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A Descriptive Study of the Physical Education Programs for Kindergarten through Third Grade Students in Michigan

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A DESCRIPTIVE STUDY OF THE PHYSICAL EDUCATION PROGRAMS FOR KINDERGARTEN THROUGH THIRD GRADE STUDENTS IN MICHIGAN

by

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A DESCRIPTIVE STUDY OF THE PHYSICAL EDUCATION PROGRAMS FOR KINDERGARTEN THROUGH THIRD GRADE STUDENTS IN MICHIGAN

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"The period of early childhood is a crucial time for the balanced, optimal development of the cognitive, affective, and psychomotor domains of human behavior" (McClenahan & Gallahue, 1978, p. 5) According to noted authorities in the field of physical education such as Cratty (1979), and Roach and Kephart (1966), who have conducted large scale investigations of normal motor development of children, early elementary students are at a crucial point in motor development. When discussing the interaction between physical activity and growth, Shepherd (1982) stated that preschool and early elementary school students should develop basic motor skills which are prerequisite to performing mature physical and academic tasks. Shepherd also stated that children who lag behind in motor development will still lag behind in later grades. Corbin (1980), another noted researcher in the field of motor development,called motor development an "integral part of total human development" (p. ix)

According to Gabbard and LeBlanc (1986), who have conducted research to set standards for the physical fitness of young children, elementary students need more physical education programs than are currently offered; however, schools are providing less. Early elementary students are receiving an average of thirty six hours in physical education per year according to a study conducted by the Michigan Exemplary Physical Education Programs Committee (Cavanaugh, 1989). Edgar Leon, (1990) Physical Education Consultant for the Michigan State Department of Education reported in an interview that often, physical education programs in elementary schools are provided by the classroom teacher who has had only one college course in physical education.

Finally, a review of the Michigan Essential Goals and Objectives for Physical Education (State Board of Education, 1990) reveals that most of the outcomes expected from early elementary physical education are specific sport lead up skills rather than fundamental movement skills, which are necessary for everyday living and classroom success.

The purpose of the study was to determine whether or not the physical education needs of early elementary school students are being met through current physical education programs available in Michigan public schools. Data were collected from two sources. First, five nationally recognized textbooks in the area of physical education were identified. From the textbooks, the areas of physical education which should be emphasized, recommended about of time, recommended equipment and caseloads were listed. Secondly, a survey, designed by the researcher, of 574 teachers providing physical education for early elementary students was conducted to ascertain current data about the areas of physical education listed above in the state of Michigan.

After the data were collected, a comparison was made between what the physical education needs of early elementary students are, according to noted authorities, and what physical education programs consist of currently. If a difference was found the implication was that physical education programs were not related to the needs of early elementary school children; therefore, the programs should be reviewed for modification. The results and conclusions were presented in manner which may help school administrators and physical educators develop solutions to updating physical education programs for early elementary school students.

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Finally, I dedicate my dissertation to my nephew and godson Dylan Segula. I hope the contributions of all Educational Leadership Graduates will make school a wonderful place for him someday.

Allison Ann Hammond

TABLE OF CONTENTS

CHAPTER

CHAPTER

CHAPTER

Table of Contents—Continued

LIST OF TABLES

List of Tables—Continued

List of Tables—Continued

CHAPTER I

INTRODUCTION

General Background

"The period of early childhood is a crucial time for the balanced, optimal development of the cognitive, affective and psychomotor domains of human behavior," according to McClenaghan and Gallahue (1978, p. 5). Since the 1960's, noted authorities in the field of physical education, such as Cratty (1979), and Roach and Kephart (1966) who conducted large scale investigations of normal motor development of children, have advocated that early elementary students are at a crucial point in motor development. When discussing the interaction between physical activity and growth, Shephard (1982) stated that preschool and early elementary school students should develop basic motor skills which are prerequisite to performing mature physical and academic tasks. Shephard also found that children who lag behind in motor development will still lack mature motor development in later grades. Corbin (1980), another noted researcher in the field of motor development, called motor development an ". . . integral part of total human development. . ." (p. ix).

According to Gabbard and LeBlanc (1986), who have conducted research to set standards for the physical fitness of young children, elementary students must receive more physical education in the school curriculum for optimal motor and fitness development. However, schools are decreasing physical education programs. In Michigan, early elementary students are receiving an average of thirty six hours in physical education per year according to a study of physical education programs in Michigan conducted by the Michigan Exemplary Physical Education Programs Committee (Cavanaugh, 1989). Edgar Leon (1990), Physical education consultant for the Michigan State

Department of Education reported in an interview that often, physical education programs in elementary schools are provided by the classroom teacher who has had only one college course in physical education. A review of the Michigan Essential Goals and objectives for Physical Education (Michigan State Board of Education, 1990) reveals that most of the outcomes expected from early elementary physical education are specific sport lead up skills rather than fundamental movement skills, which are the building blocks to becoming an efficient mover.

A considerable amount of research which describes the importance of motor learning and physical fitness for early elementary students has been done. However, the information does not seem to be reaching the practicing physical education teachers or administrators writing curriculum guidelines. For a technical report on education in the United States, Klein (1982) found that physical education curriculum guidelines contain activities for specific sport skills, but little about activities to develop fundamental motor skills. In a case study of one physical education teacher, Schempp (1989) found a lack of use of current research to improve physical education instruction. Schempp stated that ". . . [the teacher's] attitude appeared to be that such information represented an intrusion and interfered with his professional practices and policies" (p. 4).

Pangrazi and Dauer (1992) noted that the back to basics trend in education has been detrimental to physical education because the allotted time for physical education has decreased to increase time for fine motor tasks. Two reasons for the trend of decreasing physical education for early elementary students are: (1) lack of attention to research about the importance of physical education for young children, and (2) development of curricula that emphasize academic tasks.

According to the Michigan School Code, physical education must be provided in school districts with 1000 or more students; however, delivery of the programs can be through recess or by elementary certified teachers with only one course in physical education. The Michigan State Board of Education (1987a) included physical education in the document Michigan K - 12 Program Standards of Quality by stating:

> Physical education programs provide all students with the opportunity to develop proficiency in body management and coordination, to obtain fundamental motor skills and the combination of skills required for proficiency in the games, dances and sports of our culture. In addition, physical education programs provide for the development of knowledge, attitudes and habits associated with health-related physical fitness. The physical education program is comprised of a planned sequence of developmentally oriented lessons, organized in accordance with stated goals and objectives. School or community activities such as free play, marching band, athletics or agency sports are not considered a substitute for the physical education program. Physical education programs are taught coeducationally, under the provisions of Title IX, Education Amendments, 1972. (p. 51)

Although the statement appears to support the importance of developing specific goals and objectives for physical education, some school districts in Michigan use recess and marching band as substitutes for physical education (Leon, 1990).

Through reviewing the literature, three areas of physical education appear to be crucial to the development of the total student: (1) motor development for using the body in a variety of everyday tasks, games, dance, sports and recreation; (2) physical fitness to maintain the ability to function everyday; and (3) personal social development to function as a member of the community. With the current emphasis on academic activities, professional educators have forgotten that basic fitness and coordination are necessary to put academic knowledge of the world into action (Metheny, 1965).

Purpose of the Study

The purpose of the study was to describe the current physical education programs provided to early elementary school students in Michigan. A survey of teachers currently teaching physical education to kindergarten through third grade students was used to collect data for analysis. The data collected from the survey responses were compared to the needs of early elementary school students as described in textbooks by recognized authorities in elementary physical education. If a difference was found between the needs and current programs the implication was that physical education programs were not meeting the needs of early elementary school children. Therefore, the programs should be reviewed for modification. The results and conclusions are pre-

sented in a manner which may help physical education teachers influence school administrators to support physical education as an important part of total education.

Importance of the Study

The importance of the study was to describe the discrepancy between physical education programs provided in Michigan and recommended programs proposed by authorities in elementary physical education. By examining the discrepancies, a case will be made that the current physical education programs do not meet the needs of early elementary school students. Physical education teachers would then be provided with rationale for requesting increased resources to improve physical education. Continually cutting resources and crippling weak programs creates physical education programs which have little impact on the total educational program. Graham, Holt-Hale and Parker (1987) stated that if students had daily quality physical education ". . . communities would understand that an appropriate program of physical education for every child is at least as important as athletic programs for the gifted" (p. 723).

Although research has been conducted which overwhelmingly supports the importance of physical education for early elementary school student development, physical education programs continue to lose the support of local communities and school administrators. Researchers have indicated that the physical fitness levels of children have declined since the 1960's (Pangrazi & Dauer, 1992); however, in the book, A Nation at Risk, Gardner (cited in Pangrazi & Dauer, 1992) addressed the shortcomings of education in the United States without any mention of physical education. Corbin (1980) stated, "For years motor development, an integral part of total human development, has been given only minimal attention with the bulk of the focus in human growth and development being given to intellectual, social and emotional development" (p. ix). Physical education teachers are often asked to work with more students than the classroom teacher because physical education is viewed as a time to burn energy and give the classroom teachers a break. Locke cited in Graham, Holt-Hale and Parker (1987) stated, "What many outsiders fail to appreciate is that an average class contains a

lot of kids for one person to handle even if there were no intent to teach anything. This failure is particularly true of parents who often feel qualified as experts on child management because they deal more or less successfully with their own children in groups rarely exceeding 3 or 4" (p. 10). Physical education programs are seen as less valuable to the educational process, and the teachers are put in situations in which teaching is nearly impossible. The amount of time, resources and facilities necessary to provide physical education programs which would impact on the overall development of the students is continually being decreased (Graham, Holt-Hale and Parker, 1987). Therefore, physical education teachers are forced to justify physical education programs that are inadequate.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The review of literature covers several major topics. The first topic is a description of theoretical bases for physical education programming. Secondly, the need for developmentally appropriate physical education is discussed. The third topic is the physical education needs of early elementary school students. Motor development needs, physical fitness needs and personal social needs are presented next and are followed by suggestions for equipment, facilities, time and class size. Information from the review of literature was used to determine (a) general categories for content analysis, and (b) development of survey questions for the physical education teachers.

In order to review the literature concerning the physical education needs of early elementary school students, a variety of literature searches were conducted. The following data bases were used: (a) Educational Resources Information Center (ERIC), (b) Psychological Abstracts, (c) Western Michigan University Libraries, (d) Medline, (e) Dissertation Abstracts, (f) Michigan Department of Education, and (g) Michigan State University Library.

Definition of Physical Education

Physical education has many definitions. In Table 1, definitions from four physical education textbooks are given. Gallahue (1987) stated, "The aims of physical education have been stated by a variety of authors and leaders in the profession. Lofty ideals and flowery platitudes have often clouded the fact that the aims of physical

Table 1

Definitions of Physical Education

Source	Definition
Nichols (1990)	Physical education is defined as the aspect of education in the schools designed to develop skillful, fit, and knowledgeable movers through a series of carefully planned and conducted motor activities. (p. 3)
Pangrazi & Dauer (1992)	Physical education is defined as education of and through movement, and must be conducted in a manner that merits this meaning. It should be an instructional program that gives adequate and proportional attention to all learning domains - psychomotor, cognitive, and affective.
Kirchner (1992)	Physical education is the part of the curriculum that is responsible for enhancing the physical fitness and well-being of children as well as teaching children a wide variety of motor skills.
Gallahue (1993)	Physical education is learning to move and learning through movement. Physical education helps students learn to use their bodies more efficiently and knowledgeably in a wide variety of fundamental and sport-related movement skills.

education may be simply and succinctly stated as learning to move and learning through movement" (p. 3). In general, physical education is teaching students fundamental motor development, physical fitness, personal social skills and sports, games or dances which are defined by the community culture.

The National Association of Sport and Physical Education (1991) developed a

definition of a physically educated person. The definition states that a physically educated person:

1. has learned skills necessary to perform a variety of physical activities
2. is physically fit
3. does participate regularly in physical activity
4. knows the implications of and the benefits from involvement in physical activities
5. values physical activity and its contributions to a healthful lifestyle (Graham, 1992, P. 8-9)

The Michigan State Board of Education (1990) defined goals in six areas of physical education: (1) fundamental motor skills, (2) cognitive skills, (3) body control skills, (4) effective personal/social skills, (5) physical fitness, and (6) leisure sports and activities. In 1987, the Michigan State Board of Education listed components of physical education programs. At the K-12 level, students are taught:

1. The fundamental locomotor and non-locomotor movement skills.
2. The necessary motor coordination to combine the fundamental skills into more complex movements, included in the games, dances and sports of our culture.
3. The basic principles of human movement which underlie the acquisition and maintenance of motor skills and physical fitness.
4. Knowledge and practices of the health and performance related benefits associated with an active lifestyle.
5. Practices leading to acceptable levels of physical fitness.
6. To develop a realistic and positive perception of their competence in the objectives of the program.
7. To acquire proficiency in numerous leisure-related activities including games, dances, aquatics, individual, dual and team sports.
8. To develop a sense of responsibility for self and others through participation in activities that require cooperation and competition as part of the structure.

At the K-12 level, students will have opportunities to:

1. Participate in activities related to the goals and objectives of the program that result in the assessment of individual performance, capabilities, attitudes and values.
2. Participate in activities that provide a context within which students can effectively practice and/or develop their motor skills, knowledges, fitness capacities and personal-social skills.
3. Participate in activities that allow the students to use their newly acquired abilities that effect the objectives of the program.

Physical Education Needs of Early Elementary School Students

Several arguments relating to the importance of physical education in early elementary schools exist. One argument is that ". . . scientific evidence has become compelling that a sedentary lifestyle carries a risk for the development of coronary artery disease, obesity, hypertension, diabetes mellitus and other chronic diseases of adulthood" (Rowland, 1990, p. 23). Early elementary school students need to learn to efficiently use their bodies in order to avoid injury, to adjust movement to any new situations and to perform the meriad of movements used everyday (Nichols, 1990; Keogh & Sugden, 1985). Gallahue (1987) stated that students should not only experience learning through cognitive methods, but also through an understanding of body movement.

Two areas that are unique to physical education, which need to part of the overall early elementary school curriculum are neuromuscular development and healthy lifestyle attitude development (Seefeldt, 1984). Another important reason for physical education is that early elementary school students need ". . . the opportunity to become an efficient user of his body and to supply a strong base on which to build future academic learning" (Herman, 1983, p.167). In order to successfully integrate movement patterns, students also need to have movement tasks presented at a

developmentally appropriate level (Kirchner, 1992).

Theories Related to Planning Physical Education Programs

In the book Motor Development and Movement Experiences for Young Children (3 - 7), Gallahue (1976) discussed three basic theories of child development: (1) age-stage, (2) developmental task, and (3) developmental milestones. Age-stage theory, based on the work of Freud, Erikson and Gesell, describes the motor development of students by delineating what motor behaviors are expected by students at certain ages. Developmental task theory, based on the work of Havighurst, describes expected motor behaviors by age. The theory also includes certain tasks which must be achieved in order for the child to function effectively and meet societal demands. Developmental milestone theory, based on the work of Piaget, describes the indicators of developmental level without expecting certain behaviors at specific ages.

Currently, in Michigan the age-stage and developmental task theories seem to prevail when developing physical education programs for early elementary school students. In Program Design in Physical Education: A Guide to the Development of Exemplary Programs, Vogel and Seefeldt (1990), from Michigan State University, suggest identifying instructional objectives by determining what skills should be attained by a certain age. For example, kindergarten students should be able to achieve an overhand throw. No mention is made about considerations for a kindergarten student who is at a different level. Michigan Essential Goals and Objectives for Physical Education (K - 12) (Michigan State Board of Education, 1990) states that the purpose of having goals and objectives for physical education is to ". . . provide teachers with the means for shifting the emphasis in K - 12 education programs from 'instructional inputs of activities' to 'student outcomes'" (p. 1). The outcomes expected are based on the age that certain objectives or goals should be met. No mention is made about what to do when a student is developmentally not ready to achieve tasks.

The developmental milestone theory is not considered in current programs. Although students are measured for fitness level, assessing the developmental level of a student prior to setting goals and objectives for physical education is not a priority (Nichols, 1990; Pangrazi & Dauer, 1992). When certain abilities are assumed because of the age of a student, the assumptions are based on the average child or what is expected of 50 percent of the students at a certain age. Programs that do not take into consideration the development level of students could be too advanced for the 50 percent of students who are below average. A disadvantage of such programs is the ". . . intrusion of adult expectations and excessive concentration on a few types of activity, to the possible exclusion of pursuits for which a given child is structurally and temperamentally well suited" (Shephard, 1982, p. 247). Students whose developmental levels are not average may not be able to fully participate in physical education; therefore, attaining the fitness and motor skill level set by age-stage standards may be difficult for the student. The students who are not at the same developmental level will also have less opportunity to participate in community sports organizations which also decreases the amount of time the student has to practice new skills (Graham, Holt-Hale & Parker, 1987).

The developmental milestone theory needs to be considered when designing physical education programs (Gallahue, 1987). Shephard (1982) addressed the importance of the interaction between designing physical activity programs and assessing the physical growth of students in Physical Activity and Growth. Nichols (1990) and Pangrazi and Dauer (1992) emphasized the need to modify programs by monitoring the progress of the students. Finally, McClenaghan and Gallahue (1978) emphasized the importance of assessment in physical education to ". . .enable the teacher to build the program around the actual developmental and remedial needs of individual children rather than around a hypothetical group of 'average' children".(p. 7). Auxter, Pyfer and Huettig (1993) also stated that lack of attention to the developmental level of the students and the assumption that the student will mature

naturally into age appropriate abilities results in students remaining developmentally behind peers.

Importance of Physical Education Programs Which Are Developmentally Appropriate

Physical education programs which are based on standards of age dependent expectations disregard students who lack the skills of the average student. Students do not receive opportunities to develop the prerequisite abilities to participate fully in physical education (Pangrazi & Dauer, 1992). The existence of abilities necessary to reach outcomes of physical education curricula based on the average student is not guaranteed by the age of a student. "The ages four to nine have been suggested as critical years for learning motor skills... yet children vary within these ages - they're not all at the same skill level" (Graham, Holt-Hale & Parker, 1987, p. 25). Rowland (1990) stated, "Chronological age serves poorly as a marker of biological maturity, because at a given age children may differ significantly in work capacity and motor proficiency purely on a developmental basis" (p. 23). To put the problem in perspective, Corbin (1980) wrote, "A person is not skinny one day and fat the next. Neither is a child a child one day and an adult the next" (p. 4). Students who are not participating in activities at the appropriate developmental level will perform specific skills inaccurately; therefore, the sensory feedback about the movement will also be inaccurate (Fisher, Murray & Bundy, 1991). Gallahue (1976) observed that students function at different levels depending on their experiential background and hereditary make up. A student may be able to perform stability activities involving balance, but cannot do manipulative activities involving visual motor control. Pangrazi and Dauer (1992) and Nichols (1990) expressed concern for expecting students to develop physically at the same rate. An eight year old child may vary in skeletomuscular development from five years old to eleven years old. Finally, skills which have been acquired through rote training when a student is not developmentally ready will not be transferred to new situations.

Motor Development Needs of Early Elementary School Students

Some physical education programs focus on the development of physical fitness and exclude the development of basic motor skills which are necessary not only to succeed in physical education, but also in the classroom. Corbin (1980) found that ". . . the attention which was given to the motor domain was limited to height, weight and body proportions" (p. ix). Unfortunately, Graham, Holt-Hale and Parker (1987) found that many teachers focus on product assessments, such as how many and how far, rather than the process of the movement because these are easier to conduct.

In Table 2, four definitions of motor development are listed. In general, motor development means the order in which movement patterns develop. Encouraging the development of sensory motor, perceptual motor and motor abilities in early elementary physical education programs is paramount. McClenaghan and Gallahue (1978) stated that ". . . it is clear that children begin developing fundamental movement patterns prior to reaching school age, and the first few years at school are spent molding these patterns into highly coordinated movement" (p. 22). However, students who lag behind in motor development in early grades will still lag behind in later grades. Contrary to traditional approaches to physical education, not all students who have normal size and growth have fully developed motor skills (Auxter, Pyfer & Huettig, 1993). Halverson (1971) began to question developing physical education programs based on nationally accepted standards by stating, "I am well aware of the importance of neurophysiological and psychological maturation in the readiness of a child for some experiences. But, I do not believe that all motor development will necessarily unfold automatically for all children at a magical maturational moment" (p. 19).

Students need a wide variety of experiences when developing motor skills. Not all students need to practice each fundamental movement as much as others; however, most students will benefit from enrichment (Gallahue, 1976). One student may excel at throwing and catching, but lack coordination to skip or hop. Gallahue (1985) stated, "Motor development is highly specific. The once accepted notion of general motor

ability has been [disputed] to the satisfaction of most. Superior ability in one area does not guarantee similar ability in others. The outmoded concept that one either possesses

Table 2

Definitions of Motor Development

Source	Definition
Pangrazi & Dauer (1992)	The process by which students learn movement skills
Gallahue (1987)	The process by which students develop from fundamental movement skills to sport or activity specific skills
Graham, Holt-Hale & Parker (1987)	The distinct patterns or stages through which basic movement skills are developed
Kirchner (1992)	The systematic and progressive acquisition of a skill

or does not possess ability in movement activities have been replaced by the concept that each has specific capabilities within each of the many performance areas" (p. 6). Also, children need to learn that ". . . body movements must be adjusted to the existing circumstances, as when using delicate control of force to shave, in contrast with using maximal force to throw a ball, or walking carefully on an icy sidewalk, in contrast with running full speed in a foot race" (Keogh & Sugden, 1985, p. 7). Therefore, providing all students with the opportunity to experience and practice a wide variety of movement patterns at the appropriate developmental level is the goal of physical education (Graham, Holt-Hale & Parker, 1987; Nichols, 1990).

Physical Fitness Needs of Early Elementary School Students

In general, the components of physical fitness are strength, endurance,

flexibility, speed or agility, and cardiovascular endurance (Rowland, 1990; American Alliance of Health, Physical Education, Recreation and Dance, 1989). Muscle strength is considered the ability to exert muscular force against a maximal level of resistance one time. The measurement is the maximum weight a student can lift in one repetition. Muscular endurance is measured by the amount of time a student can repetitively lift a weight. Flexibility is the largest range of motion in a given joint. Speed and agility are measured not only by how quickly a task is completed, but also by the accuracy. Finally, cardiovascular fitness is measured by the maximum amount of oxygen that the heart, lungs and vascular systems deliver to the muscles. Other aspects of fitness are measured by growth, weight, body composition and height.

Early elementary school students need a physical education program that develops not only motor skills, but also fitness. Seefeldt (1984), Pangrazi and Dauer (1992) and Rowland (1990) emphasized research which has determined that fitness cannot be an assumed by-product of drill in fundamental motor skills. In the past, physical development occurred out of necessity. "When a child must help his or her parents in order to survive, any 'voluntary physical activity' e.g. games, is strictly purposeful, preparing the youngster for an early contribution to the domestic economy" (Shephard, 1982, p.1). Therefore, physical fitness must be developed through physical education and encouraged as a means of maintaining health. Rowland (1990) advocated a physical fitness program that concentrates on physical activities which will decrease the likelihood of obesity, osteoporosis, atherosclerosis, emotional disorders, impaired exercise capacity, chronic back disease, athletic injury, and systematic hypertension. Benefits such as avoiding hypokinetic disease, relieving stress, decreasing fatigue and having the fitness to perform every day tasks were reported by Miller and Allen (1990). In the book, Physical Best, the American Alliance of Health, Physical Education, Recreation and Dance (1989) advocates that comprehensive physical fitness programs should ". . . instill in children and youth the knowledge, skills, and attitudes which will prepare and encourage them to engage in appropriate physical activity throughout their lifetimes" (p. 5).

Physical fitness programs for early elementary school students should be provided through fun and games which motivate the students to participate actively. Fitness programs should produce students who (a) perform daily activities with vigor, (b) reduce their risk of health problems through regular exercise, and (c) establish a fitness base for participation in a variety of physical activities (American Alliance of Health, Physical Education, Recreation and Dance, 1989). Exercise programs that consist of calisthenic drills do not encourage students to continue a routine of physical activity on a daily basis. Many exercises and equipment are designed to meet fitness needs of adults and may not be as effective with elementary school children whose body proportion is different than adults. Rowland (1990) stated that young children do not need an exercise program but ". . . the rate of decline of habitual exercise during childhood is both dramatic and disturbing. Many of the health-related benefits of exercise relate to the amount of daily exercise, and it is assumed that exercise habits during childhood predict adult patterns of physical activity" (p. 32-33). Therefore, providing a strict daily exercise program in early elementary school does not translate into a lifetime adult physical fitness program. However, an activity program that is fun and keeps students actively working at an elevated heart rate for at least 15 minutes will improve cardiovascular endurance and will more likely be continued into adulthood.

Personal Social Development Needs of Early Elementary School Students

Personal social development is one of the goals of physical education according to the Michigan Essential Goals and Objectives for Physical Education (Michigan State Board of Education, 1990). "Social development refers to the acquisition of personal-social characteristics that enables an individual to function in society . . . and socialization is the process by which persons learn the skills, attitudes, values, and behaviors that enable them to participate as members of the society in which they live" (Sage, 1986, p. 344). Personal social skills which should be learned are the abilities to (a) understand and follow rules, (b) cooperate with others, and (c) demonstrate

leadership. Besides the objectives listed above, Stallings (1973) discussed the importance of learning problem solving and decision making skills. Nichols (1990) wrote that elementary school students need to begin to take responsibility for behavior and interpersonal relationships which are the foundation of a democratic society.

Physical education programs should actively address personal-social learning objectives because ". . . the 'critical' years in which primary and lasting socialization occurs are from birth to adolescence" (Sage, 1986, p. 344). "During the preschool and elementary school years children move from the social context of the home to the school, peer group, and other social groups such as scouting or church groups" (Nichols, 1990, p. 21). Four major trends of social development are:

1. Movement from egocentric to group behavior
2. Recognition of sex roles and preferences in play
3. Movement from dependence on the family and other adults to increasing dependence on the peer group as behavior models
4. Increased competitive behavior (Nichols, 1990, p.21)

Arnold (1979) stated that physical education can teach students about interpersonal relationships as students experience moving alone, with a partner and with a group. Respect, trust, fear, caring and even dislike for others can be learned as students meet others in a movement situation. Classroom work often requires that students work individually in a stationary position. Through successful movement experiences students share themselves actively with others (Hoffman, Young & Klesius, 1985).

The unique component of physical education which allows children to develop socially is play. Play ". . . permits the child to interact in unique ways with the environment and its social participants. Social development, hence, occurs as the children assimilate various social roles" (Sage, 1986, p. 347). As students assume various roles within a game, culturally accepted behaviors for coping with conflict, problem solving and decision making are learned (Hoffman, Young & Klesius, 1985).

Assessment Recommendations for Early Elementary School Students

"[Assessment] requires at least two appraisals - one at the beginning of the

program and the other at a later point" (Melograno, 1985, p. 57). Safrit (1990) listed the following as uses for assessment: (a) motivation, (b) achievement, (c) program improvement, (d) prescription, and (e) grading.

Prior to teaching a new movement pattern, assessment is important in order to answer the questions: (a) What can the student do? and (b) What level of ability should new movement patterns be introduced? (Graham, Holt-Hale & Parker, 1987). Formal as well as informal evaluation tools must be used (Stallings, 1973). Information from assessments prior to the planning of a program will ". . .enable the teacher to build the program around the actual developmental or remedial needs of individual children rather than around a hypothetical group of 'average' children" (McClenaghan & Gallahue, 1978, p. 7). The document Physical Best published by the American Alliance of Health, Physical Education, Recreation and Dance (1989) contains the statement, "Tests in the cognitive, affective, and psychomotor domains should be administered to all students to assess their initial levels in each of these areas and to provide a basis for setting realistic goals" (p. 5).

Assessments following physical education programs are also important to determine whether or not students are meeting the goals and objectives of the program (Melograno, 1985). The information from assessments conducted at the end of the programs should be used to determine the effectiveness of the total program (Safrit, 1990).

Teachers should use normed standards of fitness and development as guidelines. However, Shephard (1982) outlined the need to assess each student when developing the physical education program. First, the physical education teacher must define the level of normality for each student because ". . . one difficulty in deciding whether an individual's growth is normal is that the range of normality is considerable. At different periods of childhood, the span from the fifth to the ninety-fifth percentile is the equal of two to four years growth" (p.23). Another reason to set individual and class goals rather than using national norms is that ". . . rate of growth and the ultimate adult size vary substantially both from community to community and, within a given

community, from decade to decade" (Shephard, 1982, p. 24).

Assessment for planning a physical education program should include measurements of general motor ability, specific skill ability, cognitive ability and social skill (Herkowitz, 1978). Cratty (1973) discussed the importance of also evaluating visual-motor coordination and the ability to control quality of movement. Furthermore, when administering assessments, teachers need to consider the wide variety of possible responses based on age, size, maturation and past experience.

Physical Education Content for Early Elementary School Students

Luebke (1981) suggested the following requirements for physical education teachers to provide a developmentally appropriate physical education program for early elementary school students: (a) develop teacher observation skills, and (b) develop teaching which honors individuals abilities. Shephard (1982) suggested moving away from programs with emphasis on specific sports skills because structured programs include ". . . the intrusion of adult expectations and excessive concentration on a few types of activity, to the possible exclusion of pursuits for which a given child is structurally and temperamentally well suited" (p. 247). Gallahue (1976) reiterated that not all students need movement enrichment; however, most students will benefit. The developmental physical education trend continues in textbooks of physical education (Nichols, 1990; Graham, Holt-Hale & Parker, 1987).

Within the planning process of a physical education program, four considerations are: (1) a flexible environment which can be structured to meet the needs of the students, (2) a balance between formal and informal activities, (3) an assessment of the needs of the students, and (4) an understanding of the variety of developmental levels which may be in each class (Luebke, 1981). The learning environment should not be a simple adaptation of a setting designed primarily for adults. Formal and informal activities should be balanced to include instruction and play, as refinement of rudimentary patterns occurs through continual exploration

(Luebke, 1981; McClenaghan & Gallahue, 1978). Assessing and understanding the developmental differences among students is vital in the design of activities that increase the level of ability in each student and not only the needs of the average student. (McClenaghan & Gallahue, 1978)

Logistics for Teaching Physical Education to Early Elementary School Students

All physical education professionals agree that having the appropriate facilities, equipment, time, and class size to teach developmentally appropriate physical education is important. Often, physical education equipment and facilities are more appropriate for adults and older students (Graham, Holt-Hale & Parker, 1987; Shephard, 1982; Herkowitz, 1978c). The amount of allotted time and caseloads also make developing a program to meet the wide array of needs of early elementary school students difficult (Pangrazi & Dauer, 1992; Gilliom, 1970).

Facilities

The gymnasium or outdoor field should be viewed and treated as a classroom where students will be educated (Kirchner, 1992). Wherever the physical education class meets, the students should be able to hear and see instructions without distraction. The space needs to be large enough to allow all of the students to practice movements fully (Pangrazi & Dauer, 1992). However, ". . in some schools, physical education classes are forced to use classrooms, cafeterias or even hallways on rainy days" (Graham, Holt-Hale & Parker, 1987, p. 10). Therefore, other activities occurring at the same time in the physical education space erodes the learning environment for early elementary students, who are easily distracted. Small spaces, such as hallways, classrooms or stages, drastically limit the number of students who can move at the same time (Graham, 1992). The end result is that children fail to learn new skills not because of low motor coordination or low developmental level, but because of the

limited opportunity to practice a new skills under the direction of a physical education teacher (Nichols, 1990).

Equipment

The equipment for early elementary physical education programs must be appropriate for the size and developmental level of the students (Gallahue, 1987). Herkowitz (1984) listed 5 considerations for selecting equipment for early elementary school students: (1) providing for physical growth of children, (2) providing for accurate feedback about performance, (3) providing for mechanically efficient movement, (4) providing for the visual and perceptual processing abilities of the students, and (5) providing for safety.

Many schools have purchased adult size equipment with the notion that students will grow into it. However, ". . .more often than not commercially available equipment is suited for use by a narrow, and usually highly skilled range of students" (Herkowitz, 1978c, p. 117). Inappropriate equipment may result in poor neuromuscular development as the students must adjust movements to the size of equipment that is too large or too heavy (Pangrazi & Dauer, 1992; Graham, Holt-Hale & Parker, 1987). For example, adult size rackets and bats have handles which are too long for the students to develop efficient striking patterns. A sufficient variety of developmental levels of equipment should be available so that each student may select the most appropriate equipment for current abilities.

Class Time

In order to provide early elementary school students with enough time to learn and practice motor skills that will impact on the total educational process, students should receive daily physical education (Pangrazi & Dauer, 1992). The American Alliance of Health, Physical Education, Recreation and Dance (1989) indicated that physical activity needs to occur three to five times per week to improve the components

of physical fitness. However, physical education programs do not receive priority status when school schedules are set. In addition, "Field trips and visiting speakers often present surprises to the physical education teachers. . ." who are usually the last to be informed that their class time has been preempted (Graham, 1992, p.5). "Classes that meet once or twice a week accomplish far less than classes that meet daily because you can't present as much material in one or two days as you can in five. And children, particularly young ones, tend to forget what they learned a week earlier" (Graham, Holt-Hale & Parker, 1987, p. 50). Time is wasted in programs which meet only two times per week because the teachers must spend five to ten minutes reviewing the last lesson thus decreasing participation and practice time.

The Michigan State Board of Education (1987b) document School Effectiveness: Eight Variables that Make a Difference did not address physical education directly; however, the document stresses time on task as being extremely important for students to learn and retain material. Rink (1993) indicated that the issue of time is difficult to define in physical education because most studies concerning time on tasks were conducted in classroom settings; however, ". . . the notion that students learn more when engaged for longer times with the content at an appropriate level is a reasonable concept" (p. 41).

Suggestions for increasing time allotted for physical education would be (a) to minimize disruptions, such as another class in the space; (b) to not withhold students from physical education for punishment; (c) to cut travel time to class; and (d) to schedule more time for physical education. Besides instructional time, students need to try the new movement, receive feedback and adjust the performance into a proficient skill. Then time for practicing the newly acquired skills must also be available.

Class Size

"Another variable - one that is particularly important to the physical education teacher - is class size. Physical education classes are historically the largest classes in a school" (Graham, Holt-Hale & Parker, 1987, p. 9). Not only are the classes large, but

many elementary school systems have one physical education teacher who travels to more than one school. "In a single day an elementary physical education teacher typically works with 7 to 12 classes of children" (Graham, 1992, p. 5). Therefore, by the end of the day the physical education teacher may have interacted with hundreds of children. With such large numbers of students, the task of assessing, planning and implementing effective elementary physical education programs in which each student reaches full motor development potential is overwhelming.

The physical education teacher is also responsible for teaching children who have a wide variety of ages. Kindergarten students are very different in all aspects of motor and physical development than fifth grade students. Frequently, classes of students are not scheduled for physical education in order of development. "The result is that a class of fifth graders may be followed by kindergartners, followed by second graders, and then another fifth grade class" (Graham, 1992, p. 5).

Summary

The review of literature described the components of effective physical education programs for early elementary school students. In general, the physical education program for early elementary school students should address the individual abilities. The content must provide the opportunity for the full development of basic motor skills and physical fitness to address any movement situation the students will encounter in later grades and life. Students must be assessed at the onset and throughout the program to ensure that the program is meeting individual developmental needs. Finally, the school must provide adequate facilities, equipment and time for the early elementary school students to become physically educated.

CHAPTER III

METHODS AND PROCEDURES

In order to determine the difference between physical education needs of early elementary school students and physical education programs, data were collected from two sources. The initial source was university textbooks concerned with the physical education needs of early elementary students. A content analysis process of the textbooks generated information about physical education needs of early elementary students. Second, a survey of physical education teachers was conducted to create a description of physical education programs in the state of Michigan. Finally, the two sets of data were compared to determine whether or not a difference exists between the physical education needs of early elementary students and physical education programs offered in Michigan elementary schools.

Content Analysis of Textbooks About Physical Education

Content analysis is a research technique in which communications, either tape recorded, videotaped or written, are systematically coded and analyzed in order to make inferences about a research question. Leading authors of research methods place emphasis on the importance of using a content analysis system that is objective, quantifiable and replicable in order to assure that inferences are valid and reliable (Patton, 1990; Kerlinger, 1986; Krippendorff, 1980). For the current study, the differences between recommendations of authorities in physical education and components of actual physical education programs in Michigan was investigated by systematically collecting data from written textbooks and surveys.

The advantage of content analysis is that the subjects cannot react to the investi-

gator, are not influenced by being assigned the role of interviewee, and are not influenced by the measurement instrument. Documents are also a rich source of information about programs when records are analyzed for the dynamics of behavior, consequences, conflict and consensus (Patton, 1990; Krippendorff, 1980).

The steps in planning to conduct content analysis are as follows: (a) unitizing or determining the parameters defining which documents are to be analyzed, (b) sampling or selection of documents, (c) partitioning document into codes or categories, (d) analyzing codes, and (e) determining reliability and validity.

Selection and Sampling of Textbooks

The parameters used to determine the type of literature to be analyzed were texts that (a) addressed the physical needs of early elementary school students, (b) provided information about approriate physical education programs for early elementary school students, and (c) contained reviews of current research. For the study, textbooks of physical education for elementary school students were determined to fit within the parameters defined because they are compiled from the most current research concerning elementary school physical education programs. In order to further narrow the textbooks to be analyzed, the universities in Michigan which offer an undergraduate physical education major were asked what textbook was used to teach elementary physical education courses. The data are reported in Table 3.

Coding Procedure for Selected Textbooks
About Physical Education

Four types of information were gathered from each textbook through the coding process: (1) bibliographic information, (2) physical education definitions, (3) general program content, and 4) program logistics. The definition of physical education, if explicitly stated, was presented in the Review of Literature.

The first step in the content analysis was to list the purpose of each text book. The audience for which the texts were intended and the theoretical basis for each text

was noted. In addition to the background information about each textbook, titles of chapters that were analyzed were listed. Keywords found during the review of literature were used to develop the chapter keyword list. (See Table 4)

Table 3

Elementary Physical Education Course Textbooks Used in Michigan Universities Which Offer a Physical Education Major

Universities	Title and Author(s)
Aquinas College Central Michigan University Hope College	Dynamic Physical Education for Elementary School Children (Pangrazi & Dauer, 1992)
Concordia College Michigan State University Wayne State University	Teaching Children Physical Education: Becoming a Master Teacher (Graham, 1992)
Eastern Michigan University Western Michigan University	Moving and Learning: The Elementary School Physical Education Experience (Nichols, 1990)
Northern Michigan University	Physical Education for Today's Elementary School Children (Gallahue, 1987)
Grand Valley State University	Physical Education for Elementary School Children (8th ed.) (Kirchner, 1992)

Secondly, the recommendations for curriculum development were noted. The persons who should be involved and the goals and objectives were listed if the author discussed curriculum development in the text.

Table 4

Keywords in Chapter Titles Which Determined Inclusion in the Content Analysis

Physical education	Motor development
Physical activity	Motor behavior
Physical fitness	Motor skills
Physical growth	Motor abilities
Physical skills	Personal skills
Social skills	Physical fitness
Equipment	Facilities
Activity space	Evaluation or assessment
Class size	Class time

Listing the types of assessment which are recommended by the authors occurred next. The recommended purposes and timing of assessment were also described.

Following the analysis of the recommendations for assessment, the logistical recommendations given in each textbook were summarized. The recommendations for facilities and equipment that should be available for an effective physical education program for early elementary school students were described. Next, the amount of time the authors suggested for early elementary physical education programs was given.

Finally, the content for early elementary physical education programs recommended by each author was then described. Definitions of motor development, physical fitness and personal social skills. Activities which teach motor development, physical fitness and personal social skills that were emphasized in each text were listed.

Validity of the Content Analysis

The type of validity that was most important to the study was the sample selec-

tion. Three areas must be addressed to determine sample validity: (1) investigator bias, (2) subject bias, and (3) analysis accuracy. In order to avoid investigator bias the universities in Michigan that offer a degree in physical education were polled. The physical education professors in the Michigan Universities controlled the five textbooks selected not the investigator. The authors of the textbooks came from five different areas of the united states. Therefore, the textbooks do not reflect physical education research and practices in a specific region in the United States. During analysis, the investigator used categories determined in the process of reviewing the literature to determine the chapters of the text books to be analyzed. Therefore, accuracy was maintained because the same areas were analyzed in each text. Also, the investigator closely summarized the exact statements of the authors about each area of content analysis.

Reliability of the Content Analysis

Three components of reliability for content analysis are determining stability, reproducibility and accuracy. Because the content analysis was performed by the investigator for the first time in the study, stability and accuracy are difficult to determine. However, the investigator has specifically described the steps of the content analysis for the study; therefore, the study can be replicated.

Development and Administration Procedures for the Survey

Following the guidelines of Fink and Kosecoff (1985) in How to Conduct Surveys, the survey was developed by considering the purpose of the study and determining the areas within physical education programs that were to be investigated. (See Appendix A) The primary source of information for development of the survey was the review of literature. Additional ideas for questions were found in of (a) Mackay and Marland (1978), who surveyed classroom teachers providing physical education instruction in elementary schools, and (b) Schempp (1989) who conducted an in depth case study of one physical education teacher.

The first part of the survey asked some general questions about the background of the physical education teachers. Educational background, major degree, type of certification, number of years experience, are areas in which the respondents provided information.

Secondly, the survey contained questions concerning the physical education curriculum guidelines for each district. The respondents were asked about the personnel involved in developing the curriculum as well as when the curriculum was developed.

The third portion asked about the logistics of the physical education program. The respondents were asked about caseloads as well as the nature of the time and equipment available for the early elementary school students.

Next, the respondents were asked to indicate what assessments from a supplied list were used with elementary school students. Then, the respondents were asked if assessment was used to plan or evaluate the physical education program.

The fifth section of the survey requested information about the physical education programs provided to students in grades kindergarten to third grade. The respondents were asked to indicate five areas of physical education that were most emphasized in the physical education program offered. Then the respondents were asked to rank these five areas in order of importance. One being the most important and 5 being the least important.

Finally, the respondents were asked about the level of support for resources for the elementary physical education program. First, the respondents checked which areas of support were adequate and secondly, the respondents selected the areas in which more support was necessary.

Sampling Procedures for the Survey

According to the Michigan State Board of Education (1991), each of the 574 local public school districts in Michigan employs an average of two physical education

teachers for elementary schools. A list of physical education liaisons from each district to the state was provided by the State Department of Education. Each of the school districts received one survey to be completed by a person who teaches physical education to kindergarten through third grade students. In order to keep a record of respondents, each survey had a numerical code which identified the school district to which the survey was sent.

Coding Procedures for the Survey Data

The first step in coding the survey responses was to code the frequency of similar answers on the background information portion of the survey. For example, the number of respondents with a bachelor's degree, the type of degree and type of certification was coded on a dot computer data entry sheet. Also, percentage of similar responses on the questions concerning numbers of years of physical education teaching experience was determined. (See Table 5)

Table 5

Example Analysis of Data About the Background of the Respondents

Education Level		Major	
n%	Bachelor's Degree	n%	Physical education
n%	Master's Degree	n%	Elementary education
n%	Hours beyond master's degree	n%	Other
n%	Specialist Degree		
n%	Doctoral Degree		

Next, the percentage of similar responses on survey questions concerning the physical education programs was calculated. The general information responses indicated how the curriculum guidelines were developed and what content was included. General information analysis was followed by analysis of the questions concerning as-

sessment, facilities, equipment and time. (See Table 6)

Two types of analysis were completed on the question concerning the content of the physical education programs. First, the frequency that each content area was selected was determined. The average rank order of importance of each content area was then calculated. (See Table 7)

Table 6

Examples of Analyses of Responses on the Survey of Physical Education Teachers

Example A.	Does your school district have a written physical education curriculum?
	n% Yes n% No n% Don't know
Example B.	What tests or measurements do you use to evaluate students?
	n% American Alliance of Health, Physical Education, Recreation and Dance (AAHPERD) Health Related Fitness Test n% Presidential Fitness Test n% Prigance Diagnostic Inventory for Early Development

Validity of the Survey

Random sampling was not used for the study. This created a danger to internal validity. The variables may have been affected by the respondents self-submission. However, the investigator wanted to assure that all districts had the opportunity to participate. In an informal interview with Dr. Gerald Nester (1991) of the Michigan Department of Education, Office of Special Education, the comment was made that in Michigan, the characteristics of schools in the upper peninsula are often over shadowed

Table 7

Example of Analysis of Survey Responses About Physical Education Program Content

In your school or school district, what areas of physical education are taught in kindergarten through third grade?	
Frequency that the content area was selected	Average rank order
_n_ thinking (cognitive) skills	n
_n_ physical fitness	n
_n_ health education	n

by the high population of the southeast section of the state. The survey was mailed to the 574 public school districts in Michigan. If a return rate of 30 percent from a wide variety of regions in Michigan had not been obtained, follow up letters would have been sent to the non-responding districts.

Although the expected return rate percentage was low, the expectation for a broad representation of school district needed to be met. Therefore, the general trends found in the responses would be representative of many elementary physical education programs in Michigan.

Reliability of the Survey

In general the reliability of the survey depends on the accuracy of the responses to each question. The survey used in the study asked concrete questions about the elementary physical education program in the school district. For example, the answer to the number of days per week students receive physical education per week does not require the respondent to supply an opinion. The concrete nature of the survey means that the responses would probably be the same if the survey was readministered (Gay, 1987).

Further reliability was determined by having 10 physical education profession-

als respond to a pilot survey. The respondents did not indicate that any of the questions were ambiguous or difficult to understand. Therefore, the reliability that the surveys would obtain the information expected was determined to the adequate.

Comparison Between Data From Content Analysis and Survey Responses

Two major sets of data concerning physical education programs for early elementary school students were generated from content analysis and survey analysis. The data collected from the physical education textbooks represented the physical education needs of early elementary school students. Data collected from the survey of physical education teachers in Michigan represented current physical education programs. The components of physical education programs for early elementary school students recommended in the leading textbooks were compared to the survey data concerning the current physical education programs to determine differences. (See Table 8)

For each section of comparison a written description of the similarities and differences between the data from the content analysis and survey responses was completed. The number of sections in which the textbook authors and survey responses agree or disagree was determined. If a thirty percent difference occurred between the content analysis recommendations and survey responses, the conclusion was that a difference between the needs of early elementary school students in physical education and the programs provided in Michigan existed. Therefore, specific recommendations for decreasing the disparity between the physical education needs of early elementary school students and the programs provided in Michigan were to be made for each area of the study that was not congruent.

Table 8

Comparison of Data From Content Analysis and Survey Responses

Content Analysis	Survey Responses
Curriculum Development	
Recommended curriculum content	Percentage of responses on items number 5, 8 and 9
Recommended frequency of curriculum review	Percentage of responses on item number 6
Recommended personnel involved in curriculum development	Percentage of responses on item number 7
Amount of allotted time for physical education	
Recommended number of days per week	Percentage of responses on item number 10
Recommended number of minutes per class	Percentage of responses on item number 11
Caseloads for physical education teachers	
Recommended number of students per class	Percentage of responses on items number 12 and 13

Table 8 - Continued

Physical education equipment for early elementary school students	
Recommended types of equipment	Percentage of responses on item number 14
Recommended amount of equipment	Percentage of responses on item number 15
Facilities for early elementary school physical education programs	
Recommended facilities for physical education	Percentage of responses on item number 16
Assessment in early elementary physical education programs	
Recommended assessment instruments	Percentage of responses on item number 17
Recommendations for assessments used in program planning	Percentage of responses on item number 18
Recommendations for assessments used in program evaluation	Percentage of responses on item number 19

Table 8 - Continued

Content of physical education programs for early elementary school students	
Recommendations for program content	Percentage of each selected item on question number 20
Areas of emphasis for physical education programs for early elementary school students	Average rank of items ranked 1 through 5 on question number 20
Support from administration to provide appropriate physical education programs for early elementary school students	
Recommendations for promoting physical education to administrators	Percentage of each selected item on questions numbers III and IV

CHAPTER IV

RESULTS OF THE DATA COLLECTION

Introduction

The results of the data collection for the study are presented in the following manner. First, the tables of data found through the content analysis of the five textbooks are presented followed by the results of the survey of teachers of physical education. Next, the two sets of data are integrated by comparing the results from the content analysis and surveys by section. For each section, a description of the similarities and differences between the sets of data is given.

Results of the Content Analysis

The five textbooks used for content analysis are presented in Table 9 along with the author, the university that requires the text and the year of publication. The only concern was the small sample for content analysis because only five textbooks were specified; however, the investigator determined that the recent publication dates and variety of regions in the United States that were represented maintained sample validity.

Attention to the reliability of the content analysis was through the systematic approach. The content analysis could be reproduced by following the steps in the study. Therefore, a suggestion for further research would be to recreate the study and determine any differences between this and subsequent efforts.

Note that three of the five textbooks were published in 1992 and that the earliest publication was Gallahue (1987); therefore, the texts met the parameter of being current and accurate sources of information concerning the physical education needs of

early elementary school students. Further bibliographic information can be found in the bibliography.

Table 9

Textbooks Used for Content Analysis

Title	Author (Year)	Universities (N=10)	N
Dynamic Physical Education for Elementary School Children (10th ed.)	Pangrazi & Dauer (1992)	Aquinas College Central Michigan Hope College	3
Teaching Children Physical Education: Becoming a Master Teacher	Graham (1992)	Concordia College Michigan State Wayne State	3
Moving and Learning:The Elementary School Physical Education Experience (2nd ed.)	Nichols (1990)	Eastern Michigan Western Michigan	2
Physical Education for Elementary School Children (8th ed.)	Kirchner (1992)	Grand Valley State	1
Physical Education for Today's Elementary School Children	Gallahue (1987)	Northern Michigan	1

The universities at which the authors worked at the time of publication can be found in Table 10. The authors represent work from seven different universities in five states, which means a broad base of characteristics of early elementary school students were represented. For example, the work of Dauer at Washington State University likely reflects the characteristics of children from the Northwest while the work of

Graham would tend to represent children in the East. Therefore, generalizability was maintained because the texts are not specific to a given geographical region.

Table 10

Current Positions of Authors of the Textbooks Which Were Used in Content Analysis

Author	Current Position
Robert P. Pangrazi	Arizona State University
Victor P. Dauer	Washington State University Professor Emeritus
George Graham	Virginia Tech
Beverly Nichols	University of Vermont
Glenn Kirchner	Simon Frazier University and Visiting Professor at Western Washington University
David L. Gallahue	Indiana University

The purpose of each textbook was noted in Table 11. In general, the stated purposes were to provide preservice physical education teachers with information about the development of elementary school students in the areas of motor development, physical fitness and personal social skills. Following the general information about the characteristics of elementary schools students, four of the texts described specific methods for teaching movement themes, games, physical fitness and sports. The text by Graham was different in that the focus of the book was on classroom management techniques rather than motor development of early elementary students with specific activities. The text by Graham did not contain some of the information in the areas of concern for the study.

Content of the textbooks that provided information to compare to the data gathered by the survey of physical education teachers is presented in the following order: (a) recommendations for curriculum development, (b) recommendations for amount of time students receive physical education per week, (c) recommendations for class size

or case load, (d) recommendations for equipment, (e) recommendations for facilities, (f) recommendations for assessment of students, (g) recommendations for physical education content, and (h) recommendations for relationship to administrators. The chapters from each text that were used in the content analysis are listed in Appendix B.

Recommendations for Curriculum Development

Each of the textbooks was analyzed for recommendations for curriculum development. Recommendations regarding representatives of the school district and community to be involved in the curriculum development process were noted as well as the frequency at which curriculum should be revised. The results of the content analysis concerning recommendations for curriculum development are presented in Table 12.

All of the authors recommended that the curriculum be a district wide responsibility. Three of the authors (Nichols, 1990; Pangrazi & Dauer, 1992; Graham,1992) specifically stated that in addition to physical education teachers, other members of the school system and the community should be involved in the process. By stating that the physical education curriculum needs to match the philosophy of the entire district, Gallahue (1987) implied that physical education teachers, other school staff and administration should be involved in curriculum writing.

Kirchner (1992) and Pangrazi and Dauer (1992) recommended that the physical education curriculum be revised on a regular basis. Kirchner (1992) indicated that the rapid changes in recommendations derived from research need to be incorporated into the curriculum continually. Another consideration for frequent revision is the ever changing characteristics of the students and the environments in which they live.

Recommended Time for Physical Education

The recommended amount of time for students to participate in physical education was an area of content analysis (see Table 13). Nichols (1990) and Pangrazi and Dauer (1992) recommended that the amount of time scheduled for students to attend

Table 11

Purposes of the Textbooks Used in the Content Analysis

Author	Purpose
Pangrazi & Dauer (1992)	"The tenth edition of Dynamic Physical Education for Elementary School Children represents an effort to refine and improve the quality and continuity of information. . . . This revision emphasized enhancing the effectiveness of instruction while increasing the number of skill-based activities. Sections on planning, establishing, and maintaining an environment for learning will help classroom teachers and physical education majors teach effectively" (p. vii).
Graham (1992)	"In writing this book, I have tried to express the perspective of a teacher as opposed to that of a university professor. . . . This book is unique in that it focuses totally on the teaching process - the skills and techniques that successful teachers use to make their classes more interesting and appropriate for children" (p. viii).
Kirchner (1992)	The book was written to promote a developmentally based physical education curriculum for elementary school students. (p. xi)
Nichols (1990)	The book is written for elementary and physical education majors studying elementary physical education. It may be considered as a text for elementary curriculum and planning and teaching. The book could also be used as a resource for practicing teachers. (p.vii)
Gallahue (1987)	Written for undergraduate and graduate students taking an introductory course in elementary physical education. Written from a developmental perspective - where children are in terms of development, not where they should be based on chronological age. (p. vii)

Table 12

Recommendations for Curriculum Development
Summarized From the Textbooks

Pangrazi & Dauer (1992)	A curriculum is developed to give sequence and direction to the learning experience of students. Committee representatives should be physical education teachers at all grade levels, parents, administrators, classroom teachers and other community agencies. The committee should meet regularly to review and update the curriculum.
Graham (1992)	Physical education teachers for kindergarten through twelfth grade students should meet to determine district goals and objectives. All physical education teachers at each grade level will then know what the children are learning and if children are transient they will receive consistent physical education programs.
Kirchner (1992)	Curriculum needs to be revised frequently to match the latest findings of research and the changing environments of the students and the schools.
Nichols (1990)	Curriculum development is the first step in the improvement of instruction. Physical education is a district wide responsibility. Curriculum change is continuous. Involved in the process should be the needs of the students and the community. The geographic location, number of teachers, and administrators should also be considered. The curriculum should be integrated with the total school district curriculum.
Gallahue (1987)	Physical education curriculum should match the philosophy or mission statement of the school district and school.

physical education should allow the goals and objectives of the curriculum to be met. Kirchner (1992) stated that the optimal amount of physical education time to develop fitness and motor skills is daily physical education for thirty minute sessions. All of the authors indicated that traditionally physical education is twice per week for thirty min-

utes; however, Graham (1992) stated that physical education teachers should lobby for more scheduled time. Gallahue (1987) suggested that noon time fitness programs or intramural activities be created.

Table 13

Recommendations for Amount of Time Students Should Receive Physical Education

Pangrazi and Dauer (1992)	The amount of time students receive physical education should be consistent with the curriculum. Enough time needs to be allotted for the students to achieve the goals and objectives in the physical education curriculum.
Graham (1992)	Most physical education classes meet twice per week for thirty minutes. Teachers should lobby for longer and more frequent class periods.
Kirchner (1992)	The optimal amount of time is daily physical education for thirty minutes each day.
Nichols (1990)	Enough time needs to be allotted in order for the students to meet the goals and objectives in the curriculum. Less time means that fewer objectives should be included in the curriculum.
Gallahue (1987)	Since physical education teachers only see students one to two times per week, alternative times for activity should be provided such as noon hour fitness programs or intramurals.

Recommended Class Size and Caseloads

Most of the texts indicated that the number of students that a physical education teacher contacts per week and the size of classes should be based on the curriculum (see Table 14). Class sizes or caseloads for physical education teachers should allow the teachers to provide programs in which students can reach physical education goals and objectives, according to Pangrazi and Dauer (1992), Kirchner (1992), and Nichols (1990). Kirchner also implied that smaller caseloads will allow the physical education

teacher to know and to teach to the individual needs of the students. Gallahue (1987) stated that class size will determine how the classroom management plan and classroom organization for activities will be developed. Large class size means less time for each student to participate. The only author who gave specific recommendations for class size and caseloads was Graham (1992), who indicated the maximum should be seven to eight classes per day with no more that thirty students per class.

Table 14

Recommendations for Class Size and Caseloads

Pangrazi and Dauer (1992)	Class size should be based on meeting the goals in the curriculum.
Graham (1992)	Seven to eight classes per day with thirty students.
Kirchner (1992)	Smaller case loads and class size which will enable the optimal opportunity for teachers to meet the individual needs of the students.
Nichols (1990)	The class size will determine the ability of the teacher to meet all of the objectives listed in the curriculum.
Gallahue (1987)	Class size will determine classroom management planning as well as the organization of the students for activities.

Recommendations for Equipment

All of the texts indicated that equipment should match the curriculum. Two other general thoughts about equipment were found in the texts (see Table 15). First, three of the texts gave suggestions for the amount of equipment and secondly, two of the texts listed the types of equipment necessary for early elementary physical education. Enough small equipment should be available for each student, in order to maximize the opportunities for the students to learn and practice new movement skills

(Pangrazi & Dauer, 1992; Nichols, 1990; Gallahue, 1987). The equipment should also meet the developmental needs of the students and should not be adult weight and sizes.

Table 15

Recommendations for Physical Education Equipment

Pangrazi and Dauer (1992)	One piece of equipment per student when using small equipment such as rackets, bats, balls, etc. Enough large equipment so that each student has ample time to participate. The equipment should be based on the curriculum and should fit the growth and development of each student.
Graham (1992)	The equipment available should meet the goals and objectives of the curriculum and curriculum planning should include consideration of the types of equipment available.
Kirchner (1992)	Equipment should allow the students to meet the goals of the curriculum and should match the developmental needs of each student.
Nichols (1990)	Enough small equipment should be available for each student. Large equipment should allow ample practice time. The equipment should reflect the curriculum.
Gallahue (1987)	Equipment should match the curriculum. Enough equipment to allow all students to be actively involved during the entire lesson.

Recommendations for Facilities

Several different recommendations were found in the texts. In general, the important ideas were that the facility needs to allow students to meet the goals and objectives of the curriculum, needs to be safe, and needs to be large enough for all students to move freely (see Table 16). Graham (1992) stated that the facility will determine part of the classroom management plan. Enough space needs to be available to allow students to move fully while learning to perform locomotor and ball handling skills

(Nichols, 1990). One text specifically recommended that the space be reserved for physical education and that other objects in the room such as cafeteria tables or staging should be removed (Gallahue, 1987).

Table 16

Recommendations for Physical Education Facilities

Pangrazi and Dauer (1992)	The facilities available should allow the students to meet the goals and objectives of the curriculum.
Graham (1992)	The environment needs to be considered when developing classroom management strategies.
Kirchner (1992)	Indoor and outdoor facilities should be large enough for students to move freely. If hallways or classrooms must be used the teacher will need to modify the activities for safety and the students may not have the same opportunities to meet the curriculum.
Nichols (1990)	Since kindergarten through third grade physical education should emphasize fundamental motor skills, a large space should be available for all students to fully experience all qualities and quantities of movement. A large multipurpose room or field will work.
Gallahue (1987)	Multipurpose rooms that also serve as the cafeteria may have safety hazards. Acoustics need to be considered, in order for students to hear instructions well. The space should be well lit. Enough space is needed for all students to move freely.

Recommendations for Assessment

In general, the analysis of the five textbooks revealed three basic purposes for assessment in physical education, which are listed in Table 17: (1) to monitor the progress of the students, (2) to evaluate the effectiveness of instruction, and (3) to evaluate the physical education program (Kirchner, 1992; Pangrazi & Dauer, 1992;

Nichols, 1990; Gallahue, 1987). Interestingly, only two of the texts discussed the importance of assessment prior to planning the physical education program in order to ensure the program begins at the developmental level of the students (Gallahue, 1987; Graham, 1992).

Table 17

Recommendations for Assessment in Physical Education

Pangrazi and Dauer (1992)	Assessment should review all phases of education: pupil progress, teacher performance and program effectiveness.
Graham (1992)	Two purposes of assessment are to determine the progress of the students and effectiveness of the program. Assessment should occur prior to and after the program.
Kirchner (1992)	Evaluation should be used to measure the effectiveness of teaching, the level of skill development and the efficacy of the physical education program.
Nichols (1990)	Evaluation should be used to make decisions about meeting the needs of the student, the effectiveness of teaching and the physical education program. The planning process needs to include determining how the effectiveness of the program will be measured.
Gallahue (1987)	Assessment should occur at the entry level, during the program, and following the program in order to ensure that the individual developmental needs of the students are being met. Assessment should be used to evaluate student progress, teacher effectiveness and program effectiveness.

Recommendations for Physical Education Program Content

Physical fitness and fundamental motor skills were recommended program con-

tent by the four texts which discussed program content. In addition to physical fitness and fundamental motor skills, other areas of program content were cognitive skills, educational games, health education, rhythmic movement, body control skills, and personal social skills. In Table 18, the program content from each of the four texts is listed in order of priority determined from content analysis. The text by Graham did not contain specific recommendations for physical education program content.

Table 18

Recommendations for Physical Education Program Content and Priority of Each Area

Pangrazi and Dauer (1992)	Priority 1 - Physical fitness Priority 2 - Fundamental motor skills Priority 3 - Health education Priority 4 - Rhythmic movement Priority 5 - Educational game
Kirchner (1992)	Priority 1 - Fundamental motor skills Priority 2 - Locomotor skills Priority 3 - Cognitive skills Priority 4 - Physical fitness Priority 5 - Educational game
Nichols (1990)	Priority 1 - Fundamental motor skills Priority 2 - Cognitive skills Priority 3 - Personal social skills Priority 4 - Educational games Priority 5 - Physical Fitness
Gallahue (1987)	Priority 1 - Fundamental motor skills Priority 2 - Physical fitness Priority 3 - Personal social skills Priority 4 - Body control skills Priority 5 - Educational games

Recommendations for Relationship of Physical Education Teachers to the Administration

All of the texts indicated that the relationship with administration should be open and consistent in order for physical education to maintain status in the curriculum and in the budget (see Table 19). Administrators need to be continually briefed on the progress of students in the physical education program in relationship to the total school curriculum. Graham (1992) specifically suggested that physical education teachers volunteer for school committee work in order to educate classroom teachers and keep physical education as a priority in budget development. Pangrazi and Dauer (1992) stated that administrators needs to have consistent updates about the physical education program to keep the program as part of the long range plan for the school district rather than on a year to year budget controlled basis. Administrators who are kept informed about the physical education program are more likely to understand the importance of the development of motor skills and fitness in the total educational program and will not use physical education as a reward for student behavior or break time for classroom teachers (Gallahue, 1987). Finally, physical education teachers need to be continually informed of new legal responsibilities and liability issues.

Results of the Survey of Elementary Physical Education Teachers

The Survey of Physical Education Teachers about Physical Education Programs for Kindergarten through Third Grade Students was sent to the 574 physical education liaisons to the Michigan Department of Education on August 25, 1993. Each liaison was asked to complete the survey if the liaison taught early elementary physical education or to pass the survey on to a person who taught elementary physical education in the district. Two hundred and fifty one surveys were returned by September 28, 1993. A forty four percent (44%) return rate was achieved. In Appendix C, a list of the school districts represented may be found. The rate of return was greater than the

expected 30 percent. In addition, the wide geographic area represented in Michigan met the criteria for sample validity discussed in Methods and Procedures.

Table 19

Recommendations for the Relationship of Physical Education Teachers to Administration

Pangrazi and Dauer (1992)	Administrators need to be involved in curriculum planning in order to assist in establishing consistent yearly budget allocations, long range equipment needs, facility needs and integration of physical education into the total curriculum.
Graham (1992)	Physical education teachers should volunteer for committee work in order to maintain awareness of physical education programs in the district.
Kirchner (1992)	Administrators should involve the physical education teachers in understanding legal responsibilities and liability issues.
Nichols (1990)	During curriculum planning, administrators should be involved in order to maintain consistent physical education programming throughout the school district. Informed administrators are more likely to maintain the level of priority physical education receives in the total curriculum.
Gallahue (1987)	The administration should be involved in order to have input about the total philosophy of the school district. Principals can be involved in supporting other physical activity opportunities for students such an noon hour fitness or intramural programs.

Accuracy for the survey analysis was maintained by coding the responses. The data were entered into the VAX system at Western Michigan University and analyzed using SPSS statistical software. The only data that were manually assessed were responses to an other category and open ended comments.

The results of the survey responses are presented in the following order: (a) background of the respondents, (b) curriculum development, (c) physical education

allocated time, (d) class size and weekly caseloads, (e) equipment available, (f) facilities used, (g) assessments used, (h) program content, and (i) support from administration.

The first question on the survey was "Physical education is provided for elementary school students in your district? yes or no." If the respondent indicated that physical education was not provided to elementary school students in the district the instruction was to return the survey in the self-addressed stamped envelope provided. The number of respondents who answered that physical education was not provided to elementary school students was 36. Therefore, 14.3 percent of the respondents had no elementary physical education program. Although the respondents without elementary physical education programs were not asked to comment, four of the districts indicated that the program was cut after the 1992 - 1993 school year because of budgetary constraints. Two of the respondents stated that classroom teachers provide some physical activity for the students. One respondent described the school district as a one room rural school district. The school districts without elementary physical education programs were not coded; therefore, the results of the survey analysis were based on the 215 respondents who had elementary physical education.

Background of Respondents

Background information about the respondents included (a) educational background, (b) major and minor degrees, (c) teaching certification, (d) years of experience teaching physical education and (e) years of experience teaching physical education to kindergarten through third grade students.

All of the respondents had received at least a bachelor's degree. The percentage of respondents with a master's degree was 45 percent. Nineteen (18.6) percent had completed university credit hours beyond a master's degree. One respondent had completed a specialist degree and one respondent had earned a doctorate. Two respondents had other additional degrees which were not specified.

The major areas of study of the respondents and level of education are presented in Table 20. Most of the respondents (84.6%) had majored in physical education. The

next highest proportion of major area was "other" majors (11.2 %). Some of the common other majors were music, math, industrial arts, and speech. Bachelors degree minor areas are listed in Appendix D.

At the master's degree level the most common major specified was physical education (21.9%), with other masters degree majors (10.7%) being the next largest proportion of respondents with master's degree who specified a major area. Seven of the respondents indicating a masters degree major listed counseling. Unfortunately, the major area was not specified by most of the respondents with a masters degree (54%). Eighty percent (80.5%) did not list a minor area; however, the most common minor area was "other" (12.1%). For a complete listing of the masters degree major and minor areas see Appendix E.

Most of the respondents (86%) with hours beyond a master's degree did not indicate a major area. Twelve respondents indicated that the major area was other; however, the area was not specified.

A high percentage of the respondents (87.4%) were certified to teach kindergarten through twelfth grade physical education (see Table 21). Three (2.8) percent were certified to teach kindergarten through sixth grade physical education and five (4.7) percent were certified kindergarten through sixth grade elementary all subjects. One percent were certified in areas that are other than majors degrees required for physical education teachers in Michigan.

The respondents were, in general, teachers with bachelors degrees in physical education certified to teach kindergarten through twelfth grade physical education. Therefore, the respondents represent teachers who meet the qualifications to teach physical education in Michigan.

The respondents represent physical education teachers with many years of experience (see Table 22). The years of experience teaching physical education was 15 years or more for a high percentage of the respondents (54%). Fourteen (13.5) percent taught eleven to fifteen years, 15.8% percent six to ten years and 16.3 percent zero to five years.

Table 20

Educational Background of the Survey Respondents

Degree Level	Major	Percent of Responses (n)
Bachelor's		100% (215)
	Physical Education	(84.6%)
	Elementary Education	(3.3%)
	Health	(0.9%)
	OTHER	(11.2%)
	NO MAJOR SPECIFIED	(0.5%)
Master's		45.1% (97)
	Physical Education	(21.9%)
	Elementary Education	(2.8%)
	Special Education	(0.9%)
	Administration	(9.3%)
	Health	(0.5%)
	OTHER	(10.7%)
	NO MAJOR SPECIFIED	(54.0%)
Hours Beyond Master's Degree		18.6% (40)
Specialist Degree		0.5% (1)
Doctorate		0.5% (1)

Although the respondents represented physical education teachers who have had many years experience teaching, the years of experience teaching early elementary school students was not as high. Thirty one (30.7) percent of respondents had taught physical education to early elementary school students zero to five years, the next highest percentage was fifteen or more years (28.4%).

Curriculum Development in the Districts Represented

Five questions on the survey asked information about the physical education curriculum in the district. The first question asked if a district physical education curriculum existed. The following questions asked: (a) What curriculum the respondent followed? (b) When the curriculum was written? and (c) Who wrote the curriculum? The last question asked if recess was considered part of the physical education curriculum in the district. The results of the responses concerning the physical education curriculum are presented in Table 23.

Table 21

Certification of Physical Education Survey Respondents

Certification	Percent of Respondents (n)
Kindergarten - 12th Grade Physical Education	87.4% (188)
Kindergarten - 6th Grade Physical Education	2.8% (6)
7th - 12 Grade Physical Education	2.8% (6)
Kindergarten - 6th Grade Elementary Education	4.7% (10)
Secondary Education	1.4% (3)
OTHER	0.9% (2)

Seventy one (71.2) percent of the respondents indicated that a district curriculum existed. Surprisingly, 27.4 percent of the respondents answered that no curricu-

lum existed and three did not know if a district physical education curriculum had been developed. Many of the respondents (42.8 %) indicated that a combination of a self-developed program and the district curriculum guidelines were used to teach the physical education program. Thirty four percent of the respondents use a self-developed curriculum only. Twenty one (20.5) percent responded that the district curriculum is used and five responded that no developed curriculum is used to teach the physical education program of the respondent.

Table 22

Years of Experience of Physical Education Survey Respondents

Years of Experience Teaching Physical Education	Percent of Responses (n)
0 - 5 years	16.3% (35)
6 - 10 years	15.8% (34)
11 - 15 years	13.5% (29)
15 + years	54.5% (117)

Years of Experience Teaching Elementary Physical Education	Percent of Responses (n)
0 - 5 years	30.1% (66)
6 - 10 years	27.9% (60)
11 - 15 years	13.0% (28)
15 + years	28.4% 61

Table 23

Responses to Physical Education Survey Concerning Curriculum Development

Question	Response	Percent of Responses	n
Does your school district have a written physical education curriculum?	Yes	71.2%	153
	No	27.4%	59
	Don't know	1.4%	3
What physical education curriculum do you follow?	District	20.5%	44
	My own	34.0%	73
	Combination	42.8%	92
	Don't use	2.3%	5
	Fitness for Youth	0.5%	1
When was the curriculum written?	10 years ago	13.0%	28
	5 years ago	14.4%	31
	2 years ago	12.6%	27
	Recently revised	30.7%	66
	Don't know	3.7%	8
	None	25.6%	55
Who wrote the physical education curriculum used in your district?	P.E. Teachers	52.6%	113
	Administrators	0.5%	1
	Combination	16.3%	35
	Don't know	3.3%	7
	Fitness for Youth	0.5%	1
	None	27.0%	58
In your district, is recessconsidered physical education?	Yes	1.4%	3
	No	97.7%	210
	Don't know	0.9%	2

Many of the respondents (43.2%) with district physical education curriculums answered that the curriculum was written two years ago or had been recently revised.

Thirteen percent were written ten or more years ago and 14.4 percent were written five years ago.

The responses concerning the parties responsible for writing the district physical education curriculum, if one existed, were as follows: (a) physical education teachers (52.6%), (b) administrators (0.5%), and (c) a combination of physical education teachers and administrators (16.3%). Seven respondents did not know who wrote the physical education curriculum.

Amount of Time Early Elementary School Students Received Physical Education

Two questions that concerned the amount of time early elementary school students receive physical education were asked on the survey. First the respondents were asked the number of days per week that each grade level, kindergarten through third grade, received physical education (see Table 24). Then the respondents indicated the amount of time each class session met (see Table 25).

The greatest proportion of the respondents indicated that first grade through third grade students receive two physical education classes per week for 25 to 30 minutes per session. The second highest proportion of respondents had physical education for early elementary school students one day per week. Fifteen (14.9) percent indicated that kindergarten receives no formal physical education. Forty seven percent of kindergarten students received physical education one day per week. Three of the respondents indicated that physical education occurred in 9 or 11 week units. One school district responded that early elementary students received daily physical education. Physical education was provided to first through third grade students four days per week in one district.

Class Size and Caseloads of the Physical Education Teachers

The average number of students per class and the number of students the re-

spondent taught per week were the next survey questions. In Table 26, the responses are presented. In general, the respondents see 300 or more students per week (81%). The majority of the respondents (83.7%) had 21 to 30 students in each class.

Table 24

Days per Week That Students Received Physical Education

Grade Level	Days per week	Percent of Responses	n
Kindergarten	0	14.9%	32
	1	47.0%	101
	2	35.3%	76
	3	1.9%	4
	4	0	0
	5	0.9%	2
First Grade	0	0.9%	2
	1	33.5%	72
	2	60.0%	129
	3	4.2%	9
	4	0.5%	1
	5	0.9%	2
Second Grade	0	0.5%	1
	1	34.4%	74
	2	59.1%	127
	3	4.7%	10
	4	0.5%	1
	5	0.9%	2
Third Grade	0	0.9%	2
	1	32.6%	70
	2	60.5%	130
	3	4.7%	10
	4	0.5%	1
	5	0.9%	2

Table 25

Minutes per Physical Education Class

Minutes per class	Percent of Responses	n
15 to 20 minutes	2.3%	5
21 to 30 minutes	73.5%	158
35 to 40 minutes	15.3%	33
45 to 60 minutes	8.8%	19

Table 26

Class Sizes and Caseloads of the Physical Education Teachers

Average Number of Students per Class	Percent of Responses	n
1 - 10	0.9%	2
11 - 20	6.0%	13
21 - 30	83.7%	180
31 - 40	7.0%	15
41 - 50	1.9%	4
50 +	0.5%	1

Number of Students Taught per Week	Percent of Responses	n
1 - 30	0.9%	2
31 - 60	0.5%	1
61 - 100	4.7%	10
101 - 300	13.0%	28
301 - 600	40.0%	86
601 - 1000	29.8%	64
1001 +	11.2%	2

Equipment Available for Early Elementary Physical Education

Two questions on the survey concerned the equipment used in the respondents physical education programs. First, the respondents were asked if the amount of equipment was adequate for all students to actively participate. Then, whether or not the equipment was developmentally appropriate for the skill levels of the students was asked.

The majority of the respondents (85.1%) indicated that the equipment available for early elementary school students in physical education is developmentally appropriate. Also, most respondents (77.2%) answered that enough equipment is available for all students to have adequate opportunity to learn and practice movements (see Table 27). Fourteen (13.5) percent indicated that it was not developmentally appropriate and 20.9 percent responded that not enough equipment was available.

Table 27

Equipment Available for Early Elementary Physical Education

Question	Response	Percent of Responses	n
Is the equipment available appropriate for all developmental levels of students?	Yes	85.1%	183
	No	13.5%	29
	Don't know	1.4%	3
Is enough equipment available for all students to have adequate opportunities to learn and practice movements?	Yes	77.2%	166
	No	20.9%	45
	Don't know	1.9%	4

Facilities Used in Early Elementary Physical Education

The respondents were asked to indicate all of the facilities that are used for early elementary physical education in the schools. Almost seventy three (72.9) percent are able to use a gymnasium, while many respondents (43.7%) indicated that a multipurpose room is used for physical education. Sixteen (15.8%) answered that an outdoor area is available for physical education. Only eight percent of the respondents have a swimming pool available. Eleven percent used a classroom; however, all class room respondents also had the use of a gymnasium or multipurpose room. Some of the unusual facilities were a basement, downhill skiing facility and a foyer (see Table 28).

Table 28

Facilities Used for Early Elementary Physical Education

Facilities Used	Percent of Responses	n
Classroom	11.2%	24
Gymnasium	72.6%	156
Swimming Pool	8.4%	18
Multipurpose Room	43.7%	94
Stage	6.0%	13
Other	17.7%	38

Assessments Used in Early Elementary Physical Education

The respondents were asked to indicate any assessment tools that were used in the early elementary physical education program. The results are found in Table 29. The Presidential Fitness Test (51.6%) was the assessment most commonly used. The next most common response was "other" (28.8%). About 14 percent (14.4%) of the respondents employed the American Alliance of Health, Physical Education, Recreation

and Dance (AAHPERD) Health Related Fitness Test. The AAHPERD Youth Fitness Test followed closely with 14.0 percent (see Appendix E).

Table 29

Assessments Used in Early Elementary Physical Education

Assessment	Percent of Responses	n
AAHPERD Health Related Fitness	14.4%	31
Presidential Fitness Test	51.6%	111
Brigance Diagnostic Inventory for Early Development	0.9%	2
Hughes Basic Gross Motor Assessment	2.8%	6
Purdue Perceptual Motor Survey	2.3%	5
AAHPERD Youth Fitness Test	14.0%	30
Denver Developmental Screening	0.9%	2
Bruininks-Oseretsky Test of Motor Proficiency	0.9%	2
Gesell	3.3%	7
Other	28.8%	62

After the respondents were asked what, if any, assessments were used in the elementary physical education program, the respondents were asked if assessment was used in planning or evaluating the program. Fifty four (54.4) percent answered that assessment was not applied in planning the physical education program. Forty seven (46.5%) percent answered that assessment was not used to evaluate the physical educa-

tion program. Two respondents indicated that they did not know if assessment was used to plan or evaluate the physical education program in that school (see Table 30).

Table 30

Proportions of Respondents Who Used Assessment to Plan or to Evaluate the Physical Education Program

Question	Responses	Percent of Responses	n
Do you used any tests or measurements to plan your physical education program?	Yes	43.3%	93
	No	54.4%	117
	Don't know	2.3%	5
Do you use any tests or measurements to evaluate your physical education program	Yes	49.8%	107
	No	46.5	100
	Don't know	3.7%	8

Content of Early Elementary Physical Education Programs

The respondents were provided with a list of 19 areas of physical education programs from the literature (see Table 31). The respondent selected all of the areas of physical education that were provided. Secondly, the respondents were asked to choose five priority areas in the physical education program and then rank the areas from one to five. The five commonly selected areas were (1) fundamental motor skills (96.7%), (2) locomotor skills (95.3%), (3) ball handling skills (92.1%), (4) physical fitness (90.7%), and (5) personal social skills (81.9%). Some of the other activities were jumprope, juggling, parachute activities, and downhill or cross country skiing.

Areas the respondents chose to rank from 1 to 5 as emphasis areas were (a) fundamental motor skills (94.1%), (b) physical fitness (81.7%), (c) locomotor skills (78.5%), (d) personal social skills (64.0%), (e) thinking (47.2%), and (f) ball handling skills (38.3%) The highest ranking content area of six areas that were most frequently

Table 31

Contents Areas of Physical Education Taught

Content Area	Percent of Respondents	n
Thinking Skills	80.0%	172
Physical Fitness	90.7%	195
Health Education	51.6%	111
Personal Social Skills	81.9%	176
Fundamental Motor Skills	96.7%	208
Ball handling Skills	92.1%	198
Fine Motor Skills	69.3%	149
Locomotor Skills	95.3%	205
Rhythmic Movement	74.0%	159
Dance	45.6%	98
Stunts and Tumbling	78.1%	168
Basketball	63.3%	136
Football	34.4%	74
Soccer	69.8%	150
Volleyball	53.0%	114
Track and Field	47.9%	103
Softball	45.6%	98
Swimming	7.9%	17
Hockey	40.5%	87
OTHER	11.2%	24

chosen to be ranked was fundamental motor skills with personal social skills following with a 2.6 average rank. None of the specific sports that were selected as one of the five emphasis areas and ranked were ranked above a four. Twenty nine of the respondents (13.5%) did not correctly complete the item which required ranking of the content areas; therefore, there were 29 missing responses in the analysis (see Table 32).

Support From Administrators for Early Elementary Physical Education

The respondents were asked to indicate the areas of support for physical education that were available from the administration to improve the quality of elementary

physical education. Almost seventy (69.8) percent of the respondents indicated that a yearly equipment budget was available and that support from other teachers (59.5%) was apparent. Parent awareness was also frequently selected (see Table 33).

Table 32

Areas of Emphasis and Average Rank of the Areas Taught in Physical Education

Content Area	Percent of Respondents Selecting the Area	n	Average Rank of Respondents selecting the area
Thinking Skills	47.2%	88	3.4
Physical Fitness	81.7%	152	2.6
Health Education	17.7%	33	2.9
Personal Social Skills	64.0%	119	3.1
Fundamental Motor Skills	94.1%	174	2.1
Ball handling Skills	38.3%	71	3.6
Fine Motor Skills	31.1%	58	2.4
Locomotor Skills	78.5%	146	2.8
Rhythmic Movement	17.8%	62	2.0
Dance	4.3%	8	3.7
Stunts and Tumbling	12.3%	23	4.2
Basketball	2.7%	5	3.4
Football	0.5%	1	5.0
Soccer	1.6%	3	4.3
Volleyball	1.5%	3	3.0
Track and Field	2.1%	4	4.0
Softball	0.5%	1	4.0
Swimming	1.0%	2	2.5
Hockey	0.5	1	5.0

Support Needed From the Administration to Improve Early Elementary Physical Education

The respondents were asked to select the areas of support from the administration that existed. Then, the respondents indicated the areas in which support from the administration was needed. The respondents most frequently indicated that more time

Table 33

Administrative Support Available to Improve Physical Education

Area of Support	Percent of Responses	n
Physical education has priority	27.9%	60
Yearly equipment budget	69.8%	150
Equipment purchased on request	59.1%	127
More scheduled time	13.5%	29
In service training	36.7%	79
Improved gymnasium facilities	26.1%	56
Outdoor facilities	34.4%	74
Swimming pool	7.9%	17
Assessment tools	14.4%	31
Time for assessment	7.9%	17
Other teacher's support	59.5%	128
Parent awareness	41.9%	90
Priority in school curriculum	18.1%	39
None	3.7%	8

is needed for physical education (60.5%) and 41.4 percent indicated that more time for assessment was also needed (see Table 34). The need to improve the status of physical education in the curriculum was selected by 57.7 percent of respondents. Also, Forty five (44.7) percent of the respondents answered that physical education needed higher priority in the school curriculum.

Perception of Area of Highest Need to Improve Elementary Physical Education

The respondents were asked to describe one thing that would improve the physical education program for kindergarten through third grade students (see Table 35). Sixty two (62.3) percent specifically said that more time, more classes per week or daily physical education would improve the physical education program. More time would allow the teachers to effectively meet the needs of the individual students. The

Table 34

Needs From Administration in Order to Improve Physical Education

Area of need	Percent of Responses	n
Physical education needs priority	57.7%	124
Yearly equipment budget	32.6%	79
Equipment purchased on request	20.9%	45
More scheduled time	60.5%	130
In service training	40.5%	87
Improved gymnasium facilities	40.9%	88
Outdoor facilities	22.8%	49
Swimming pool	12.6%	27
Assessment tools	17.7%	38
Time for assessment	41.4%	89
Other teacher's support	16.7%	36
Parent awareness	21.4%	46
Priority in school curriculum	44.7%	96
None	3.3%	7

other frequent responses were: (a) higher priority in the curriculum (n=16), (b) equipment and facilities receive more consideration in the budget (n=38), and (c) more qualified physical education teachers (n=20).

General Comments About the Early Elementary Physical Education Programs

The last question on the survey allowed the respondents to make any comments about their physical education programs for kindergarten through third grade students. The most common comment (n=79) was that the physical education teachers are generally satisfied with the physical education being provided to early elementary school students considering the limits of time and money. In Table 36, the results of the comments are presented. The comments can be found in Appendix F.

Table 35

One Thing That Would Improve the Physical Education Program

Item	Percent of Responses	n
More time per week or daily	62.3%	134
Better/improved facilities	11.1%	24
Priority in total curriculum	6.9%	15
More teachers	6.5%	14
Better equipment	2.7%	6
Smaller classes and caseloads	2.3%	5
More inservice training	2.3%	5
Don't know	0.5%	1

Table 36

General Comments Concerning Early Elementary Physical Education

Comment category	n
Satisfied with the program	79
Need more time	39
Priority in curriculum	26
Smaller caseloads	12
Higher priority in budget	10
No kindergarten physical education	10
Need more physical education teachers	8
Need better facilities	8
Not seen as other teachers break time	7
Need more inservice training	7
Need more administrative support	7
Need support from other teachers	2
Need support from parents	1

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of the study was to describe the current physical education programs that are provided to early elementary school students in Michigan. Data has been collected, analyzed and reported from content analysis of five physical education textbooks written by leading authorities and through a survey of elementary physical education teachers. A comparison of the data from the two sources was completed.

The first area to be described was the background and experience of the survey respondents. The following areas were compared to note any discrepancies between the recommendations of the authorities and the physical education teachers who responded: (a) curriculum development, (b) time allotment, (c) caseloads , (d) equipment needs, (e) facility needs, (f) content of the program, and (g) relationship to administration.

Comments About the Background of the Textbook Authors and Survey Respondents

The five textbooks used for content analysis were written by seven authors from various locations in the United States. Also, the textbooks had recent publishing dates. The latest was 1992 and the earliest was 1987. The textbooks analyzed were determined to be representative of the latest research and practices in elementary physical education.

The respondents represent a group of well qualified and experienced physical education teachers from around Michigan (see Appendix C). The survey was returned by 44 percent of the survey recipients. All of the teachers had completed a bachelors

degree. The largest proportion of respondents were certified to teach kindergarten through third grade physical education. Therefore, the survey respondents represented well qualified and experienced elementary physical education teachers.

Conclusions About Curriculum Development

In Table 37, the comparison of the results of the content analysis and survey responses concerning curriculum development are presented. In two of the areas about curriculum development, no conclusions can be made since a difference between the content analysis and survey results was not discovered. The two areas were: (1) written district curriculum, and (2) recess used for physical education. However, a difference was found between the results in the three areas: (1) what curriculum was actually used in the physical education class, and (2) who was involved in the curriculum writing process, and (3) when the curriculum was revised.

If the physical education teachers who responded were frequently using a self-developed curriculum or a combination of the district and self-developed curriculum the ability to maintain district-wide consistency of physical education is compromised. For example, children who have attended a program that focuses on fundamental movement and move to another school in the district that focuses on a specific sport may be disadvantaged (Graham, Holt-Hale and Parker, 1987). Teachers need to modify the physical education program to help the students meet the district curriculum; however, changing the objectives to a teacher developed curriculum decreases the ability of the district to evaluate the outcomes of the physical education program. The administration does not know what the physical education program should be or how to evaluate the effectiveness of the program. Also, the district curriculum is not being evaluated for long term planning (Pangrazi & Dauer, 1992) or to support the program in the district (Gabbard & LeBlanc, 1986).

Administrators should take a leadership role in ensuring that a district curriculum which incorporates physical education is available and updated frequently (Nichols, 1990). Physical education teachers should be involved in writing the district

Table 37

Comparison of Content Analysis Results and Survey Results Concerning Curriculum Development

Content Analysis	Percent of Textbooks	Survey Results	Percent of Responses	Difference
Need written Curriculum	100%	District Curriculum	71%	inconclusive
Recess is not physical education	100%	Recess is not physical education	97.7%	inconclusive
Follow district	100%	Combination or own	76.8%	difference
Continual/Frequent curriculum revision	100%	2 years or recent revision	43%	difference
District wide involvement in curriculum	100%	Physical Ed Teachers wrote the curriculum	52.6%	difference

curriculum. A separate physical education curriculum written by physical education teachers alone or modified by an individual teacher may cause physical education to become isolated from the total curriculum. A basis for district wide monitoring, maintaining or improving physical education in relationship to the total curriculum will not exist. The foundation for expected student outcomes in both physical education and the total curriculum is weak.

Conclusions About Time for Physical Education

The comparison of the content analysis to the survey response concerning the number of minutes per physical education class was inconclusive. Two of the authori-

ties recommend that the number of class meetings per week should allow the students to meet curricular goals. Three of the authorities recommend that physical education teachers lobby for more longer and more frequents class periods. One specifically stated that daily physical education is necessary for an effective physical education program. The recommendations for number of classes per week was different than the days per week the majority of respondents indicated that elementary students have physical education (see Table 38).

Table 38

Comparison of Content Analysis Results and Survey Results Concerning Time for Physical Education

Recommendation from textbooks	Content Analysis Results	Survey Response	Percent of Response	Difference
30 minutes	60.0%	21 to 30 minutes	73.0%	inconclusive
3 to 5 days per week	60.0%	1 - 2 Days per week	90.0%	difference

The minutes per class was inconclusive because the respondents have the amount of time per class that the authorities recommended. Three of the five textbooks contained recommendations for physical education more that two times per week but 93 percent of the respondents indicated that first through third grade students receive one or two days. Eighty two (82.3) percent indicated that kindergarten students receive one to two days and 15 percent answered that kindergarten students receive no physical education.

Teachers who conduct physical education programs for one to two days per week per class need to petition for at least three days per week. Administrators need to be appraised of the latest research in physical fitness and motor development of early el-

ementary school students. According to the AAHPERD (1989) Physical Best program, in order to develop and maintain fitness, students need vigorous physical activity for optimal fitness development. Graham, Holt-Hale and Parker (1987) stressed the need for young students to have physical education on a frequent basis because the students forget the last lesson. The need for the teacher to review or reteach material decreases the amount of time to work with individual students and to introduce new material. Also, the view that early elementary school students need more time for seated academic tasks needs to be replaced with the knowledge that young children learn through movement (Seefeldt, 1988).

Conclusions About Class Size and Caseloads in Physical Education

Although no conclusions about class size were possible in the comparison of recommendations from authorities and survey responses, a difference between the recommended caseloads and actual caseloads was found. The textbook recommendations and the survey responses corresponded because most physical education teachers have the desired 20 to 30 students per class. However, Eighty one percent of the respondents have contact with 300 or more students each week. Large caseloads create physical education programs in which the curriculum objectives are impossible to meet. If teachers need to consider the abilities of the student, the nature of the task to be accomplished and type of learner to be taught, 300 students per week will not allow such individual consideration. Teachers do not have the opportunity to provide much needed individualized physical education programs for the wide variance among the developmental levels of the students (Pangrazi & Dauer, 1992). Assessment and evaluation of the program become mechanical paper trails of tests rather than direct analysis of the needs of each student, from the most talented to the most uncoordinated and from the most fit to the least fit.

Administrators must be made aware that caseloads of 300 plus students are unsatisfactory. Any administrator, teacher, parent or community member would be ap-

palled if a reading teacher was assigned three hundred students (Seefeldt, 1988). The crucial importance of optimal motor and physical fitness development for early elementary school students, discussed in the Review of Literature, warrants a critical review of the practice of assigning 300 individual students to one physical education teacher.

Conclusions About Equipment

No conclusions could be drawn from the results of the content analysis compared to the survey results concerning equipment. In general, the authorities stated that the equipment should be based on the curriculum, should be developmentally appropriate and should be in a large enough quantity for all students to participate. The survey responses indicated that enough developmental equipment was available for all students to have an opportunity to practice new movements.

One concern was for the physical education teachers who used a curriculum that was written 5 to 10 years ago or had no curriculum. Determination of the types and amounts of equipment indicated on the surveys was based on the physical educator perception of developmentally appropriate equipment. According to Halverson (1988), physical education programs have not changed since 1971 and much research about the developmental differences among early elementary school students has not been incorporated in the current programs. A recommendation would be for a systematical inventory of the equipment based on assessments of the developmental level students and the goals and objectives of the curriculum.

Conclusions About Facilities

According to the responses on the surveys, most of the school districts represented have adequate facilities for early elementary school students. The authorities did not specify facilities other than to state that, in general, enough space needs to be available for active participation.

Conclusions About Assessment

All of the authorities recommended using both motor development and physical fitness tests to evaluate the progress of the students and the effectiveness of the program. The most common assessments used by the respondents were physical fitness tests which were also important in the content analysis. However, few respondents indicated that a measurement of motor development was used. The lack of use of motor development assessments was contrary to the recommendations found in the textbooks (see Table 39).

No conclusions could be made about the use of assessment to plan physical education programs. Only, two of the textbooks specifically mentioned using assessment to determine the level at which the program should start for each student. The use of assessments to evaluate the physical education program varied between the recommendations and the survey responses. All of the authorities detailed the importance of using assessment to evaluate the progress of the students and the effectiveness of the program. Only 50 percent of the respondents indicated that the physical education program is evaluated (see Table 40).

Assessment for the level of physical fitness of early elementary school students was described as very important in the Review of Literature. However, the lack of frequency that respondents indicated use of assessments of motor development needs to be addressed. The lack of motor assessment was interesting since fundamental motor skills was the most often selected response and the highest rank ing content area by the survey respondents. The Michigan State Board of Education (1990) defined development of fundamental motor skills as one of the six goals of physical education programs. If little formal evaluation of motor development is completed, then the physical education teacher had no documentation of the progress of the students or effectiveness of the physical education program related to motor development.

Recommendations would be for the physical education teachers to begin to use a motor development screening test to document the entry level and progress of the stu-

Table 39

Comparison of Types of Assessments Used Between the Content Analysis Results and Survey Results

Content Analysis	Percent	Survey	Percent	Difference
Fitness Assessments Recommended	100%	Presidential Fitness	51.6%	inconclusive
		AAHPERD Tests	28.4%	
		TOTAL	80.0%	
Motor Development Assessments Recommended	100%	TOTAL	11.1%	difference

dents. The equipment for early elementary physical education programs should be developmentally appropriate (Lederman, 1986); however, unless motor development assessments are completed the determination of the appropriateness of the equipment could be questioned.

Neither the content analysis nor the survey respondents indicated that assessment was important for planning the physical education program. However, other research reviewed for the study suggested the importance of knowing the abilities of the students prior to starting the program.

In particular, the complete research that supports the developmental milestone theory indicated that between the ages of five and eleven children may vary up to two years in physical growth (Rowland, 1990). Motor development was not found to be strictly dependent on age (Shephard, 1992). Physical educators that assume early elementary school students have developed certain physical and motor abilities because of age, do not take into consideration the variety of individual strengths and weaknesses.

Table 40

Comparison of Uses of Assessments Between the Content Analysis and Survey Results

Content Analysis	Percent	Survey Results	Percent of Responses	Difference
Use assessment to plan program	40%	Use assessment to plan program	43.3%	inconclusive
Use assessment to evaluate program	100%	Use assessment to evaluate program	49.8%	difference

Physical education teachers also need the initial assessment in order to provide a base to determine whether or not children have changed physical and motor characteristics while in the program. Teachers who only evaluate following the program may have students who started the program at a level too advanced or too easy; therefore, the students who did poorly may have been attempting to perform tasks that were overly difficult (Gallahue, 1985).

Physical educators would be leaders in the movement to increase the priority of physical education if the students and the program were evaluated on a continual basis. Evaluation of physical education programs should be an integral part of the curriculum. Not only will evaluations indicate the accomplishments of the students, but will justify physical education programs. If programs are rigorously evaluated and documented the teacher will have a basis for concrete support for physical education.

Conclusions About Physical Education Program Content

The priority areas of physical education indicated on the surveys closely

matched the recommended emphasis areas in the textbooks (see Table 41). Therefore no conclusions about difference between the content analysis and the survey responses could be made. Both data sources included fundamental motor skills, physical fitness, cognitive skills, educational games and personal social skills as important components of the physical education program. The physical education programs represented by many of the survey responses appeared to fit the program content suggested in the textbooks.

One concern about the areas of emphasis and the physical education program was that the classes meet only once or twice a week and the caseloads of many districts was large. With limited time, the physical education teacher has the monumental task of providing the goals and objectives in approximately 36 hours per year. No suggestions for physical education programs are necessary; however, the physical education teachers need more time and smaller caseloads to provide the content adequately.

Conclusions About Relationships With Administration

The reliability of the items on the survey was questionable in the area of relationship to administration. The respondents were asked to select the areas in which administrators are supportive and in which administrative support is needed. However, the content analysis was centered on the administrative role in determining curriculum, equipment and facilities in relationship to the physical education teacher. No conclusions could be made from the comparison between content analysis and survey responses.

Overall Conclusions of the Study

According to the survey responses, physical education program content, facilities and equipment and curricula met the recommendations of the authorities. Most physical education teachers of early elementary school students are providing the appropriate content in the physical education program. Fundamental motor skills, physical

Table 41

Comparison of the Five Physical Education Content Areas Emphasized in the Textbooks and by the Survey Respondents

Content Analysis Priority Areas	Survey Respondents Priority Areas
Fundamental motor skills	Fundamental motor skills
Physical fitness	Physical fitness
Thinking skills	Locomotor skills
Educational games	Personal social skills
Personal social skills	Thinking skills

fitness and cognitive skills were high priorities of most of the teachers. The survey indicated that the facilities and equipment were adequate to provide students with the opportunity to actively participate. Most of the defined district curriculums had been written within the past two years. New or revised curricula may include new practices in teaching early elementary physical education. Inspite of the limited amount of time and large caseloads, many of the respondents are providing early elementary school students with appropriate physical education. Many of the respondents commented that the program was well rounded considering the limitations.

Unfortunately, many physical education programs were operating with an inadequate amount of time and with too many students assigned to each teacher. Many of the respondents worked with curricula that were designed by physical education teachers alone or curricula that were self-designed. Half of the respondents indicated that assessment was not used to evaluate the physical education program. Lack of time, large caseloads, segregated physical education curricula and disregard for program evaluation contributed to the decrease of physical education programs that Gabbard and LeBlanc (1986) discussed.

Recommendations for Administrators

Physical education teachers need support to improve programs for early elementary school students. Two specific recommendations for providing support are: (1) scheduling physical education at least three times per week, and (2) hiring more physical education teachers. Physical education is simply too important for elementary school students to have one teacher assigned to over 100 students and have contact with each student an average of 1 hour per week. Research has demonstrated that early elementary school students learn through movement (Seefeldt, 1988). Until the age of seven or eight, normal children have not developed all of the mature fundamental motor skills such as cross lateral skipping or internal knowledge of right and left (Auxter, Pyfer & Huettig, 1993). Early elementary school students who, starting at the age of 5, are required to spend most of the day at seated academic work are losing the opportunity to develop good motor development, body control skills and physical fitness. Motor development and body control skills are taken for granted, yet uncoordinated students are often the students who struggle in the class room (Cratty, 1985).

In general, the findings of the study indicated that physical education teachers have the knowledge and qualifications to teach well rounded physical education programs. However, the limitations of time and large caseloads make the job of providing appropriate physical education, as well as documenting the outcomes of the program, impossible.

Recommendations for Physical Education Teachers

The two most urgent recommendations for physical education teachers relate to documentation of the goals, objectives and outcomes of the physical education program in relationship to the total kindergarten through twefth grade curricula. Physical education teachers need to take a leadership role in developing a district wide integrated educational curriculum in which physical education is equal with other educational content areas. Without an integrated curriculum, physical education teachers are operating out-

side of the educational mainstream. The curricula should be inclusive of not only the contribution of health related fitness for early elementary school students, but also motor development objectives that contribute to the ability of the student to function in the classroom. The curricula should include objectives which match the cognitive objectives of the total curriculum, such as problem solving and critical thinking. Finally, personal social skill development objectives should correspondent to the citizenship development component of the total educational program.

The second recommendation is that physical education teachers actively evaluate the outcomes of the physical education program both informally and formally. One respondent said that evaluation was not a priority because the students have a great time and are happy. Other respondents who did not use evaluation also commented that the elementary physical education program was enjoyed by the students. Unfortunately, when school boards must make budget cuts, a program that is simply described as fun for the students will not receive much enthusiastic support. Taxpayers are not willing to pay for the luxury of a program that has the purpose of entertaining students without a specifically delineated contribution to education. Therefore, program evaluation is an important function of the physical education teacher. Written justification for the role of physical education in a well-rounded educational program for all students is necessary to improve and maintain the priority physical education receives.

Although the recommendations for physical education teachers may seem impossible, given the few teachers and the overloaded schedules, physical educators as professionals need to acknowledge that the competition for funds among educational programs in schools is increasing. In 1994, the uncertainty of school funding procedures in Michigan may further inhibit physical education because of the current trend toward cutting programs. Fourteen (14.3) percent of the respondents have lost physical education as part of education for elementary students. Michigan physical education teachers must actively compete for quality physical education programs by becoming leaders in curriculum development and by documenting the important contribution physical education makes to the total educational process.

Appendix A

Cover Letter and Survey

August 25, 1993

Dear Colleague,

I am completing a doctoral dissertation in Educational Leadership at Western Michigan University under the direction of Dr. Gene Thompson and Dr. Billye Cheatum. Also, I am also a member of the Michigan Department of Education Referent Committee on Physical Education. The purpose of my study is to describe current physical education programs for kindergarten through third grade students in Michigan. The results and conclusions will be used to list specific program recommendations for school administrators.

The enclosed survey should be completed by a person who teaches physical education to elementary school students (Kindergarten through third grade) in your school district. If your district does not have a physical education program, please answer the first question on the survey and return it in the enclosed self addressed stamped envelope. Otherwise, a person who teaches physical education to elementary school students should complete the survey. I realize that this is a busy time of year, but I would appreciate receiving the completed survey by September 15, 1993.

The survey is completely confidential. All surveys are coded to determine which surveys have and have not been returned. However, the codes will not be used in the data analysis and at no time will your name or the name of a school district be specifically related to data presented in the dissertation.

Thank you for your time and consideration.

Sincerely,

Allison Hammond
Western Michigan
University

Survey for Physical Education Teachers about Physical Education Programs for Kindergarten through Third Grade Students

Physical education is provided for elementary school students in your district?
Yes ____ No ____
(If the answer is no, you do not need to complete the survey, but please mail it back in the return envelope. If the answer is yes, please complete the survey and return it. Thank you.)

I. Background Information:

1. Educational Achievement (check all that apply):

____ Bachelor's Degree Major _____
Minor(s) _____
____ Master's Degree Major _____
Minor(s) _____
____ Specialist's Degree Major _____
Minor(s) _____
____ Ph.D. Major _____
Minor(s) _____
____ Ed.D. Major _____
Minor(s) _____
____ other, please specify_____

2. Teaching Certification (Check all that apply):

____ Kindergarten - 12 Physical Education
____ Kindergarten - 6 Physical Education
____ 7 - 12 Physical Education
____ Kindergarten - 6 Elementary
____ Approval as a Teacher of Physical Education for Individuals with Disabilities
____ Other, please specify _____

3. Years of experience teaching physical education:

0-5 years __ 6-10 years __ 11 - 15 years __ 15+ __

4. Years of experience teaching physical education to kindergarten through third grade students:

0-5 years __ 6-10 years __ 11 - 15 years __ 15+ __

II. General information about your Physical Education Program: (for questions 5 - 16 please check the response that most closely matches your situation.)

5. Does your school district have a physical education curriculum?

Yes ____ No ____ Don't know ____

6. What physical education curriculum do you follow?

District curriculum ____
Develop my own ____
Combination of district and mine ____
Don't use a curriculum ____

7. When was the curriculum written?

10 years ago ____ 5 years ago ____ 2 years ago ___
recently revised ____ don't know ____

8. Who wrote the physical education curriculum used in your school or school district?

Physical education teachers ____
Administration ____
Combination of both ____
Don't know ____
Other ____, please specify _____

9. In your district is recess considered physical education? Yes ___ No ___

10. Number of days per week physical education program is provided: (indicate number of days in the blank for each grade)

K ____ 1 ____ 2 ____ 3 ____

11. Amount of time for each physical education class (in minutes per class)

15-20 min ____ 25-30 min ____ 35-40 min ____
45-50 min ____ 60+ min ____

12. Average number of students per class:

1-10 __ 11-20 __ 21-30 __ 31-40 __ 41-50 __ 50+ __

13. Number of students you teach per week:

1-30 ____ 31-60 ____ 61-100 ____ 101-300 ____
301-600 ____ 601-1000 ____ 1001+ ____

14. Is the equipment available appropriate for all developmental levels of students?

Yes ____ No ____ Don't know ____

15. Is enough equipment available for all students to have adequate opportunities to learn and practice movements?

Yes ____ No ____ Don't know ____

16. What facilities are used for elementary physical education in your school? (Check all that apply.)

Classroom ____
Gymnasium ____
Swimming pool ____
Multipurpose room ____
Stage ____
Other ____ Please Specify, _____

17. What tests or measurements do you use to evaluate students: (Please check all that apply)

AAHPERD Health Related Fitness test ____
Presidential Fitness Test ____
Brigance Diagnostic Inventory for Early Development ____
Hughes Basic Gross Motor Assessment ____
Purdue Perceptual Motor Survey ____
AAHPERD Youth Fitness Test ____
Denver Developmental Screening ____
Bruininks-Oseretsky Test of Motor Proficiency ____
Gesell ____
Other, _____
Other, _____

18. Do you use any tests or measurements to plan your physical education program?

Yes ____ No ____ Don't know ____

19. Do you use any tests or measurements to evaluate you physical education program?

Yes ___ No ___ Don't know___

20. In your school or school district, what areas of physical education are taught in kindergarten through third grade? **(Check all that apply on the left column. Then choose the 5 areas that are priorities and rank order the areas from 1 - 5 on level of importance. One (1) is most important.)**

Check		Rank order
____	thinking (cognitive) skills	____
____	physical fitness	____
____	health education	____
____	personal social skills	____
____	ball handling skills	____
____	perceptual motor skills	____
____	everyday living motor skills	____
____	fine motor skills	____
____	locomotor skills	____
____	rhythmic movement	____
____	dance	____
____	stunts and tumbling	____
____	basketball	____
____	football	____
____	soccer	____
____	volleyball	____
____	track and field	____
____	softball	____
____	swimming	____
____	hockey	____
____	other _____	____
____	other _____	____
____	other _____	____

III. In your school, what suppport do you have from the administration to improve the quality physical education to kindergarten through third grade students. (Check all that apply.)

Equipment budget higher priority	____
More scheduled time	____
In service training	____
Improved gymnasium facilities	____
Outdoor facilities	____
Swimming pooi	____
Assessment tools	____
Time for assessment	____
Other teachers'support	____
Parent awareness	____
Priority in school curriculum	____
None	____
Other, _____	____
Other, _____	____

IV. In your school, what suppport do you need from the administration to improve the quality physical education to kindergarten through third grade students. (Check all that apply.)

Equipment budget higher priority	____
More scheduled time	____
In service training	____
Improved gymnasium facilities	____
Outdoor facilities	____
Swimming pool	____
Assessment tools	____
Time for assessment	____
Other teachers'support	____
Parent awareness	____
Priority in school curriculum	____
None	____
Other, _____	____
Other, _____	____

V. If you had your choice of one thing that would improve the physical education program for kindergarten through third grade students what would it be?

_____

VI. General comments about the physical education program provided to kindergarten through third grade students in your school or school district.

_____
_____
_____
_____

Appendix B

Chapters Used in Content Analysis

Graham, G. (1992). Teaching children physical education: becoming a master teacher.

Chapter #	Chapter Title	Pages
1	Successful Teaching	1 - 11
2	Planning to maximize Learning	13 - 27
6	Instructing and Demonstration	63 - 77
9	Developing the Content	101 - 115
13	Assessing Children's Progress	149 - 162
14	Continuing to Develop as a Teacher	163 - 171

Pangrazi, R. & Dauer, V. (1992). Physical education for elementary school children. (10th ed.)

Chapter #	Chapter Title	Pages
1	Introduction to Elementary School Physical Education	1 - 16
2	Physical Activity and the Growing Child	17 - 30
3	The Basis for Learning Motor Skills	33 - 48
4	Developing a Physical Education Curriculum	49 - 68
6	Establishing and Maintaining an Environment for Learning	97 - 108
10	Evaluation	171 - 196
13	Incorportation Physical Fitness into the Program	225 - 271
33	Facilities, Equipment, and Supplies	695 - 717

Kirchner, G. (1992). Physical education for elementary school children.

Chapter #	Chapter Title	Pages
1	Elementary School Physical Education	1 - 14
2	Children and Activity	17 - 28
5	Learning Motor Skills	70 - 87
6	Planning a Physical Education Curriculum	93 - 108
7	Organizing for Physical Education	109 - 135
9	Selecting Evaluative Methods and Techniques	137 - 148

Nichols, B. (1990). Moving and learning: the elementary school physical education experience.

Chapter #	Chapter Title	Pages
1	Physical Education in the Elementary School	2 - 7
2	The Elementary School Child	13 - 22
3	The Elementary School Physical Education Program	30 - 38
4	Program Planning	43 - 54
5	Learning and Motor Learning	60 - 68
10	Essentials of Evaluation	114 - 123
14	Fitness, Stress Reduction, and Movement Efficiency	198 - 221
Appendix 1	Suggested Equipment and Records	A-1
Appendix 5	Screening Devices, Sources, and IEP Forms	A-14

Gallahue, D. (1987). Developmental physical education for today's elementary school children.

Chapter #	Chapter Title	Pages
1	Developmental Physical Education: Why Bother	3 - 9
2	Movement Skill Development	10 - 17
3	Fitness Development	18 - 26
4	Perceptual - Motor Development	28 - 33
5	Self - Concept Development	35 - 40
7	Childhood Growth and Motor Development	54 - 60
9	Developmental Characteristics of Children	77 - 83
14	The Developmental Physical Education Curriculum	127 - 141
16	Organizing the Learning Environment	155 - 163
17	The Extended Curriculum	164 - 172
19	Assessing Progress	184 - 189

Appendix C

School Districts Represented

School Districts Represented in the Survey

School District	City
Addison Community Schools	Addison
Akron Fairgrove Schools	Fairgrove
Alcona Community Schools	Lincoln
Algonquin Community Schools	Algonac
Allegan Public Schools	Allegan
Alma Public Schools	Alma
Alpena Public Schools	Alpena
Ann Arbor Public Schools	Ann Arbor
Arenac Eastern School District	Twining
Atherton Community School District	Burton
Atlanta Community Schools	Atlanta
Au Gres Sims School District	Au Gres
Autrain-Onota Public Schools	Deerton
Baraga Area School District	Baraga
Bay City Public Schools	Bay City
Bear Lake School District	Vear Lake
Beaver Island Community Schools	St. James
Bedford Public Schools	Lambertville
Belding Public Schools	Belding
Bellaire Public Schools	Bellaire
Bentley Community School District	Bentley
Bessemer Area Schools	Bessemer
Birch Run Area Schools	Birch Run
Birmingham City School District	Birmingham
Blissfield Community Schools	Blissfield
Bloomfield Hills Public Schools	Bloomfield Hills
Brandon School District	Ortonville

School Districts Represented in the Survey

School District	City
Breitung Township School District	Kingsford
Bridgeport-Spaulding School District	Bridgeport
Bridgman Public Schools	Bridgman
Britton-Macon Area Schools	Britton
Buckley Community School District	Buckley
Burr Oak Community School District	Burr Oak
Byron Area Schools	Byron
Caledonia Community Schools	Caledonia
Calumet Public Schools	Calumet
Camden Frontier Schools	Camden
Capac Community School District	Capac
Carman-Ainsworth Schools	Flint
Carney Nadeau Public Schools	Carney
Carrollton School District	Carrollton
Carsonville-Port Sanilac Schools	Carson City
Caseville Public Schools	Caseville
Cassopolis Public Schools	Cassopolis
Central Lake Public Schools	Central Lake
Central Montcalm Public Schools	Stanton
Chassell Township School District	Chassell
Cheboygan Area Schools	Cheboygan
Chippewa Valley Schools	Mt. Clemens
Clare Public Schools	Clare
Clarkston Community School District	Clarkston
Clawson School District	Clawson
Clinton Community Schools	Clinton
Clintondale Community Schools	Mt. Clemens

School Districts Represented in the Survey

School District	City
Coleman Community Schools	Coleman
Colfax Township School District 1F	Bad Axe
Coloma Community Schools	Coloma
Columbia School District	Cement City
Comstock Public Schools	Comstock
Constantine Public Schools	Constantine
Coopersville Area Public Schools	Coopersville
Corunna Public School District	Corunna
Covington School District	Sidnaw
Crawford Ausable Schools	Sidnaw
Crestwood School District	Dearborn Heights
Dansville Ag School	Dansville
Dearborn Public Schools	Dearborn
Deckerville Community School Dist.	Deckerville
DeWitt Public Schools	DeWitt
Dryden Community Schools	Dryden
East China Twp. School District	St. Clair
East Jackson Community Schools	Jackson
East Lansing School District	East Lansing
Eaton Rapids Public Schools	Eaton Rapids
Eau Claire Public Schools	Eau Claire
Edwardsburg Public Schools	Edwardsburg
Elm River Twp School District	Toivola
Evart Public Schools	Evart
Ewen-Trout Creek Cons. Schools	Ewen
Falmouth Elementary School District	Falmouth
Farmington Public School District	Farmington

School Districts Represented in the Survey

School District	City
Farwell Area Schools	Farwell
Flint Community Schools	Flint
Frankenmuth School District	Frankenmuth
Frankfort-Elberta Area Schools	Frankfort
Fraser Public Schools	Fraser
Fremont Public School District	Fremont
Fruitport Community Schools	Fruitport
Galesburg Augusta Comm. Schools	Galesburg
Ganges #4 School District	Glenn
Garden City School District	Garden City
Gaylord Community Schools	Gaylord
Gibralter School District	Rockwood
Gladwin Community Schools	Gladwin
Godwin-Heights Public Schools	Wyoming
Grand Blanc Community Schools	Grand Blanc
Grand Haven City School District	Grand Haven
Grand Rapids Public Schools	Grand Rapids
Grandville Public Schools	Grandville
Grant Public School District	Grant
Grass Lake Community Schools	Grass Lake
Greenville Public Schools	Greenville
Hagar Township School District #6	Riverside
Hancock Public Schools	Hancock
Hanover Horton Schools	Hanover
Harbor Springs School District	Harbor Springs
Harper Woods City Schools	Harper Woods
Harrison Community Schools	Harrison

School Districts Represented in the Survey

School District	City
Hartford Public School District	Hartford
Hemlock Public School District	Hemlock
Hillman Community Schools	Hillman
Hillsdale Community Public Schools	Hillsdale
Holland School District	Holland
Holt Public Schools	Holt
Homer Community Schools	Homer
Hopkins Public Schools	Hopkins
Houghton Lake Community Schools	Houghton Lake
Howell Public Schools	Howell
Huron School District	New Boston
Ironwood Area Schools	Ironwood
Ishpeming Public School District	Ishpeming
Jackson Public Schools	Jackson
Jonesville Community Schools	Jonesville
Kaleva Norman Dickson School Dis.	Brethren
Kalkaska Public Schools	Kalkaska
Kenowa Hills Public Schools	Grand Rapids
Kent City Community Schools	Kent City
Kentwood Public Schools	Kentwood
Kingsley Area Schools	Kingsley
Laingsburg Community Schools	Laingsburg
Lakeshore Public Schools	St. Claire Shores
Lakeview Community Schools	Lakeview
Lakeview School District	St. Clair Shores
Lamphere Public Schools	Madison Heights
Lawrence Public Schools	Lawrence

School Districts Represented in the Survey

School District	City
Les Cheneaux Community School Dis.	Cedarville
Lincoln Cons. School District	Ypsilanti
Linden Community School District	Linden
Lowell Area Schools	Lowell
Madison Public Schools	Madison Heights
Mancelona Public Schools	Mancelona
Manchester Community Schools	Manchester
Manistee Area Public Schools	Manistee
Manistique Area Schools	Manistique
Manton Consolidated Schools	Manton
Maple Valley School District	Nashville
Marenisco School District	Marenisco
Martin Public Schools	Martin
Marysville Public Schools	Marysville
Mason Consolidated School District	Mason
Mason County Central Public Schools	Scottville
Mason Public Schools	Mason
Mattawan Consolidated School Dis.	Mattawan
Mesick Consolidated Schools	Mesick
Mid Peninsula School District	Rock
Mid Peninsula School District	Rock
Millington Community Schools	Millington
Mona Shores School District	Norton Shores
Monroe Public Schools	Monroe
Montabella Community Schools	Edmore
Montague Area Public Schools	Montague
Moran Township School District	St. Ignace

School Districts Represented in the Survey

School District	City
Morley-Stanwood Community Schools	Morley
Mt. Morris Consolidated Schools	Mt. Morris
Muskegon Public Schools	Muskegon
Napoleon Community Schools	Napoleon
Negaunee Public Schools	Negaunee
New Buffalo Area School District	New Buffalo
North Adams Public Schools	Painesdale
North Central Area Schools	Hermansville
North Dickinson County School Dis.	Iron Mountain
North Muskegon Public Schools	North Muskegon
Northville Public School	Northville
Northwest School District	Jackson
Nottawa Community Schools	Sturgis
Oak Park City School District	Oak Park
Okemos Public Schools	Okemos
Orchard View Schools	Muskegon
Orleans Township School District #10	Orleans
Orleans Township School District #9	Orleans
Osceola Township School District	Dollar Bay
Oscoda Area Schools	Oscoda
Palo Community School District	Palo
Parchment School District	Parchment
Paw Paw Public Schools	Paw Paw
Peck Community School District	Peck
Pellston Public School District	Pellston
Pennfield School District	Battle Creek
Petoskey Schools	Petoskey

School Districts Represented in the Survey

School District	City
Pinckney Community Schools	Hamburg
Pinconning Area Schools	Pinconning
Plainwell Community Schools	Plainwell
Port Huron Area School District	Port Huron
Posen Consolidated School District	Posen
Powell Township School District	Powell
Reading Schools	Reading
Redford Union School District	Redford
Reed City Public School	Reed City
Reese Public Schools	Reese
Richmond Community Schools	Richmond
River Rouge School District	River Rouge
River Valley School District	New Troy
Roseville Community Schools	Roseville
Saginaw City School District	Saginaw
Saginaw Township Community Schools	Saginaw
Saline Area School District	Saline
Sand Creek Community Schools	Sand Creek
Saranac Community Schools	Saranac
Sault Ste. Marie Area Schools	Sault Ste. Marie
Shelby Public Schools	Shelby
Sheridan Township School District 5	Bad Axe
Sigel Township School District 3	Bad Axe
Sigel Township School District 4	Harbor Beach
South Haven Public Schools	South Haven
Southfield Public Schools	Southfield
Southgate Community Schools	Southgate

School Districts Represented in the Survey

School District	City
St. Charles Community Schools	St. Charles
St. Johns Public Schools	St. Johns
St. Joseph Public Schools	St. Joseph
Stephenson Area Schools	Stephenson
Superior Central School District	Eben Junction
Suttons Bay Public School District	Suttons Bay
Swan Valley School District	Saginaw
Tawas Area Schools	Tawas City
Three Rivers Community Schools	Three Rivers
Traverse City Area Public Schools	Traverse City
Trenton Public Schools	Trenton
Tri County Area Schools	Howard City
Troy School District	Troy
Ubly Community Schools	Ubly
Union City Community Schools	Union City
Utica Community Schools	Shelby Township
Van Buren Public Schools	Belleville
Van Dyke Public Schools	Warren
Vanderbilt Area Schools	Vanderbilt
Vandercook Lake Public Schools	Jackson
Vassar Public Schoosl	Vassar
Vestaburg Community Schools	Vestaburg
Vicksburg Community Schools	Vicksburg
Warren Woods Public Schools	Warren
Waverly Community Schools	Lansing
Wells Township School District 18	Arnold
West Iron County School District	Stambaugh

School Districts Represented in the Survey

School District	City
Westwood Height School District	Flint
White Cloud Public Schools	White Cloud
White Pigeon Cons. School District	White Pigeon
Whitefish Schools	Paradise
Whiteford Agr. School District	Ottawa Lake
Wolverine Community Schools	Wolverine
Woodhaven School District	Flatrock

Appendix D

Educational Degrees of Respondents

Educational Degrees of the Survey Respondents

Other Bachelor's Degree Majors

Major	n
Mathematics	3
Recreation	2
Music	2
Language Arts	2
Industrial Arts	1
Home Economics	1
Economics	1
Speech	1
Secondary Education	1
Child Development	1
French	1

Other Bachelor's Degree Minors

Minor	n
Science	33
Social Science	19
Language Arts	13
History	13
Psychology	7
Home Economics	7
Industrial Arts	5
Mathematics	4
Business	3
Speech	3
Recreation	3
Art	3
Reading	1
Journalism	1
Music	1
Communication	1
Dance	1

Other Master's Degree Majors

Major	n
Counselling	3
Reading	1
Blind Rehabilitation	1
Recreation	1
Home Economics	1
Environmental Education	1
Mathematics	1
Early Childhood	1
Language Arts	1

Appendix E

Other Assessments Used by the Survey Respondents

Other Assessment Instruments Used by the Survey Respondents

Assessment	n
Self-Developed Test (No specific area described)	14
Fitness for Youth	12
Chrystler AAU Fitness Test	11
Prudential Fitnessgram	8
Physical Best	6
Self-Developed Fitness Test	5
Self-Developed Motor Test	2
District Developed Test (No specific area described)	1
District Developed Fitness Test	1
District Developed Motor Test	1
MEAP	1

Appendix F

Survey Comments

Survey Comments

Kids have physical education twice per week for 1/2 hour. this is about avaerage for surrounding school districts. we do as much as possible for this short amount of time.

My concern for elementary physical education is general would be that it is developmental in its approach, and not perceived as fun and games.

Program is good - can also improve. More money for equipment and larger gym times would help, as well as time for physical education teachers to attend conferences.

We have a good program.

Well liked program. Need more time to have better skills.

No K physical education. Need more time in schedule.

The K-3 program was put together from my educational background. I wrote the K-3 curriculum with the state guidelines for a resource.

Very good program, kids love it, lots of variety.

My school is a very small school (K-6 has 79 students) so all classes are grouped with another (1&2, 3&4, 5&6).

We have only had the program for four years. Its a step in the right direction.

Overall good program - introduce the students to a wide range of activities. Physical fitness is a big part of the program.

I have 2nd and 3rd grades for 1/2 hour once a week. Each class is 40 students. It's not easy.

Compared to other school districts I feel fortunate for the program we have.

K is in a different building and not seen by a physical education teacher. To keep 2 meeting times per week we double classes.

I've made many recommendations my 16 years here. Administration is very cooperative in granting them.

Large classes, lack of equipment, no district curriculum

We are limited by time for our staff - but otherwise support and all other areas are adequate.

Survey Comments

K- 3 physical education should not be the first program to be cut in times of financial problems. 30 minutes per week is not enough time.

Very well supported; however, we could use more time for elementary grades. Some classes only have 1 class period.

Physical education is used for teacher release time. Physical education is not a priority.

Used to be one of the strongest program in the state. With budget cuts it is being paid mere lip service. Program is skeleton of what it used to be. Two teachers service 3000 students.

Due to small district teachers have not been certified. In-service would help.

Very litte sports emphasis. Kindergarten classroom teachers are angry about having to teach physical education.

K receives physical education from the classroom teacher. 1 - 3 is taught by a certified PE teacher.

Only 1 time every other week for kindergarten.

Try to provide an overall good program for the students so that they will be aware that physical fitness is important.

We need to do more public relations with parents and community. When parents support you - it happens.

I'm proud of my program. The children get upset if the physical education class is cancelled or the gym is not available.

Presently we are getting by and would like to see stsudents receive physical education 2 - 3 times per week.

Over all program is very good - We are quite lucky to have a full time physical education instructor in each elementary building.

Kindergarten classes are at the high school. Broken families creating challenges.

We are making progress by offering physical education twice a week to K. Teacher is no longer traveling between buildings allows for follow up on students.

I continues to improve, recently we added another teacher to cover a second building, but not a physical education certified teacher.

Survey Comments

the K - 2 program is a bit different from the 3rd. K-2 focuses on developmental skills and the 3rd graders start to develop team work and sports skills.

We have a solid program here, but like most school districts, there's much more we could do if we had the time and support of our administration

Generally speaking, I probably have it pretty good! I know some districts that have dropped their programs of don't support it.

Overall students in this district are very lucky. Two schools have new gymnasiums.

Improvement every year with the Presidential Fitness test. Students become more aware of self goals and limits.

Good administration and teacher support. Excellent facility.

At least we have some, most schools in our county don't have as much as we do - time or equipment wise.

One of the few districts that provides daily physical education.

**

Students love it! Unfortunately, elementary physical education is cut when district funds run short. The validity of the program is not recognized by the central administration.

This is my first year. Everyone is very supportive and things are going well.

I believe our assistant superintendent is really trying to make physical education a priority.

We are a 2 room school with grades k - 2 and 3 - 6. It is very hard to have activities for the wide range of students in each group plus having so few in each group.

**

I feel we have a well balanced program with a good supply of manipulatives so each child is involved. There is no formal testing.

Our program is strong at this time. Administration has a positive outlook toward physical education. We however, always have a concern that out program will be one of the first to go if cuts are needed.

Survey Comments

Time value. 6 classes back to back.

Since our students meet only once a week, we want to get them excited about being active. Therfore, we try to provide many different movement experiences as well as an awareness of their own fitness level.

We are inproving in all areas. Elementary principal is supportive, but not all administrators are. need consistent curriculum

I feel we have a pretty good program. Spend majority of time on physical fitness, not specific skills. Socialization is also very important in my program.

I think we have a good program.

Good in our allotted time. We work a lot on fitness and enjoyment of our activities. Make fun for even our warm ups.

I feel very fortunate to have all the facilities to be able to provide this age group with a positive physical education experience.

We've moved from a game focus program to a fitness, movement education focus with a great deal of cooperative and self esteem building activities and opportunities. Our limited time is used well.

It's a good, solid program. We do the best we can with the available facilities. There is alway reeom for improvement and we try to do this by attending conferences and exchanging ideas.

need more physical education time and less students per class.

Good feeling for physical education by children. Fitness level is poorer that I like. We are going in direction of improvement.

many teachers do not value the importance of physical education in the over all development of students, not to mention the self-esteem that is gained by acquiring new skills.

We try to update and imporve the quality yearly. Parent helpers have been a great way to offer family activities and build better awareness, I have a great building and administrative support.

We started K only 3 years ago. Facility bonk issue is due this month to build a gymnasium.

We are considered to be release time for class room teachers.

Based on the situation, I believe our program is good!

Survey Comments

I don't worry about evaluation, tests, stuff that looks good on paper. My kids have fun, go crazy and work up a sweat. We go for 30 minutes.

would like to emphasize physical education more

Children love their classes and are all actively involved in a wide variety of activities.

Our program emphasized establishing a strong skills base. We work well together as a physical education department to establish priorities and exchange ideas.

Could be better, we rank physical education higher than other area schools.

In the past K-2 always had physical education. this year the classroom teachers teach physical education.

All elementary physical education teachers share buildings. It would be nice to have one teacher per building. This would give us more time.

We are not the best in Michigan, but we are not the lowest. Our elementary physical education teachers try to get toghether every so often to work on concerns which need time to be addressed. Our equipment budget is better than average.

Excellent program on a limited basis. Students have physical education for only 11 weeks per year.

**

Improvements are continually being made.

Certainly adequate - could use more time and improved outdoor facilities.

We do not service K. Need increase of time per student. More time to evaluate students.

More emphasis is shown to elementary physical education than to middle school physical education.

We offer a variety of physical education for the little time we have class.

I basically have functioned entirely on my own to put together the physical education program at our school. the gym is small and also functions as the cafeteria. Small budget, poor outdoor facilities. I do feel I have a good program considering the limited time, $ and facilities.

Survey Comments

Good program for the facilities, equipment and time. Physical education is not a priority. Budget has been cut every year. Little support in the revision of the curriculum.

My class load is over 900 students. It is ver difficult to neet the needs with the number and diversity of students that I have.

We provide physical education for 1-6.

A strong program which is based on movement concepts, locomotor movements, moving towards selected sports skills in 3rd.

I think its a good program. However, room facility and office space is needed. The gym is often unavailable because of assemblies or special events.

No K physical education. A good job is being done considering the facilities, money and time available. The elementary physical education teachers is not always qualified, ususally high school staff.

children are introduced to a variety of activities. They love to come and I have few discipline or safety probelms. It is a very positive setting in which everyone is encouraged to participate.

I have too many students. We need at least one more teacher.

I often feel as if I'm the Release Time teacher for other teachers and that shouldn't be.

Good, I believe. Variety, challenging and fun!

We are doing the best we can with the amount of time we have.

Better than most programs

We do have physical education for students 4 times per week.

Very good program considering the amount of time.

No program but the classroom teachers try to play games sometimes.

Considering the student have physical eduation only one a week, which is not enough, as much time as possible is spent with time on task. In order to use developmentally appropriate principles of motor learning which is not age dependent, they need physical education 5 days per week. How tragic they don't.

Survey Comments

Everyone has an equal opportunity - kids feel good about themselves so they will be physically active for the rest of their lives.

physical education is well liked by the students - they are eager to improve their physical fitness scores.

Outstanding and dedicated staff, highly trained staff. Tremendous support from parents and classroom teachers. Modern state of the art facility.

We are a very low priority item which continues to lose time as the district grows.

There are only 2 teachers. We also teach other subjects. The physical Education program does not get the attention it needs.

Overall, very well planned out and followed. Not enough time the test.

Need more time, more age appropriate equipment, smaller class size, consistent curriculum.

At this point, our program is loose knit. a curriculum guide would provide more continuity and focus on the program.

this class is more of a release time for the classroom teacher.

I feel we do the best we can with what we have.

I object to physical education always being on the cut list.

I believe if given more time there could be a lot better measurement of physical education in this district.

used more for a break for classroom teachers than for vital educational program

I believe our district has an excellent program. The children are exposed to many areas of physical education using 1 contact period per week.

Very basic - probably first thing cut in budget crises.

Very primitive program.

There are only 2 teachers. We need to go to conventions. Low equipment budget.

the physical education program has become stronger over the last 5 years with 1 teacher in each of the 11 buildings. However, budget cuts ove the last 2 years have put our program on shaky ground.

Survey Comments

Very good program. Well rounded with emphasis on thinking, physical fitness, health, personal social and fundamental motor skills.

I feel with the fact that I only meet the kids 1/2 hour per week, I have a good program including fitness and skills the students enjoy.

We have a good base program. With more teachers we could increase the time.

I have good support of both administration and the school board in our district.

A creative program that the children become aware of their bodies and movement through physical activities.

K does not receive physical education. the other grades feceive a well balanced program for the time alloted.

It's good and getting better.

At this time we are allowed the time for a quality program. You never know from year to year if it will stay that way.

We have three elementary schools with no gym facilities.

Classroom teachers need to be educated as to the value of physical education and importance.

Too much recreation and not enough individual work.

Students should have more than 2 half hours per week.

They love it. Want physical education to be more noted for life-long education rather than a dumping ground for students.

We see the children twice a week in 1/2 hour blocks. K has physical education only once per week.

Our district supports the program as long as it doesn't cost a considerable amount of money. Equipment for our program ahs been achieved by fund raisers and Campbell Soup labels.

Working on coordinating curriculum and writing curriculum. PE curriculum is on the third year of a 5 year plan.

More times per week would increase program and fitness. We are facing loss of curriculum due to budget cuts.

Survey Comments

Physical education could be improved by adding another teacher. We have one teacher for 1000+ students. Make adequate testing impossible.

Feel it is a good program - something necessary for this age group.

There is some priority from administration, but not as much as ther could/should be. More time.

Not enough time. should nave it more often, like everyday.

Kindergarten students should by included in formal physical education classes

We are thought of as released time for the classroom teachers.

The K-3 program is what I make it within reason. My principal has shown a great deal of confidence in me and allowed for great flexibility on my part. Sometimes it is over whelming.

30 minutes per week does not allow ample time to fullfill objectives of the physical education curriculum.

Classroom size is large. Special education students are in addition to other students.

I feel that we at Vicksburg give our K-3 students the best exposure to physical education skills and fitness that we can in the little time that we are given.

I don't feel qualified to teach the classes.

The district has not improved the program in the last 15 year.

I feel we do a very good job in K-3 physical education

I think its excellent.

A teacher assistant would be beneficial. Our program has only been reinstated in elementary during the last three years.

25 minutes per week is not enough time.

Equipment for all students. Too large class size.

Ifeel I do a good job considering my limitations of contact time, budget, etc.

We are building a program after many years of NO program at all. Each year we see improvements, but as usual they don't come fast enough.

Appendix G

Protocol Clearance From the Human Subjects
Institutional Review Board

Human Subjects Institutional Review Board

Kalamazoo, Michigan 49008-3899

WESTERN MICHIGAN UNIVERSITY

Date: June 23, 1993

To: Allison Hammond

From: M. Michele Burnette, Chair M. Michele Burnette

Re: HSIRB Project Number 93-06-07

This letter will serve as confirmation that your research project entitled "A descriptive study of current physical education programs for kindergarten through third grade students in Michigan" has been **approved** under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the approval application.

You must seek reapproval for any changes in this design. You must also seek reapproval if the project extends beyond the termination date.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: June 23, 1994

xc: Thompson, EL

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