3rd, 4th, & 5th responses, respectfully. Team leaders and physical education instructors selected general science as the second most related class. This could be the result of health being part of the general science curriculum. In addition, team leaders chose equally home economics and music as their other responses, whereas physical education instructors had the greatest range of additionally related subjects with biology, math, music, reading, and social studies chosen equally. (See Figure 11)

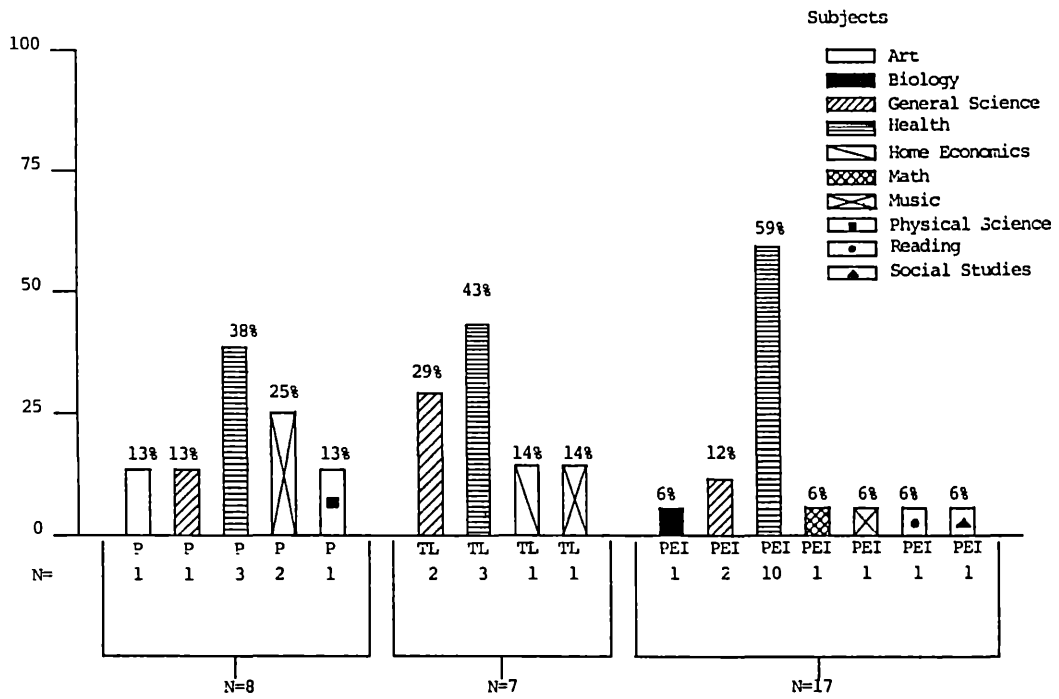


Figure 11

Question 4 (Related Interdisciplinary Subjects With Physical Education)

Ninety percent of the physical education courses were offered for a full year, with 9% offering semester courses, and 1% offering nine weeks courses. No groups selected "other". Team Leaders agreed that their programs were offered for a full year whereas physical education programs varied in two categories, full year and semester, according to physical education instructors and varied in three categories, full year, semester, and nine weeks, according to principals. (See Figure 12)

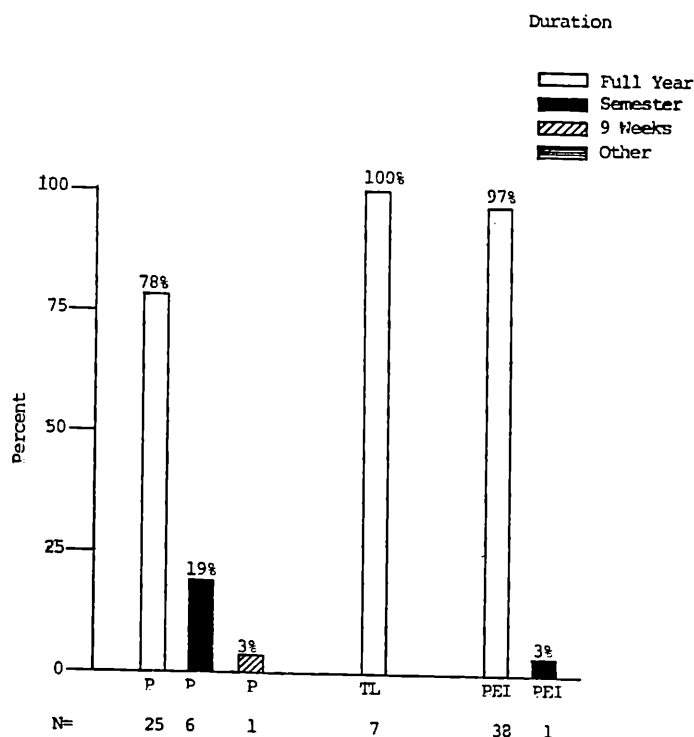


Figure 12

Question 5 (Course Duration)  
N=78

The most frequently occurring day/week schedule for all three groups was "every day". Seventy three percent of the total groups chose this response. Schedules of 3 days a week and 2 days a week respectively were represented by 10% and 9% of the sample respondents. Five percent of the total groups selected "other" and indicated that every other day was the schedule used by their school. This answer could have been distributed in the categories 2 days/week and 3 days/week for other respondents. (See Figure 13)

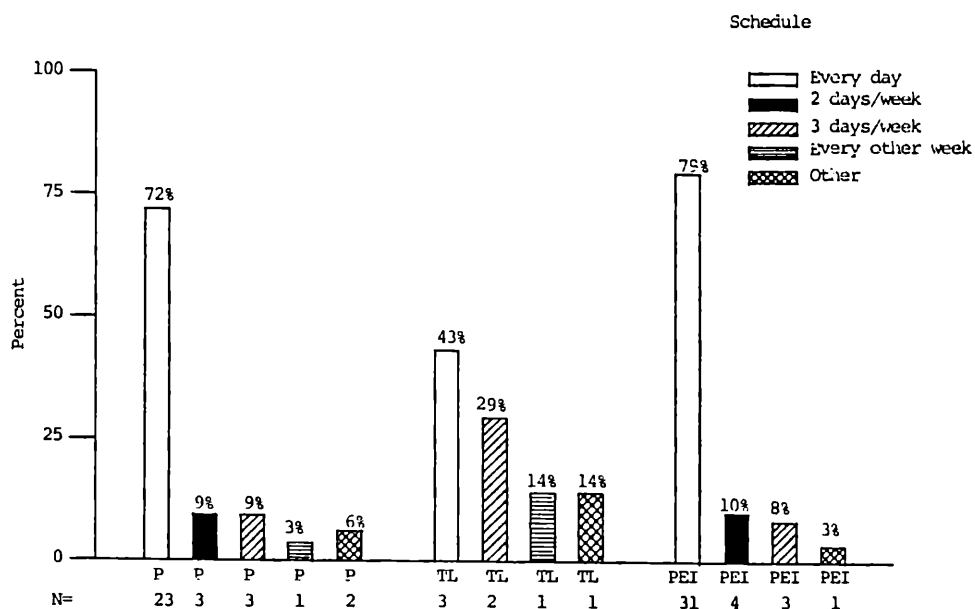


Figure 13

Question 6 (Day/Week Schedule)  
N=78

Class periods were scheduled to meet regularly (same time span per period) in 88% of the situations with 12% using an alternative schedule. Principals, team leaders, and physical education instructors made their selections from only two of the possible six choices, regular schedule and alternative schedule. (See Figure 14)

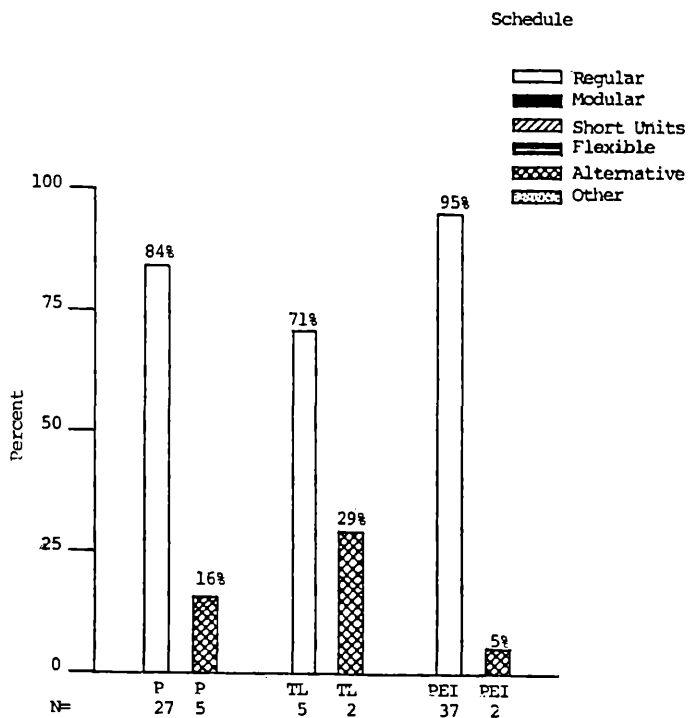


Figure 14

Question 8 (Class Period Schedule)  
N=78

Eighty nine percent of the physical education curricula offered lessons by units (Sport-i.e. soccer, tennis, etc.) whereas 12% offered activities by topics (Disciplinary Concepts-i.e. cardiovascular

fitness, nutrition, etc.). The category "other" was not selected by any group. (See Figure 15)

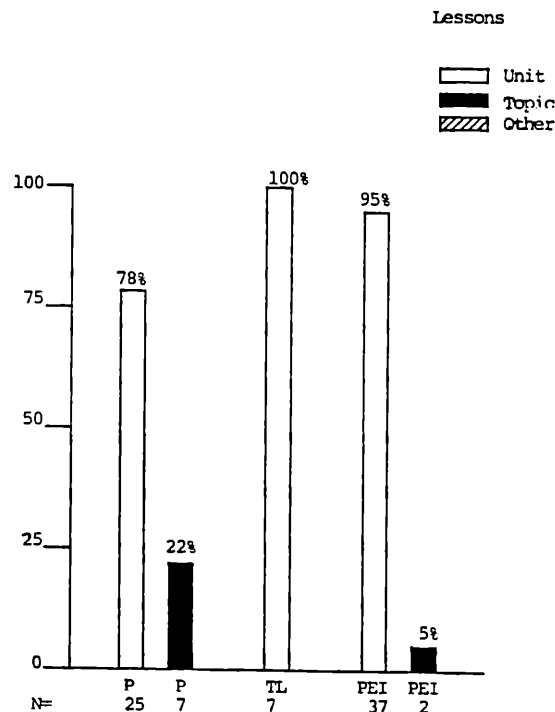


Figure 15

Question 7 (Units-Topics)  
N=78

Although 35 of the 78 respondents said that their lessons were presented by rotating teachers or students, it was important to note that 23 respondents chose individual specialists per unit and 13 respondents selected "other", specifying the same teacher all of the time. It was possible that these last two selections might really have been misunderstood and should have been part of the first re-

sponse, since one male teacher and one female teacher could have all students all the time, just rotating within the class. (See

Figure 16)

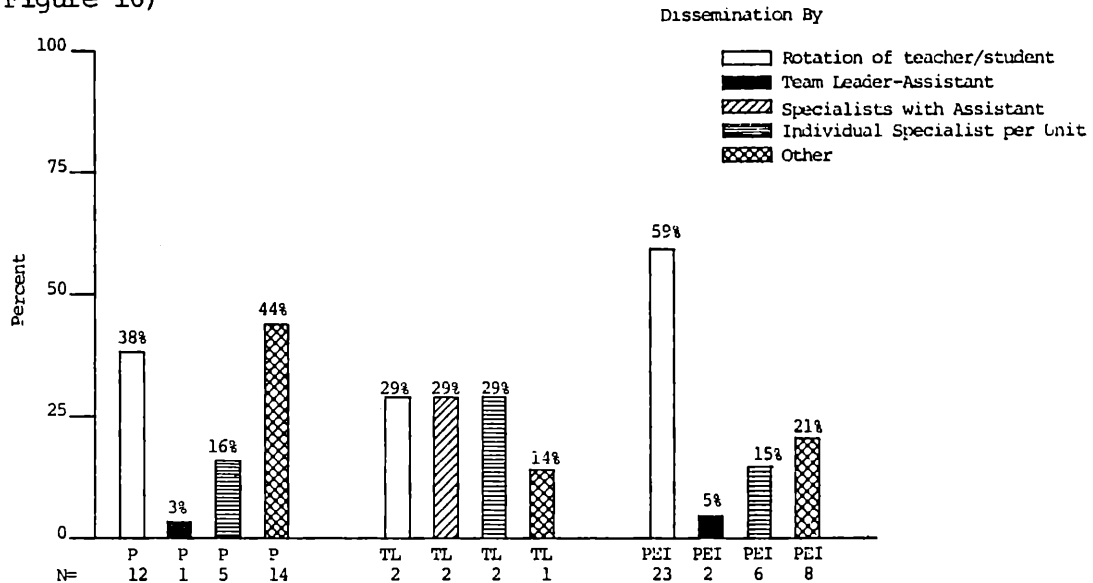


Figure 16

Question 10 (Information in Curriculum)  
N=78

The responsibility for curriculum development was seen as a combination of efforts from administrators, physical education instructors, and team leaders and chosen by 45% of the sample. Forty two percent of the sample acknowledged that the responsibility fell with the physical education instructor only and 12% of the sample thought administrators had complete control. Only four of the 32 responding principals thought that they had complete responsibility for physical education curriculum development. Instead, 17 of the 32 felt that it was a twin effort by administrators and physical



education instructors. Team leaders saw administrators as having only partial responsibility for curriculum development. In contrast 71% of them did see physical education instructors as having complete control of curriculum development. Neither they nor physical education instructors saw team leaders as a responsible party for physical education curriculum development; 6% of the principals mentioned team leaders as having a part in curriculum development. Twenty one of the 45 physical education instructors responses (which indicated that a few of them chose more than one answer) indicated that they had complete responsibility for their curriculum development. It should be noted, however, that cooperation between administrators and themselves was the second most frequently chosen response. Only 6 of the 45 physical education instructors selected "administrators" only. The only group to choose "other" was principals with the explanation that a curriculum committee was used to develop their physical education curriculum. (See Figure 17)

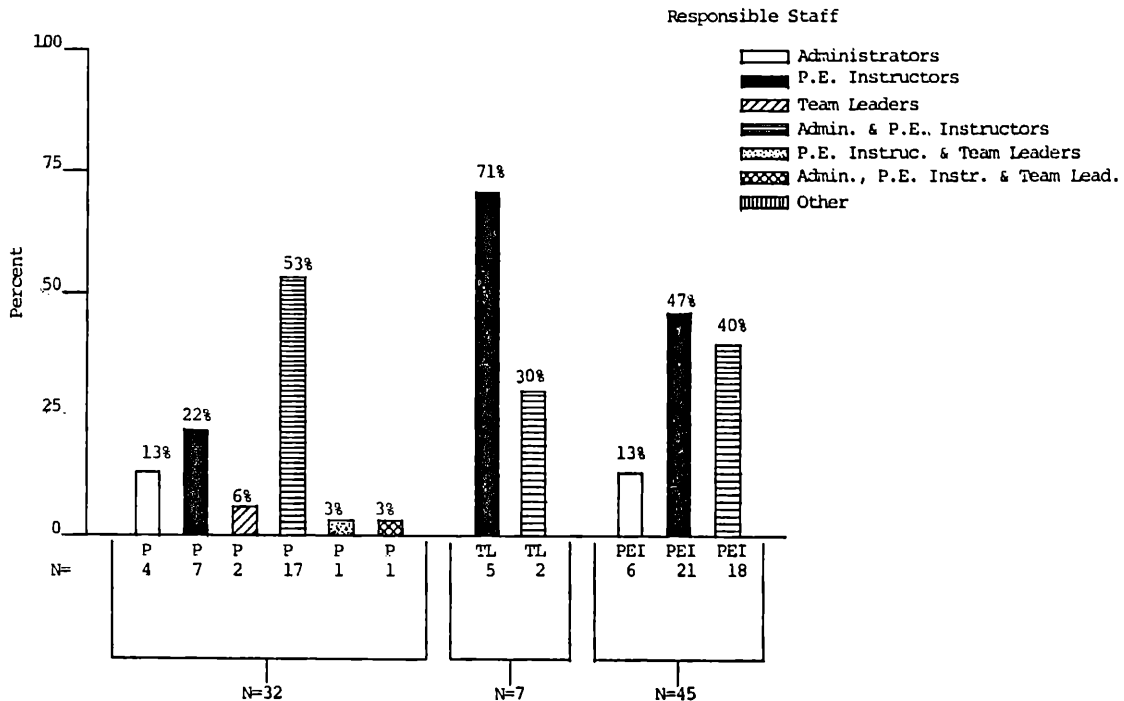


Figure 17

Question 13 (Responsibility for Planning)  
N=84

Thirty five percent of the 78 respondents said that the money to support their program came from a "physical education only" budget, whereas 62% said that the general school budget covered their program needs. One of the principals selected "other" with the explanation that the pep club supported their physical education budget. In addition, only one of the physical education instructors said that their budget was a combination of budgets. (See Figure 18)

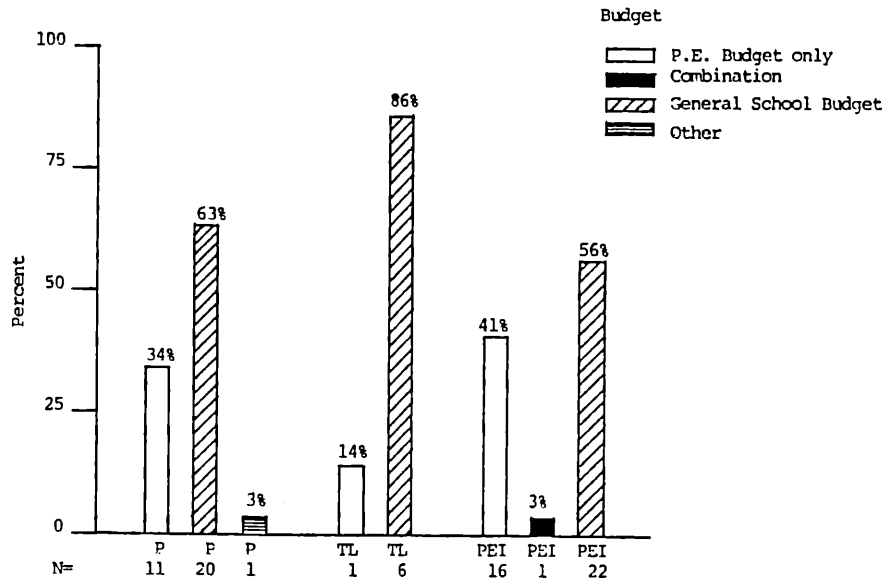


Figure 18

Question 9 (Budget)  
N=78

The most frequent selection for class design was "coeducation". Sixty five percent of the total respondents chose this selection. Principals showed responses in all other categories whereas team leaders limited their selection to coeducation and boys only & coeducation categories. It should be noted that physical education instructors did not choose the "boys only & coeducation" category; even though the majority of physical education instructors were men. (See Figure 19)

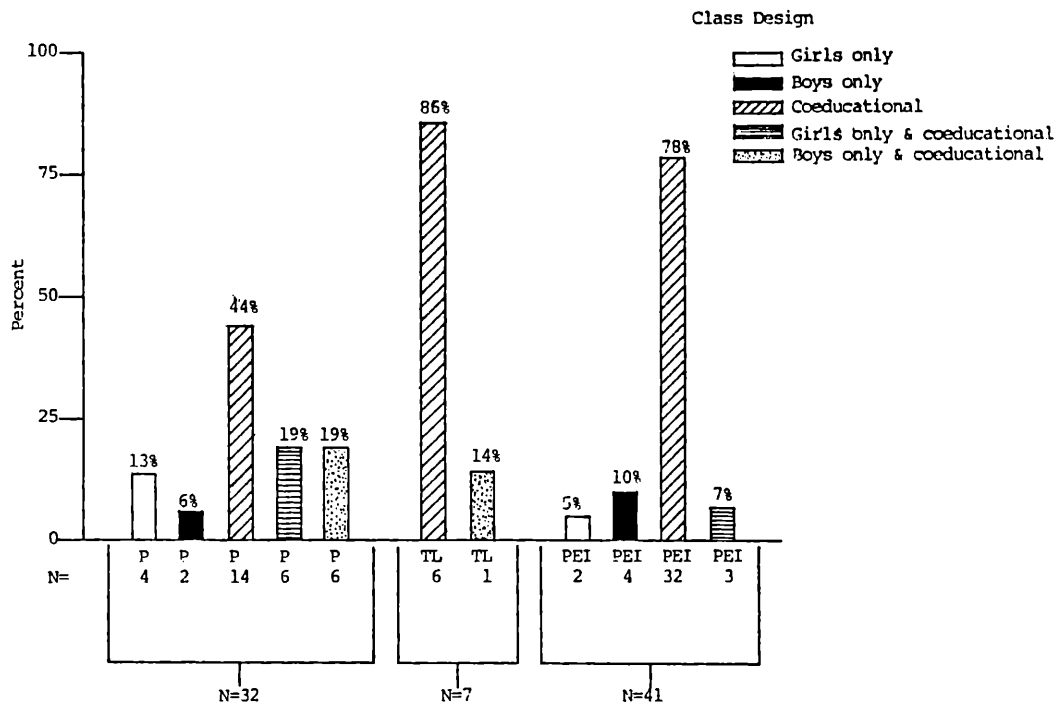


Figure 19

Question 14 (Coeducation Classes)  
N=80

As far as physical education curriculum development and advancement being either continuous, grade level to grade level, or separate and unrelated to grade level, 61 of the 78 respondents indicated continuous development, whereas 17 of the 78 respondents chose separate and unrelated to grade level. (See Figure 20)

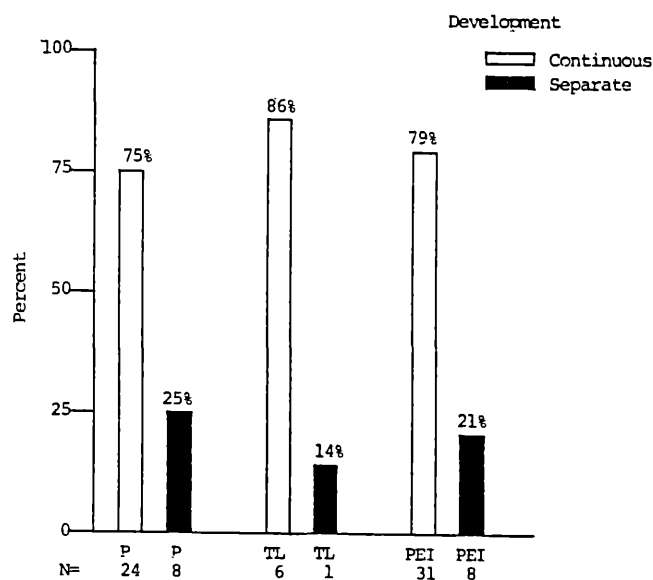


Figure 20

Question 11 (Curriculum Development)  
N=78

Physical education classes were designed for separate grade levels 45 out of 78 times, while 29 out of 78 times, they combined grade levels. Occasionally, 3 out of 78 times, classes were designed for skill levels. These three respondents were physical education instructors. (See Figure 21)

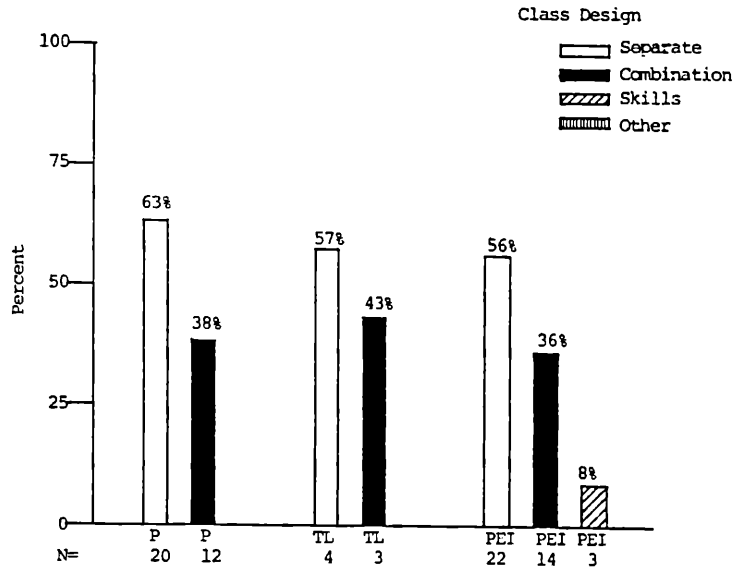


Figure 21

Question 15 (Class Design)  
N=78

Last, but not least, it was found that 100% of the responding schools had a gymnasium and an outdoor play area. Principals thought that their facilities were used more than physical education instructors and team leaders; while principals and physical education instructors showed more variety in facilities than team leaders. Respondents' (N) values for each type of facility for each group were shown on the graph. (See Figure 22)

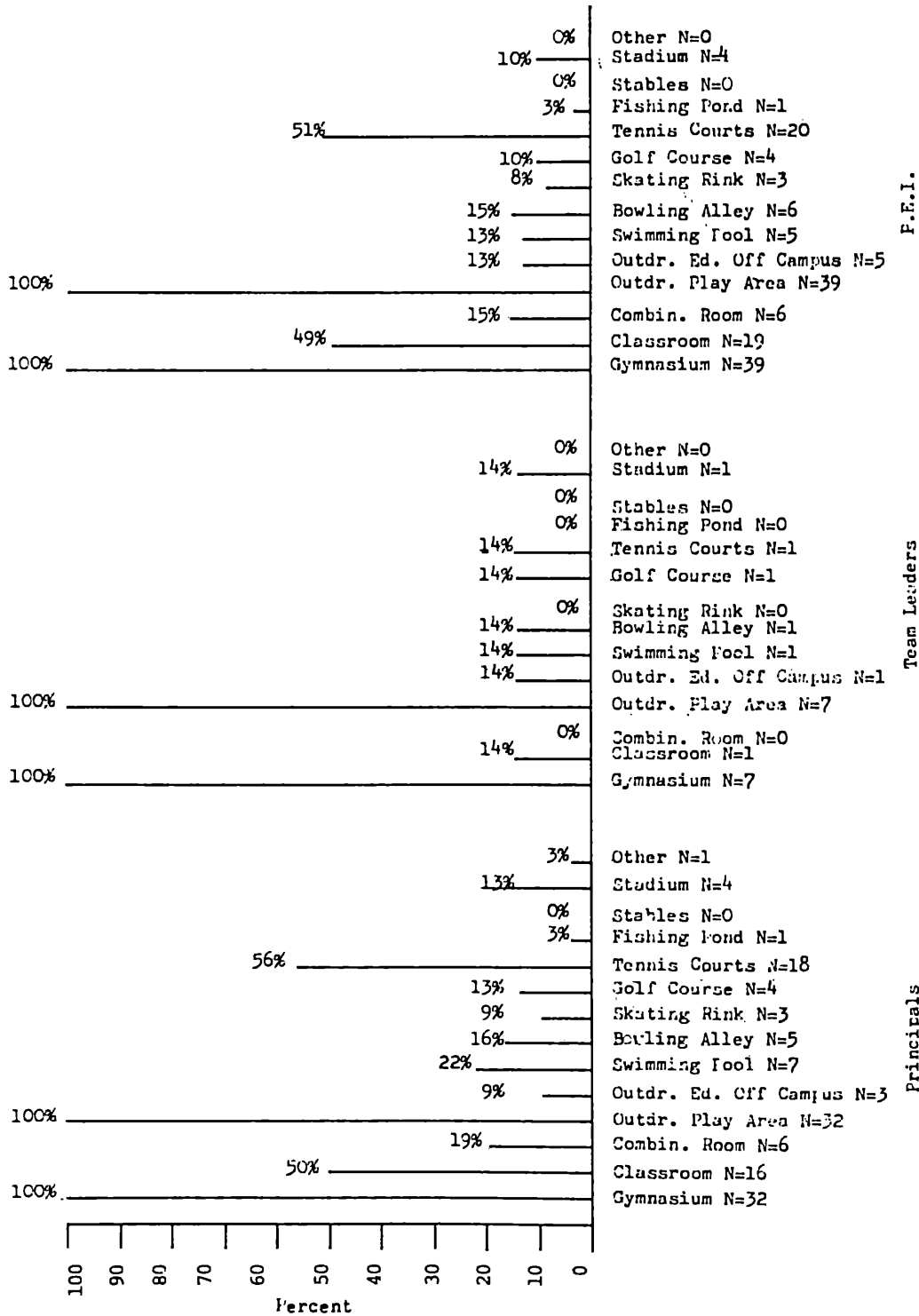


Figure 22

Question 12 (Facilities)

### Section III. Attitude Assessment

The statistical findings for this section of the questionnaire were grouped according to administrators, team leaders, and physical education instructors. An analysis of variance (ANOVA), done by computer, was used as the statistical procedure to determine significant differences between attitudes of the three groups toward an interdisciplinary physical education curriculum. Mean scores on a five point Likert scale represented the extent of the agreement or disagreement of each questionnaire item. In addition, the Scheffe post hoc test was used to determine exactly where the significant differences existed.

#### Attitudes Toward A Program Of Learning Opportunities Offering Balanced Attention To Personal Development

The total mean scores for learning opportunities offering balanced attention to personal development (3.80) indicated that all three groups mostly agreed that their programs met this curriculum objective. Mean scores varied from 3.57 for team leaders to 3.69 for principals to 4.13 for physical education instructors. With their standard deviations of .53, 1.00, and .57 respectively, the groups ranged within the mostly agree category. There was a significant difference between principals and physical education instructors revealed by the F-ratio of 3.54 which was significant at the .05 level. (See Table 1) In addition, the use of the Scheffe post hoc test showed a significant difference



between these two groups at the .10 level. (See Table 1a) The actual probability that a significant difference greater than 3.15 existed was .0389. Figure 23 shows more of a positive attitude among physical education instructors than principals or team leaders even though all three groups mostly agreed that their programs offered balanced attention to personal development. (See Figure 23)

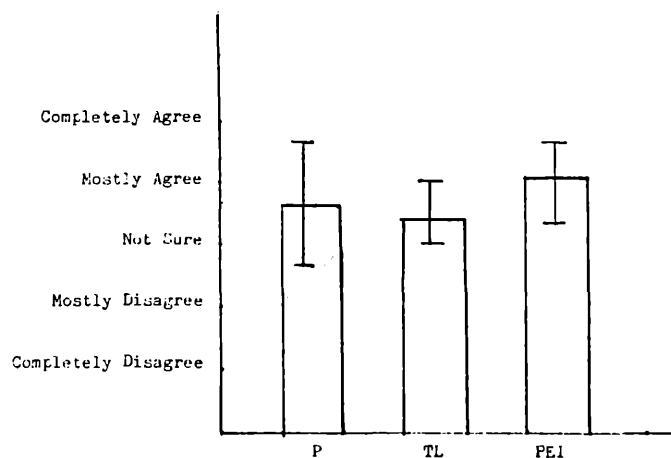


Figure 23

Mean Scores and Standard Deviations Concerning  
Balanced Attention to Personal Development

TABLE 1  
 F-Ratios of Attitudes Toward Programs of Learning  
 Opportunities Offering Balanced Attention  
 To Personal Development

	N	M	SD	F	P
Principals	52	3.69	1.00		
Team Leaders	7	3.57	.55	3.54	.0389
Physical Education Instructors	39	4.13	.57		
Total	78	11.39			

F ratio of 3.15 at .05 level with 76 and 2 degrees freedom.

Table 1A  
Scheffe Post Hoc Test Results Of Attitudes Toward  
Programs Of Learning Opportunities Offering  
Balanced Attention To Personal Development

Principals	Mean Scores		MS <sub>w</sub>	Mean Differences	Calculated F Values	Critical Values
	Team Leaders	Physical Education Instructors				
3.6875	3.5714			.1161	.129204	
3.6875		4.1282	.5992	.4407	5.697 *	4.78
	3.5714	4.1282		.5568	3.0706	

\*Significant Difference at .10 level

Attitudes Toward Learning Opportunities  
Offering Skills of Continued Learning

The total mean scores on the five point scale for learning opportunities offering skills of continued learning (3.97) indicated that all three groups mostly agreed that their programs met this curricular objective. Although Figure 24 shows more of a positive attitude among physical education instructors than principals or team leaders in this area of curriculum, no significant differences were revealed by the F-ratio of 2.17 at the .05 level. The actual probability that a significant difference greater than 3.15 existed was .1212. (See Figure 24 and Table 2)

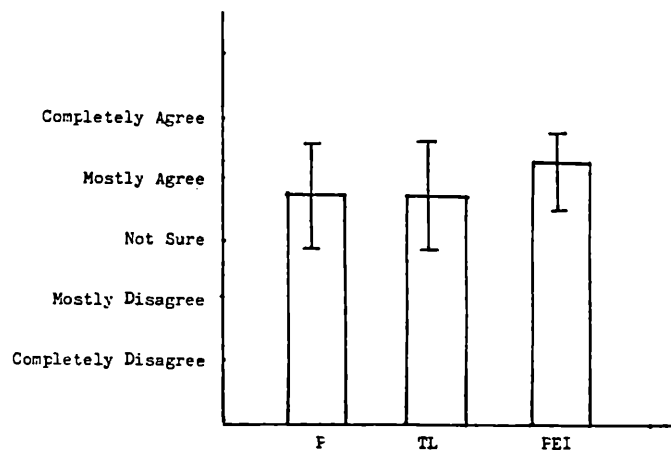


Figure 24

Mean Scores and Standard Deviations Concerning  
Skills of Continued Learning

TABLE 2  
 F-Ratios of Attitudes Toward Programs of Learning  
 Opportunities Offering Skills  
 Of Continued Learning

	N	M	SD	F	P
Principals	32	3.84	.88		
Team Leaders	7	3.86	.90	2.17	.1212
Physical Education Instructors	39	4.21	.61		
Total	78	11.91			

F ratio of 3.15 at .05 level with 76 and 2 degrees freedom

Attitudes Toward Learning Opportunities Offering  
Effective Use of Related Knowledge

The total mean scores for learning opportunities offering effective use of related knowledge (3.78) indicated that all three groups mostly agreed that their programs met this curriculum objective. Mean scores varied from 3.57 for team leaders to 3.66 for principals to 4.10 for physical education instructors. With the standard deviations of .53, .87, .50 respectfully, the groups ranged within the mostly agreed category. There were significant differences between principals and physical education instructors as indicated by the F-ratio of 4.56 at the .05 level. Figure 25 shows more of a positive attitude among physical education instructors than principals or team leaders in this area of curriculum and the Scheffe post hoc test showed the significant difference between principals and physical education instructors

at the .10 level. (See Table 3a) It should be noted that all responses fell within the mostly agree category. The actual probability that a significant difference greater than 3.15 existed was .0135. (See Figure 25 and Table 3)

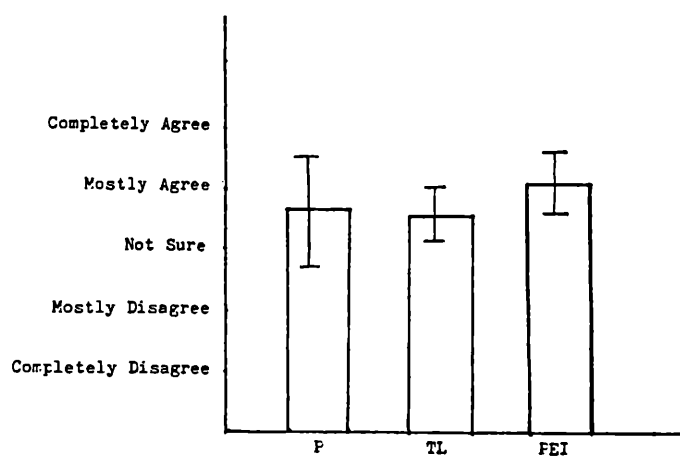


Figure 25

Mean Scores and Standard Deviations Concerning  
Effective Use of Related Knowledge

TABLE 3

F-Ratios of Attitudes Toward Programs of Learning  
Opportunities Offering Effective  
Use Of Related Knowledge

	N	M	SD	F	P
Principals	32	5.66	.87		
Team Leaders	7	3.57	.53	4.56	.0135
Physical Education Instructors	39	4.10	.50		
Total	78	11.33			

F ratio of 3.15 at .05 level with 76 and 2 degrees freedom

Table 3A

Scheffe Post Hoc Test Of Attitudes Toward Programs  
Of Learning Opportunities Offering Effective  
Use Of Related Knowledge

Principals	Mean Scores Team Leaders	Physical Education Instructors	$MS_w$	Mean Differences	Calculated F Values	Critical Values
3.66	3.57			.09	.10107	
3.66		4.10	.4603	.44	7.39*	4.78
	3.57	4.10		.53	3.62	

\*Significant Difference at .10 level

Attitudes Toward Learning Opportunities Offering  
An Instructional System Focused On  
Individual Progress

The total mean scores for learning opportunities offering an instructional system focused on individual progress (3.69) indicated that all three groups mostly agreed that their programs met this curriculum objective. Although Figure 26 shows more of a positive attitude among physical education instructors than principals or team leaders in this area of curriculum, no significant differences were revealed by the F-ratio (1.03) at the .05 level. The actual probability that a significant difference greater than 3.15 existed was .3619. (See Figure 26 and Table 4)

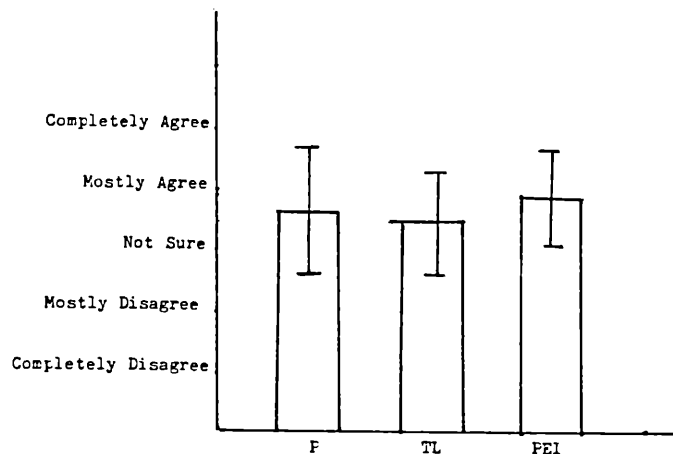


Figure 26

Mean Scores and Standard Deviations Concerning  
Instructional Systems Focused on Individual Progress

TABLE 4  
 F-Ratios of Attitudes Toward Programs of Learning  
 Opportunities Offering An Instructional  
 System Focused On Individual Progress

	N	M	SD	F	F
Principals	32	3.69	1.06		
Team Leaders	7	3.43	.79	1.03	.3619
Physical Education Instructors	39	3.95	.79		
Total	78	11.07			

F ratio of 3.15 at .05 level with 76 and 2 degrees freedom

Attitudes Toward Learning Opportunities Offering  
An Instructional System With Many  
Curricular Options

The total mean scores for learning opportunities offering an instructional system with many curricular options (3.37) indicated that all three groups agreed that they were not sure if their programs met this need. Although Figure 27 shows more of a positive attitude among team leaders than principals or physical education instructors in this area of curriculum, no significant differences were revealed by the F-ratio (.221) at the .05 level. The actual probability that a significant difference greater than 3.15 existed was .8022. (See Figure 27 and Table 5)



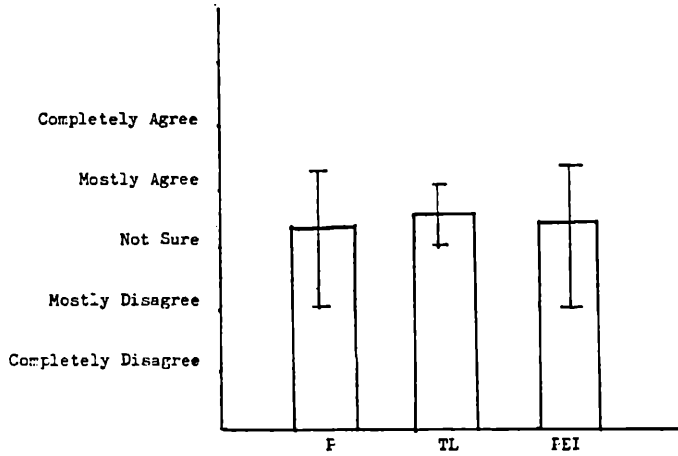


Figure 27

Mean Scores and Standard Deviations Concerning  
Instructional Systems With Many Curricular Options

TABLE 5

T-Ratios of Attitudes Toward Programs of Learning  
Opportunities Offering An Instructional System  
With Many Curricular Options

	N	M	SD	F	P
Principals	32	3.25	1.19		
Team Leaders	7	3.57	.53	.221	.8622
Physical Education Instructors	39	3.28	1.23		
Total	78	10.10			

F ratio of 3.15 at .05 level with 76 and 2 degrees freedom

Attitudes Toward Learning Opportunities Offering  
An Instructional System With  
Individual Instruction

The total mean scores for learning opportunities offering an instructional system with individualized instruction (3.36) indicated that two of the three groups were not sure enough that it caused the average mean to be in the category of "not sure" for this program need. Although Figure 28 shows more of a positive attitude among team leaders in this area of curriculum, no significant differences were revealed by the F-ratio (1.04) at the .05 level. The actual probability that a significant difference greater than 3.15 existed was .3584. (See Figure 28 and Table 6)

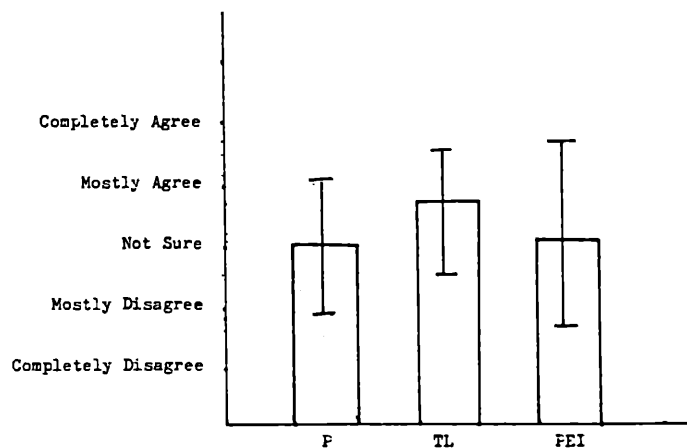


Figure 28

Mean Scores and Standard Deviations Concerning  
Instructional Systems With Individual Instruction

TABLE 6  
 F-Ratios of Attitudes Toward Programs of Learning  
 Opportunities Offering An Instructional System  
 With Individualized Instruction

	N	M	SD	F	P
Principals	32	3.09	1.12		
Team Leaders	7	3.71	.95	1.04	.3584
Physical Education Instructors	39	3.28	1.52		
Total	78	10.08			

F ratio of 3.15 at .05 level with 76 and 2 degrees freedom

Attitudes Toward Learning Opportunities Offering  
The Use Of Interdisciplinary Team Arrangement  
For Cooperative Planning

The total mean scores for learning opportunities offering the use of interdisciplinary team arrangement for cooperative planning (2.47) indicated that all three groups were between mostly disagree and not sure if their programs met this need. Although Figure 29 shows more of a negative attitude among physical education instructors in this area of curriculum, no significant differences were revealed by the F-ratio (1.52) at the .05 level. The actual probability that a significant difference greater than 3.15 existed was .2253. (See Figure 29 and Table 7)

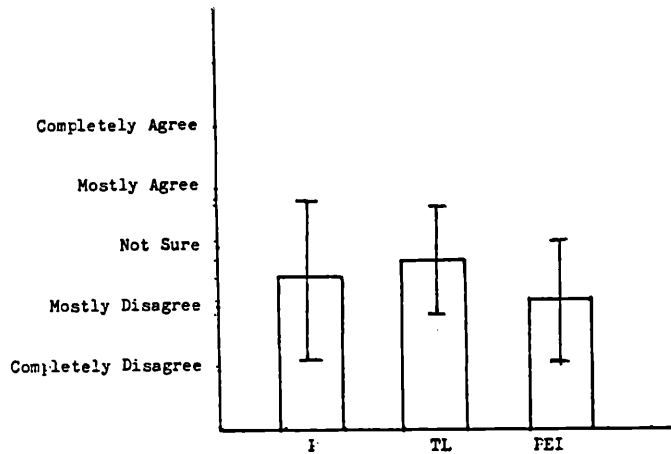


Figure 29

Mean Scores and Standard Deviations Concerning  
Use of Interdisciplinary Team  
Arrangement For Cooperative Planning

TABLE 7

F-Ratios Of Attitudes Toward Programs Of Learning Opportunities  
Offering The Use Of Interdisciplinary Team  
Arrangement For Cooperative Planning

	N	M	SD	F	P
Principals	32	2.44	1.39		
Team Leaders	7	2.86	.90	1.52	.2253
Physical Education Instructors	39	2.10	1.05		
Total	78	2.40			

F ratio of 3.15 at .05 level with 76 and 2 degrees freedom

Attitudes Toward Learning Opportunities Offering  
The Use Of Interdisciplinary Team Arrangement  
For Instruction

The total mean scores for learning opportunities offering the use of interdisciplinary team arrangement for instruction (2.48) indicated that all three groups were between mostly disagree and not sure if their programs met this need. Although Figure 30 shows more of a negative attitude among team leaders than principals or physical education instructors in this area of curriculum, no significant differences were revealed by the F-ratio (.787) at the .05 level. The actual probability that a significant difference greater than 3.15 existed was .4589. (See Figure 30 and Table 8)

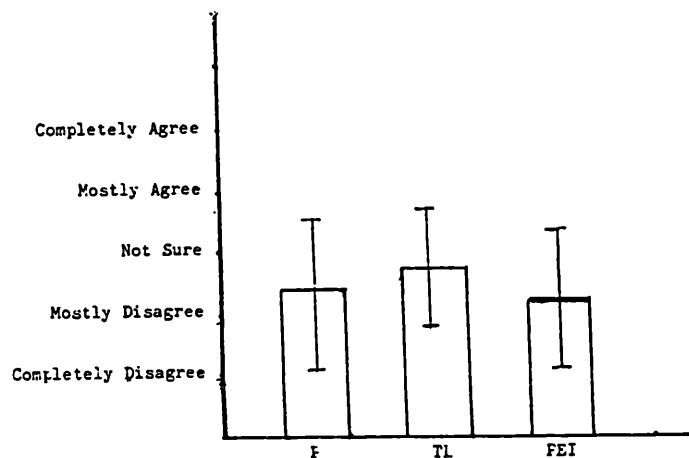


Figure 30

Mean Scores and Standard Deviations Concerning  
 Use of Interdisciplinary Team  
 Arrangement For Instruction

TABLE 8  
 F-Ratios Of Attitudes Toward Programs Of Learning Opportunities  
 Offering The Use Of Interdisciplinary Team  
 Arrangement For Instruction

	N	M	SD	F	F
Principals	32	2.34	1.29		
Team Leaders	7	2.86	.90	.787	.4589
Physical Education Instructors	39	2.23	1.20		
Total	78	2.43			

F ratio of 3.15 at .05 level with 76 and 2 degrees freedom

Attitudes Toward Learning Opportunities Offering  
The Use Of Interdisciplinary Team Arrangement  
For Evaluation

The total mean scores for learning opportunities offering the use of interdisciplinary team arrangement for evaluation (2.69) indicated that all three groups were not sure that their programs met this need. Although Figure 31 shows more of a negative attitude among principals in this area of curriculum, no significant differences were revealed by the F-ratio (.635) at the .05 level. The actual probability that a significant difference greater than 3.15 existed was .5327. (See Figure 31 and Table 9)

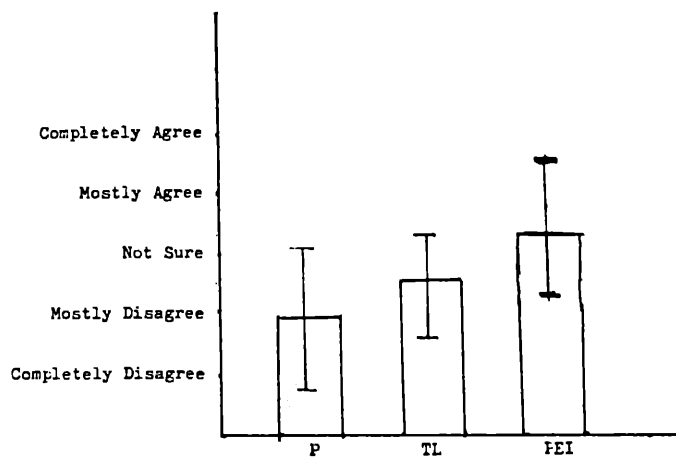


Figure 31

Mean Scores and Standard Deviations Concerning  
Use of Interdisciplinary Team  
Arrangement For Evaluation

TABLE 9

F-Ratios Of Attitudes Toward Programs Of Learning Opportunities  
Offering The Use Of Interdisciplinary Team  
Arrangement For Evaluation

	N	M	SD	F	P
Principals	32	2.03	1.15		
Team Leaders	7	2.57	.79	.635	.5327
Physical Education Instructors	39	3.46	1.21		
Total	78	8.06			

F ratio of 3.15 at .05 level with 76 and 2 degrees freedom

Attitudes Toward Curricula Offering A Wide Range  
Of Exploratory Activities

The total mean scores for learning opportunities offering a wide range of exploratory activities (3.44) indicated a not sure attitude among all three groups. In addition to Figure 32 showing a pretty even attitude among all three groups, there were no significant differences revealed by the F-ratio (.008) at the .05 level. The actual probability that a significant difference greater than 3.15 existed was .9920. (See Figure 32 and Table 10)

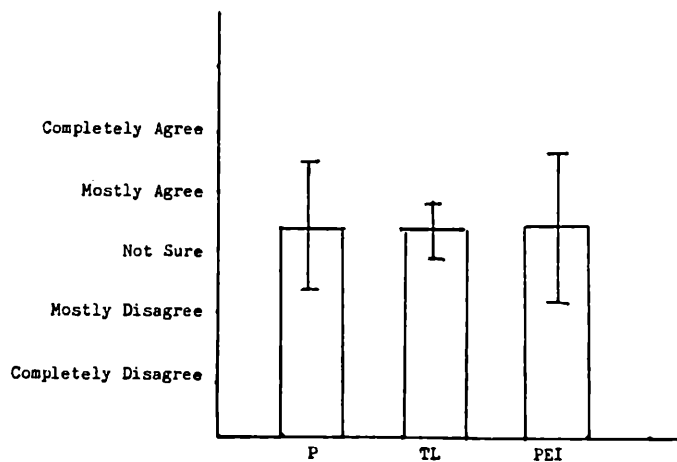


Figure 32

Mean Scores and Standard Deviations Concerning  
A Wide Range of Exploratory Activities



TABLE 10  
 F-Ratios Of Attitudes Toward Programs Of Learning  
 Opportunities Offering A Wide Range  
 Of Exploratory Activities

	N	M	SD	F	P
Principals	32	3.44	.95		
Team Leaders	7	3.43	.53	.008	.9920
Physical Education Instructors	39	3.46	1.21		
Total	78	10.33			

F ratio of 3.15 at .05 level with 76 and 2 degrees freedom

The summation of findings in Table 10A showed that principals, team leaders, and physical education instructors mostly agreed on three of the curriculum objectives, fluctuated from not sure to mostly agree on three of the curriculum objectives, varied from mostly disagree to not sure on three of the curriculum objectives, and were not sure on one of them. Significant differences in attitudes occurred in two areas of curriculum objectives whereas no significant differences in attitudes occurred in eight of the curriculum objectives. (See Table 10A)

Table 10A

Summary Of Findings In Section III. Attitude Assessment

<u>List of Objectives</u>	<u>Total Means</u>	<u>Level of Agreement</u>	<u>Significance</u>
Balanced Attention to Personal Development	3.80	Mostly Agree	.10
Skills of Continued Learning	3.97	Mostly Agree	None
Effective Use of Related Knowledge	3.78	Mostly Agree	.10
Instruc. Systems Focused on Individual Progress	3.69	Mostly Agree	None
Instruc. Systems With Many Curricular Options	3.37	Not Sure	None
Instruc. Systems With Individual Instruction	3.36	Not Sure	None
Interdis. Team Arrangement For Cooperative Team.	2.47	Mostly Disagree	None
Interdis. Team Arrangement For Instruction	2.48	Mostly Disagree	None
Interdis. Team Arrangement for Evaluation	2.69	Not Sure	None
Wide Range Of Exploratory Activities	3.44	Not Sure	None

5.00 - 4.50	Completely Agree
4.49 - 3.50	Mostly Agree
3.49 - 2.50	Not Sure
2.49 - 1.50	Mostly Disagree
1.49 - 1.00	Completely Disagree

### Discussion

The purpose of the discussion is to interpret the statistical results reported in the findings and discuss possible implications following the order of reported findings. Since the information in Section I. Demographic Information was necessary only for the purpose of identifying subjects and their schools, no further discussion will follow.

### Survey

As stated in Chapter 2, the middle school model for intermediate education evolved from the earlier programs of the junior high. Therefore, it was not surprising to find that the average number of Kansas middle schools incorporated grades 6-8. In fact, this was the most common pattern of grade organization in Kansas middle schools in 1979, as stated by Dr. Thomas Erb (14) and was not expected to change.

Because emerging adolescents differ so greatly physically, socially, emotionally, and intellectually, and because offering a wide range of exploratory activities is characteristic of a middle school, it was not surprising to find the majority of physical education programs required. This allows a somewhat easier task of scheduling and provides an excellent opportunity to meet the fore-mentioned needs of transescent youth.

The development of interdisciplinary learning experiences seems to be one of the most effective means by which a curriculum might be developed. However, because middle school concepts are so new to Kansas, it was not surprising to find that physical education curricula were still independent of other classes. It was interesting that principals saw physical education related to art, general science, music and physical science; art and music representing other "exploratory" classes, general science representing some health aspects, and physical science of which showed that they did not know what made up a physical science curriculum. They did not related physical education to other "academic" subjects but categorized them with other "exploratory" classes. Team leaders furthered this observation by including home economics, a source for health concepts and another "exploratory class. Physical education instructors related physical education to math, social studies, and reading, all "academic" subjects, and to other "exploratory" classes showing that they had some insight as to real interdisciplinary programming.

The fact that the majority of Kansas middle schools offered physical education courses regularly, every day for a full year tended to indicate that the old junior high pattern of curriculum development was still being used. In order to expose students to a wide variety of activities, it becomes necessary to be more flex-

ible with the schedule overall, including daily time allotments of classes.

In addition, the fact that Kansas middle school physical education curricula offered lessons by units taught by the same teacher all the time again reveals the fact that an interdisciplinary approach is not being used, and therefore falls under the guidelines of junior high curriculum development rather than the middle school concept of curriculum development.

Notice that very few team leaders responded, with no curriculum coordinators responding. Again, positions particular to the middle school organization of administration were lacking in the sample for this study. Those responsible for curriculum development were generally administrators and physical education instructors, instead of an interdisciplinary team of people.

Although the findings for class design were not surprising, coeducational classes, the data show that Title IX has had a lasting effect and should help promote a healthy learning environment needed by this age of student.

The question on available facilities did not reveal if these areas were actually used. However, since all schools reported having a gym and outdoor play area, it was assumed that these two facilities were used efficiently. Flexible scheduling of interdisciplinary curricula might allow for a better field trip to different optional facilities, such as more time three days a week

to visit a nearby community swimming pool, bowling alley, skating rink, etc.

### Attitudes

Responses indicating attitude assessment were not surprising for a junior high program. Areas such as learning opportunities which offered balanced attention to personal development, which offered skills of continued learning, and which offered effective use of related knowledge were supported by all three groups. areas which dealt with middle school ideas were seen as more positive by team leaders (important personnel for interdisciplinary curricula). It was very obvious that interdisciplinary teaming was not a part of their present curricula, as seen by administrators and physical education instructors, those directly responsible for curriculum development.

Note, however, that administrators saw a wide range of activities being offered, as compared to physical education activities being offered; and it was alarming that the physical education instructors who dealt with the curriculum daily were indecisive as to whether they offered a variety of activities. It was apparent that by the time physical education subjects reached the last question they were thinking overall exploratory activities, rather than physical education exploratory activities. Otherwise, their response would likely have been "completely agree."

### Implications

The middle school physical education program should focus on the period of growth and development of emerging adolescents. It should be characterized by continual guidance and assistance, a program of learning opportunities offering balanced attention to personal development, physically, mentally, socially, and intellectually; skills of continued learning, and effective use of appropriate knowledge; many curricular options and individualized instruction; the use of interdisciplinary team arrangements for cooperative planning, instruction, and evaluation; and a wide range of exploratory activities. (18)

Based on the review of literature, if school districts in Kansas would incorporate the middle school curriculum in their 6-8 level of education, the most common level of division because of number of students, building operating costs, etc., the quality of the physical education curriculum would have the opportunity to expand, inter-relate, and improve. Although the middle school concept, according to the Kansas Department of Education is in use in Kansas middle schools, the findings of this study show that this concept exists, for the most part, in name only. If physical education curricula were required, many scheduling problems would be solved. This is not to say that they have to meet for the same amount of time every day. Infact, flexible scheduling will allow for not only a greater range of activities, but a better amount of

time at one time to physically explore each activity.

Interdisciplinary physical education curricula would allow for a wider range of activities, a broader base for accountability, and the opportunity for students to relate to additional mentors of physical education activities and concepts. In addition, by offering these interdisciplinary courses coeducationally and continuously year to year, the opportunity for programs to offer balanced attention for personal development, which is vital to middle school curriculum development objectives, will increase. Interdisciplinary physical education programs open the doors to many more experiences which are global in nature, solve scheduling and facility problems by dividing the same number of students among more staff, and help achieve a more balanced program in the eyes of those who insist that physical education is not "academic." For example, relating physical education to foreign language gives the student the opportunity to learn foreign languages, what makes up the culture who speaks the language, and participate in the sports, games, and dances from those countries; a culminating activity such as the Olympics can only add more motivation to an already exciting curriculum.

Better interdisciplinary curriculum development could be achieved by involving more faculty, staff, and students. By using a curriculum development team, made up of any combination of administrators, counselors, team leaders, instructors, etc., the chance



of topic repetition ceases while the quality of each topic increases. In addition, better scheduling and use of available facilities will increase.

The attitudes of principals, team leaders, and physical education instructors implied that they were either lacking knowledge of middle school concepts, refusing to implement all of these middle school concepts in their programs, or not interested in changing to a program where they are required to be secure in their subject and willing to interact with other staff members, thus denying their students a program more adaptable to meeting their needs.

This study revealed that a junior high pattern of curriculum development was still being used. Hopefully, this study will help those involved with future middle school physical education curriculum development. Through better administrative training, statewide workshops for administrators, better teacher training with emphasis on middle school concepts, better school involvement in state and national organizations on middle school development, and better organization of planning time for instructors and administrators, the curriculum development of an interdisciplinary program will be feasible. And in the end, the development of such a program should help accountability of administrators and faculty; academic levels of students; coordinate better use of planning time, facilities, and evaluation programs; and develop interdisci-

plinary units necessary to aid in the growth and development of transescent youth.

## CHAPTER 5

### Summary

The purpose of this study was to determine the current status of physical education curricula in Kansas middle schools and determine the difference in attitudes between administrators, team leaders, and physical education instructors toward an interdisciplinary physical education curriculum.

The review of literature which included the development and description of a middle school, an overview of middle school requirements for middle school accreditation and teacher certification and the development of the physical education curriculum in America, served as a foundation for this study.

The participants involved in this study were 32 administrators, 7 team leaders, and 39 physical education instructors who responded from 43 Kansas middle schools listed in the Kansas Department of Education Directory for 1981-1982. They were given the opportunity to fill out the MSPECQ Questionnaire, using a multiple choice scale and return it by way of an enclosed self addressed, stamped envelope. Questionnaires were color coded for easier analysis of data. A descriptive format was used for Section I and Section II while a statistical format using an analysis of variance (ANOVA) method was used for Section III.

In the summary of results, descriptive findings of all three sections were reported. Only significant differences were found in the attitudes between principals and physical education instructors on whether or not their programs offered balanced attention to personal development and whether their programs offered effective use of related knowledge.

The discussion of results interpreted the findings based on the principles of curriculum formulation in the middle school reported in the review of literature. Implications for better programs based on the findings were made with the intention of increasing the significance of this study.

### Conclusions

The following conclusions were made by the investigator based upon descriptive findings of Section I and Section II and the statistical significant differences found in analyzing the results from Section III. The current status of physical education curriculum in Kansas middle schools in 1983 included:

1. All of the responding schools had a gymnasium and an outdoor play area.
2. Nearly all of the responding schools disseminated lesson information by units or topics, instead of concepts, in physical education programs which were required to meet all year.

3. A substantial majority of responding schools organized their physical education curriculum independent of other school subjects, meeting every day for the same time span each period; had coed classes; reported skill development continuous grade level to grade level; and supported their program by the general school budget.
4. Nearly half of the responding schools who reported having interdisciplinary physical education programs chose health as its counterpart. Responsibility for the physical education curriculum development was within the principal's domain half of the time and was shared by principals and physical education instructors half of the time. In addition, nearly half of the responding schools used a class design where separate grade levels were involved while the other half used a combination of grade levels; and the same teacher was used all of the time.

The difference in attitudes between administrators, team leaders and physical education instructors indicated that:

1. Although there was a significant difference between the attitudes of principals and physical education instructors on two objectives, "Attitudes Toward Balanced Attention to Personal Development", and "Attitudes Toward Effective Use of Related Knowledge", all respondents mostly agreed that the objectives were

met in their schools. All respondents mostly agreed that the objectives, "Skills of Continued Learning", and "Instructional Systems Focused On Individual Progress" were met in their middle school physical education curricula.

2. All respondents consistently held that they were not sure that the middle school objectives, "Instructional Systems With Many Curricular Options", Instructional Systems With Individual Instruction", Interdisciplinary Team Arrangement For Evaluation", or "A Wide Range of Exploratory Activities" were met in their physical education curricula.
3. All respondents were consistent in mostly disagreeing that the middle school objectives "Interdisciplinary Team Arrangement for Instruction", or Interdisciplinary Team Arrangement for Evaluation" were met in their physical education curricula.

### Recommendations

The investigator recommends that the following studies be pursued for greater understanding of physical education curriculum in Kansas middle schools:

1. A similar study comparing Kansas middle schools to a different geographical area.
2. A similar study repeated in Kansas five and/or ten years from now and the results compared with those of the present study.
3. A study after all middle school principals, team leaders, and physical education instructors have been informed through a state-wide middle school curriculum workshop.

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APPENDIX A

Copy of Questionnaire

MIDDLE SCHOOL PHYSICAL EDUCATION CURRICULUM QUESTIONNAIRE

Section I. Demographic Information

Please indicate your response(s) by making an (X) in the appropriate space(s). It is important that every numbered item be answered.

1. You are a (a) Principal. . . . . ( )  
(b) Assistant Principal. . . . . ( )  
(c) Curriculum Coordinator . . . . . ( )  
(d) Activities Coordinator . . . . . ( )  
(e) Team Leader. . . . . ( )  
(f) Physical Education Instructor. . . . . ( )
  
2. Your sex is (a) Male. . . . ( )      (b) Female. . . . . ( )
  
3. Your age is (a) 20-29 . . . ( )      (d) 50-59 . . . . . ( )  
(b) 30-39 . . . ( )      (e) 60 or over. . . . . ( )  
(c) 40-49 . . . ( )
  
4. Your teaching experience is  
(a) 1-5 years .( )      (d) 16-20 years . . . . . ( )  
(b) 6-10 years.( )      (e) 21-25 years . . . . . ( )  
(c) 11-15 years( )
  
5. Your school administrative experience is  
(a) 0 years . . ( )      (e) 16-20 years . . . . . ( )  
(b) 1-5 years .( )      (f) 21-25 years . . . . . ( )  
(c) 6-10 years.( )  
(d) 11-15 years( )
  
6. The grade level(s) you teach is(are)  
(a) 4th grade .( )      (d) 7th grade . . . . . ( )  
(b) 5th grade .( )      (e) 8th grade . . . . . ( )  
(c) 6th grade .( )      (f) 9th grade . . . . . ( )
  
7. The highest academic degree you hold is a  
(a) Bachelors Degree . . . . . ( )  
(b) Masters Degree . . . . . ( )  
(c) Specialist Degree. . . . . ( )  
(d) Doctoral Degree. . . . . ( )

Section II. Survey

Please read each of the following items carefully, then select the response(s) which you feel best reflects your situation or opinion. Indicate your response(s) by making an (X) in the appropriate space(s). It is important that every numbered item be answered.

1. The grade arrangement which constitutes your middle school is
- (a) 4-8. . . . . ( )
  - (b) 5-8. . . . . ( )
  - (c) 6-8. . . . . ( )
  - (d) 7-8. . . . . ( )
  - (e) 7-9. . . . . ( )
  - (f) other. . . . . ( )  
(specify) \_\_\_\_\_

2. Is your school's physical education curriculum
- (a) required . . . . . ( )
  - (b) elective . . . . . ( )
  - (c) combination of a and b . . . . . ( )  
(explain) \_\_\_\_\_  
\_\_\_\_\_

3. Is your school's physical education curriculum
- (a) interdisciplinary. . . . . ( )
  - (b) independent of other class subjects. . . . . ( )
  - (c) combination of a and b . . . . . ( )  
(explain) \_\_\_\_\_  
\_\_\_\_\_

4. If your school's physical education curriculum is interdisciplinary, with which subject(s) is it related?
- |                              |                               |
|------------------------------|-------------------------------|
| (a) Art. . . . . ( )         | (l) Journalism. . . . . ( )   |
| (b) Biology. . . . . ( )     | (m) Mathematics . . . . . ( ) |
| (c) Business Education . ( ) | (n) Music . . . . . ( )       |
| (d) Chemistry. . . . . ( )   | (o) Physical Science. . . ( ) |
| (e) Drama. . . . . ( )       | (p) Psychology. . . . . ( )   |
| (f) English. . . . . ( )     | (q) Reading . . . . . ( )     |
| (g) Foreign Language . . ( ) | (r) Social Studies. . . . ( ) |
| (h) General Science. . . ( ) | (s) Speech. . . . . ( )       |
| (i) Health . . . . . ( )     | (t) Vocational Classes. . ( ) |
| (j) Home Economics . . . ( ) | (u) Other . . . . . ( )       |
| (k) Industrial Arts. . . ( ) | (specify) _____<br>_____      |

5. Are your school's physical education courses offered
- (a) for a full year . . . . . ( )
  - (b) for a semester . . . . . ( )
  - (c) for 9 weeks . . . . . ( )
  - (d) other . . . . . ( )  
(specify) \_\_\_\_\_

6. Do your school's physical education classes meet
- (a) every day . . . . . ( )
  - (b) two days a week . . . . . ( )
  - (c) three days a week . . . . . ( )
  - (d) every other week. . . . . ( )
  - (e) other . . . . . ( )  
(specify) \_\_\_\_\_
- 

7. Does your school's physical education curriculum offer
- (a) lessons by unit (Sport-i.e. soccer, tennis) ( )
  - (b) activities by topics (Disciplinary concepts  
i.e. cardiovascular fitness, nutrition) . . ( )
  - (c) other . . . . . ( )  
(specify) \_\_\_\_\_
- 

8. Are your class periods scheduled to meet
- (a) regularly (same time span per period). . . . . ( )
  - (b) modularly (varies) . . . . . ( )
  - (c) based on varied number of short units of time, 15-20  
minutes. . . . . ( )
  - (d) flexible (some or all class periods shortened some  
days to increase number of class periods). . . . . ( )
  - (e) alternate schedule (classes meet every other day). . . ( )
  - (f) other. . . . . ( )  
(specify) \_\_\_\_\_
- 

9. Does your school's physical education curriculum receive  
funding from
- (a) P.E. budget only. . . . . ( )
  - (b) combination of budgets from different  
cooperating subject areas . . . . . ( )
  - (c) general school budget . . . . . ( )
  - (d) other . . . . . ( )  
(specify) \_\_\_\_\_
- 

10. Is the information in your curriculum disseminated by
- (a) rotation of teachers and/or students. . . . ( )
  - (b) team leader with assistants . . . . . ( )
  - (c) specialists with assistants . . . . . ( )
  - (d) individual specialist per unit. . . . . ( )
  - (e) other . . . . . ( )  
(specify) \_\_\_\_\_
- 

11. Is your physical education curriculum development and  
advancement
- (a) continuous, grade level to grade level. . ( )
  - (b) separate and unrelated to grade level . . ( )

12. Does your school's physical education program have access to (check all which apply)

- |                                                                |                        |
|----------------------------------------------------------------|------------------------|
| (a) a gymnasium. . . . . ( )                                   | (i) golf course. . ( ) |
| (b) a classroom. . . . . ( )                                   | (j) tennis courts. ( ) |
| (c) combination of rooms for<br>small and large groups . . ( ) | (k) fishing pond . ( ) |
| (d) outdoor playing area . . . ( )                             | (l) stables. . . . ( ) |
| (e) outdoor education area off<br>campus . . . . . ( )         | (m) stadium. . . . ( ) |
| (f) swimming pool. . . . . ( )                                 | (n) other. . . . . ( ) |
| (g) bowling alley. . . . . ( )                                 | (specify) _____        |
| (h) skating rink . . . . . ( )                                 | _____                  |
|                                                                | _____                  |

13. Who is responsible for curriculum development within physical education?

- (a) administrators. . . . . ( )
  - (b) physical education instructors. . . . . ( )
  - (c) team leaders. . . . . ( )
  - (d) combination of a and b . . . . . ( )
  - (e) combination of b and c . . . . . ( )
  - (f) combination of a,b, and c . . . . . ( )
  - (g) other . . . . . ( )
- (specify) \_\_\_\_\_
- \_\_\_\_\_

14. Are your physical education classes designed for

- (a) girls only. . . . . ( )
- (b) boys only . . . . . ( )
- (c) coeducational . . . . . ( )
- (d) combination of a and c. . . . . ( )
- (e) combination of b and c. . . . . ( )

15. Are your physical education classes designed for

- (a) separate grade levels . . . . . ( )
  - (b) combined grade levels . . . . . ( )
  - (c) skill levels. . . . . ( )
  - (d) other . . . . . ( )
- (specify) \_\_\_\_\_
- \_\_\_\_\_



Section III. Attitude Assessment

Please read each of the following items carefully, then select the response which you feel best reflects your attitude toward your middle school situation.

1. Our physical education curriculum has a program of learning opportunities offering balanced attention to personal development.

<u>Completely</u> Disagree	<u>Mostly</u> Disagree	<u>Not Sure</u>	<u>Mostly</u> Agree	<u>Completely</u> Agree
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2. Our physical education curriculum has a program of learning opportunities offering skills of continued learning.

<u>Completely</u> Disagree	<u>Mostly</u> Disagree	<u>Not Sure</u>	<u>Mostly</u> Agree	<u>Completely</u> Agree
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3. Our physical education curriculum has a program of learning opportunities offering effective use of related knowledge.

<u>Completely</u> Disagree	<u>Mostly</u> Disagree	<u>Not Sure</u>	<u>Mostly</u> Agree	<u>Completely</u> Agree
-------------------------------	---------------------------	-----------------	------------------------	----------------------------

4. Our physical education curriculum has a program of learning opportunities offering an instructional system focused on individual progress.

<u>Completely</u> Disagree	<u>Mostly</u> Disagree	<u>Not Sure</u>	<u>Mostly</u> Agree	<u>Completely</u> Agree
-------------------------------	---------------------------	-----------------	------------------------	----------------------------

5. Our physical education curriculum has a program of learning opportunities offering an instructional system with many curricular options.

<u>Completely</u> Disagree	<u>Mostly</u> Disagree	<u>Not Sure</u>	<u>Mostly</u> Agree	<u>Completely</u> Agree
-------------------------------	---------------------------	-----------------	------------------------	----------------------------

6. Our physical education curriculum has a program of learning opportunities offering an instructional system with individualized instruction.

<u>Completely</u> Disagree	<u>Mostly</u> Disagree	<u>Not Sure</u>	<u>Mostly</u> Agree	<u>Completely</u> Agree
-------------------------------	---------------------------	-----------------	------------------------	----------------------------

7. Our physical education curriculum has a program of learning opportunities offering the use of interdisciplinary team arrangement for cooperative planning.

<u>Completely</u> Disagree	<u>Mostly</u> Disagree	<u>Not Sure</u>	<u>Mostly</u> Agree	<u>Completely</u> Agree
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8. Our physical education curriculum has a program of learning opportunities offering the use of interdisciplinary team arrangement for instruction.

<u>Completely</u> Disagree	<u>Mostly</u> Disagree	<u>Not Sure</u>	<u>Mostly</u> Agree	<u>Completely</u> Agree
-------------------------------	---------------------------	-----------------	------------------------	----------------------------

9. Our physical education curriculum has a program of learning opportunities offering the use of interdisciplinary team arrangement for evaluation.

<u>Completely</u> Disagree	<u>Mostly</u> Disagree	<u>Not Sure</u>	<u>Mostly</u> Agree	<u>Completely</u> Agree
-------------------------------	---------------------------	-----------------	------------------------	----------------------------

10. Our physical education curriculum offers a wide range of exploratory activities.

<u>Completely</u> Disagree	<u>Mostly</u> Disagree	<u>Not Sure</u>	<u>Mostly</u> Agree	<u>Completely</u> Agree
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APPENDIX B

Copy of Pilot Study Cover Letter

August 15, 1983

Kim Crooks  
%HPER Dept.  
Kansas University  
Lawrence, KS 66044

Dear Administrator, Team Leaders, and Physical Education Instructors,

The enclosed questionnaire is designed to determine the difference in attitudes of administrators, team leaders, and physical education instructors toward an interdisciplinary physical education curriculum in Kansas middle schools. In order to establish reliability of this instrument, it is necessary to do a pilot study. This pilot study will involve three schools from Missouri, Oklahoma, Colorado, and Nebraska. NO RESPONDENT OR PARTICIPATING SCHOOL WILL BE IDENTIFIED.

This topic was selected because it was thought to be of merit, and to constitute a potential area of interest throughout the state, as well as the nation. This study is being undertaken in partial fulfillment of the requirements for the master program under the guidance of Dr. Marlene Mawson of the University of Kansas.

Your response to this request should involve 15-20 minutes of your time as all items are simple in their construction. Questionnaires are color coded to help ease the analysis of data. Please distribute white questionnaires to administrators, green questionnaires to team leaders (of interdisciplinary teams), and blue questionnaires to physical education instructors (one male and one female). A self-addressed, stamped envelope is enclosed for your convenience in replying. PLEASE RETURN ONLY THE QUESTIONNAIRE. Thank you for your time and energies granted this study from your busy schedule.

Sincerely,

Kim Crooks  
Middle School Instructor  
Physical Education

PS Please return these questionnaires by August 29, 1983.

APPENDIX C

Copy of Letter Which Accompanied Research  
Mailing of the Questionnaire

September 1, 1983

Kim Crooks  
%HPER Dept.  
Kansas University  
Lawrence, KS 66044

Dear Administrator, Team Leaders, and Physical Education Instructors,

The enclosed questionnaire is designed to determine the difference in attitudes of administrators, team leaders, and physical education instructors toward an interdisciplinary physical education curriculum in Kansas middle schools; and to determine the current status of middle school physical education programs across the state. NO RESPONDENT OR PARTICIPATING SCHOOL WILL BE IDENTIFIED.

This topic was selected because it was thought to be of merit, and to constitute a potential area of interest throughout the state, as well as the nation. This study is being undertaken in partial fulfillment of the requirements for the master program under the guidance of Dr. Marlene Mawson of the University of Kansas.

Your response to this request should involve 15-20 minutes of your time as all items are simple in their construction. Questionnaires are color coded to help ease the analysis of data. Please distribute the white questionnaires to administrators, the green questionnaires to team leaders (of interdisciplinary teams), and the blue questionnaires to physical education instructors (one male and one female). A self-addressed, stamped envelope is enclosed for your convenience in replying. PLEASE RETURN ONLY THE QUESTIONNAIRES. Thank you for your time and energies granted this study from your busy schedule.

Sincerely,

Kim Crooks  
Graduate Student

PS PLEASE RETURN THESE QUESTIONNAIRES BY September 10, 1983.