

**The Elementary, Elementary/Middle, and Middle School
Physical Education Environment**

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in partial fulfillment of the requirements
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The Elementary, Elementary/Middle, and Middle School
Physical Education Environment

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ABSTRACT

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The purpose of this study was to determine if the conditions of the elementary, elementary/middle and middle school physical education settings of selected North Alabama public schools were consistent with the guidelines and recommendations of the 1989 Alabama State Course of Study and the 1985 National Facilities Conference Minimum Teaching Station Standard Formula. One hundred and twenty-three physical education teachers and 29 physical education paraprofessionals in 60 systematically sampled elementary, elementary/middle, and middle public schools throughout North Alabama were surveyed. A panel of experts validated the instrument, followed by a pilot study. Surveys were hand-delivered, resulting in a 100% response.

The conditions investigated in this study were the average number of participants per class meeting and per day in physical education classes in the selected schools for comparison with the guidelines and recommendations of the Alabama State Course of Study, the average number of sections of classes reporting to a physical education teacher each period in the selected schools for comparison with the guidelines and recommendations, and the average number of teaching stations available in the selected schools for comparison with the guidelines of the National

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Facilities Conference. The secondary purpose of this study was to determine the training opportunities provided for physical education paraprofessionals and the training opportunities desired by physical education paraprofessionals. Numerical results from the survey were statistically analyzed and compared to the recommendations and standards, utilizing the simple t-test.

The quantitative analysis of the data indicated that the number of students taught by physical education teachers each day differed significantly from the Alabama State Course of Study recommendation. Physical education teachers were also assigned more sections of classes than recommended. There was no significant statistical difference between the total number of teaching stations available for the conduction of physical education class and the recommendation established by the National Facilities Conference. The findings from the investigation also revealed that physical education paraprofessionals received inadequate orientation, inservice, and on-the-job training opportunities. The majority of subjects indicated a desire to receive various training opportunities prior to beginning a new job and throughout the school year. Conclusions and recommendations were made based on information acquired from the administration of this study.

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DEDICATION

This study is dedicated to the memory of Charles
Ryder Wix.

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CHAPTER 1

Introduction

In 1987, Hellison wrote six major trends predicted for future physical education programs. One of these trends predicted to transpire over the years included public school physical education programs being characterized by smaller classes (cited in Massengale, 1987). Predictions formulated by Graham during 1990 indicated that the elementary school physical education program was on its way to a prosperous future. During that year, the number of elementary school physical education teachers was on the rise. Ironically, during that same year, it was not uncommon to find a physical education teacher attempting to provide for the needs of 50 to 75 children at once.

It is not unusual for physical education classes in the 1990's to be filled with large numbers of students. The dilemmas which teachers are faced with today dictate that a reasonable teacher-pupil ratio should exist (Bucher 1987; Bucher & Krotee, 1993; Horine, 1995; Pangrazi & Darst, 1991; Pangrazi & Dauer, 1995; Siedentop, 1991). Liability related to supervision (Maloy, 1988; Rauschenbach, 1994) and instruction (Siedentop, 1991); management of the physical education learning environment (Belka, 1991; Ratliffe, Ratliffe, & Bie, 1991); and accommodating a large range of needs (Doolittle & Girard, 1991) are some of the concerns related to crowded physical education classes. A critical

repercussion of this situation is that students often do not receive the services they need for their cognitive, affective, and psychomotor development.

Though there is certainly a need for physical activity throughout one's life span (Gabbard, 1992), a quality physical education program is especially important to younger children since activity habits are oftentimes established during the early years. In addition, research continually shows that a large population of children and adolescents live sedentary lives and that many of these individuals suffer from hypokinetic diseases (Gabbard, 1992; Pangrazi & Darst, 1991). Pediatricians and sports medicine physicians have begun to demonstrate a true worry for inactive children. In 1987, resolutions were passed by Congress strongly recommending that children in grades kindergarten through 12 be required to participate in daily physical education activity (Nichols, 1994). In 1991, the President's Council on Physical Fitness and Sports reported that the physical fitness levels of American children, since 1976, had neither improved nor declined (Pangrazi & Darst, 1991).

Since lifetime habits are established early and inactive lifestyles are on the rise, it seems that more favorable conditions in physical education should be mandatory. The physical education class should be of a reasonable size so that students are afforded the

opportunity to maximally participate in vigorous activity (Nichols, 1994). According to Pangrazi and Darst (1991), there is not enough time or enough organized activity provided within the school environment for physical education students to develop appropriate fitness levels. It appears as if a large percentage of these students are being "shortchanged." Physical education students should be afforded a variety of activities which help develop a wide range of motor skills. In addition, quality instruction and practice time are critical for the successful development of lifetime activities (Nichols, 1994).

Though a wide variety of solutions by professionals in the field has been published regarding the pervasive problems in the physical education setting today, it is conceivable that a commonality for all the dilemmas should be addressed: too many students assigned for each physical education teacher. Many elementary and middle school physical education teachers today are faced with large classes. Even though combining two or more regular classes together is educationally unsound, the practice still persists (Kirchner, 1992).

Utilizing paraprofessionals can alleviate some of the problems which exist in the physical education setting, within reason, but the responsibilities delegated to the physical education paraprofessional cannot be given to another individual (Alabama State Course of Study, 1989;

Siedentop, 1991). The Utah Board of Education (1990) indicated that the purpose of employing paraprofessionals is to "augment rather than to replace certified educators in their professional role" (p. 9). Paraprofessionals today are predominantly assigned instructional tasks; therefore, adequate training is necessary to ensure that students are receiving proper services (Pickett, Vasa, & Stookelberg, 1993).

Statement of the Problem

The purpose of this study was to determine if the conditions of the elementary, elementary/middle, and middle school physical education settings of selected North Alabama public schools were consistent with the guidelines and recommendations of the 1989 Alabama State Course of Study and the 1985 National Facilities Conference Minimum Teaching Station Standard Formula. The conditions of this study, investigated through survey, were the average number of participants per class meeting and per day in physical education classes in the selected schools for comparison with the guidelines and recommendations of the Alabama State Course of Study, the average number of sections of classes reporting to a physical education teacher each period in the selected schools for comparison with the guidelines and recommendations, and the average number of teaching stations available in the selected schools for comparison with the guidelines of the National Facilities Conference. The

secondary purpose of this study was to determine the training opportunities provided for physical education paraprofessionals and the training opportunities desired by physical education paraprofessionals.

The Hypotheses

The following null hypotheses were formulated for purposes of this study:

1. There was no significant difference at the .05 level between the number of participants per class meeting and per day in the physical education classes in the selected schools and the guidelines of the 1989 Alabama State Course of Study.

2. There was no significant difference at the .05 level between the average number of sections of classes reporting to physical education and the average number of physical education classes in the selected schools and the guidelines of the 1989 Alabama State Course of Study.

3. There was no significant difference at the .05 level between the average number of teaching stations available for physical education and the minimum teaching station standard recommended by the National Facilities Conference.

Delimitations of the Study

The study was limited to physical education teachers and paraprofessionals randomly selected throughout 10 public school systems in North Alabama. The study was also limited

to certified physical education teachers exclusively teaching physical education during the school day.

Assumptions of the Study

Based on the scope of the research instrument utilized in this study, it is assumed that the physical education teachers; paraprofessionals; and elementary, elementary/middle, and middle schools surveyed in North Alabama were representative of all physical education teachers; paraprofessionals; and elementary, elementary/middle, and middle schools nationwide.

Importance of the Study

Research is critical to establish documentation regarding the current state of physical education classes. To be effective, the researcher feels that data must be assessed involving the following variables: the number of students participating per class and per day in physical education, the number of sections of classes reporting to a physical education teacher each period, and the average number of teaching stations available for physical education class. The data compiled and analyzed from this study can be compared to the strong recommendations made by knowledgeable leaders in the field of education concerning the conditions which constitute an effective learning environment. The results of this study strongly indicate the importance and effectiveness of the current physical education learning environment. The dilemmas of physical

education are not new. Professionals over the years have sought to meet the challenges facing physical education teachers. A wide variety of areas has been researched and published which address many of the problems. To date, it seems that suggestions for the treatment of symptoms resulting from too large physical education classes have been made rather than implementing a cure for the problem. It is hoped that the information gained from this study can revolutionize and redirect physical education programming. This study should provide administrators, educators, and the academic community with a storehouse of information necessary to substantiate the need for change. In addition, it should help to identify and eradicate many of the inadequate learning conditions that continue to exist in the physical education setting. It is hoped by the researcher that the information resulting from this study will dictate that appropriate changes be made so that paraprofessionals can be utilized to optimally enhance classroom instruction. As a result, future physical education teachers should be able to better meet the challenges by reducing liabilities, maintaining class management, and providing for the needs and interests of the physical education students through closer and more frequent student-teacher interaction.

Unfortunately, it appears that many members of that education community and society have negative perceptions of physical education. According to Pangrazi and Darst (1991),

"at present, the credibility of the physical education profession is strained" (p. 259). Most people in the community do not have an understanding of the educational value of the physical education profession. The uncontrollable conditions placed on many of the physical education teachers compound this misunderstanding as the public reacts only to what they see. The most significant outcome of this study may be that lay persons begin to realize that there are legitimate reasons that caused many of the problems in the physical education setting of the past. Coping with these problems and making necessary changes to enhance the effectiveness of instruction is the underlying mission of the investigator. Ultimately, it is hoped that the perceptions of the physical education profession can be upgraded and that they can be viewed equally with other academic disciplines.

Definition of Terms

The following represent key definitions that were specific to this study:

Conditions of the physical education program--the state of the physical education learning environment indicated by the number of students participating each period and each day assigned to each certified physical education teacher and the number of available teaching stations.

Developmentally appropriate program--a program which can be conducted based on the knowledge of what is

age-appropriate for the group of children served, as well as information about what is individually appropriate.

Effective learning environment--a gym, outside field, or class setting in which students listen, follow directions, work simultaneously on lesson tasks, work with minimal noise, respond appropriately to the teacher, and quickly and efficiently perform organizational tasks.

Elementary school--a public school comprised of kindergarten through fifth grade or kindergarten through sixth grade.

Elementary school/Middle school--a public school comprised of kindergarten through eighth grade.

Learning environment--the behavioral conditions in a gym, outside field, or class setting.

Middle school--a public school comprised of sixth grade through eighth grade or fifth grade through eighth grade.

Paraeducator/Teacher aide/Teaching assistant--terms used to describe commonly used paraprofessionals in the public school setting.

Paraprofessional--employees whose positions are either instructional in nature or who deliver other direct services to students and/or their parents; and who serve in a position for which a teacher or another professional has the ultimate responsibility for the design, implementation, and evaluation of instructional programs and student progress.

Physical education management--verbal or nonverbal teacher behavior that is emitted for purposes of organizing, changing activities, providing directions about equipment and/or formations, and taking care of class routines and nonacademic activities, such as collecting permission slips and taking roll.

Physical education teacher/Professional--an individual who provides services in the practice of the physical education profession and who is required to exercise the knowledge and skill typically demonstrated by members of that profession who are in good standing in similar communities.

Teaching station--a space or setting where one physical education teacher can safely conduct physical activities for one group of students.

CHAPTER 2

Review of the Literature

The review of the literature for this investigation is critical to the understanding of the pertinence of the study. The literature will be presented as follows: class size and classroom management in physical education, physical education teaching stations and facilities, and the physical education teacher and the paraprofessional.

Class Size and Classroom Management

in Physical Education

Authorities in the field of physical education recommend that physical education classes should have no more students than other subject area classes (Alabama State Course of Study, 1989; Bucher & Krotee, 1993; Horine, 1995; Kirchner, 1992; Pangrazi & Darst, 1991; Pangrazi & Dauer, 1995). They further concur that all working conditions for physical education should mirror that of other disciplines (Pangrazi & Dauer, 1995). However, some administrators in public schools have the misconception that physical education classes can accommodate a larger number of students than other academic areas (Bucher & Krotee, 1993). When "play" is thought to be the common occurrence in the daily physical education program, rather than cognitive learning, administration is more likely to assign 50 to 60 students into one physical education class (Lumpkin, 1994). Pangrazi and Darst (1991) suggest that physical educators

should "defend the concept of a teacher-student ratio in physical education equal to the ratio in math, science, or English classes" (p. 48).

Authorities recommend 35 students for one physical education teacher per class meeting and strongly emphasize that acceptable physical education class size should never exceed 45 (Bucher & Krotee, 1993). Pangrazi and Dauer (1995) recommended approximately 25 to 35 students for one physical educator each class meeting. Two hundred students per one full-time physical education teacher each day is recommended, and this number should not exceed 250. These class size requirements help ensure both sufficient staffing of professionals and the prevention of teacher overloads (Bucher & Krotee, 1993).

In the state of Alabama, the pupil-teacher ratios set forth by accreditation standards in Alabama and the Southern Association for Colleges and Schools are the same for physical education as other subject matter areas. These pupil-teacher ratios are as follows: kindergarten, 20 to 1; first, second, and third grades, 30 to 1; and fourth, fifth, and sixth grades, 32 to 1. In schools which combine seventh and eighth grades with other elementary grades, the requirements may be followed for either fourth, fifth and sixth grades or ninth, tenth, eleventh, and twelfth grades. The pupil-teacher ratio for ninth, tenth, eleventh, and twelfth grades is 35 to 1 (Alabama State Course of Study,

1989). Based on these pupil-teacher ratios, the total number of students that a physical education teacher should teach in one day would depend upon the number of periods of physical education classes taught each day and the specific grades being taught (see Appendix A). Horine (1995) indicated that an appropriate class size is dependent on the activities being taught, the facilities available, the available equipment, and the degree of differences among students.

Like other subjects in the public school curriculum, physical education strives to contribute to the overall objectives of education. For this reason, physical education class sizes should be comparable to all other disciplines in order for an effective learning environment to be established and maintained (Bucher & Krotee, 1993). Pangrazi and Darst (1991) indicated that the number of employed physical education teachers significantly affects the extent to which physical education can be taught, then further indicated that serious consideration should be given to hiring additional, qualified staff in order to reduce the teacher-student ratio.

Bucher and Krotee (1993) indicated that the number of students in the elementary classroom unit is generally reasonable. Even though it is educationally unsound to combine two regular classes into one physical education class (Kirchner, 1992), some schools combine several regular

units or classes for physical education (Bucher & Krotee, 1993). By combining two or more sections of classes into one physical education class, larger pupil-teacher ratios result, which correlates with the following documented problems faced by physical education teachers who attempt to teach classes large in number: liability in the physical education setting (Bucher, 1987; Bucher & Krotee, 1993; Clement, 1988; Reynolds, 1988); class management (Buck & Harrison, 1990; Kirchner, 1992; Mustain, 1990; Ratliffe et al., 1991; Siedentop, 1991); and providing for developmental differences, backgrounds, and learning styles (Bredekamp, 1992; Gabbard, 1992; Gallahue & Ozmun, 1995; Kirchner, 1992; Magill, 1993; Nichols, 1994; Pangrazi & Darst, 1991; Shea, Shebilske, & Worchel, 1993). Less than optimal teaching and learning environments exist due to these large, unsafe classes (Bucher & Krotee, 1993; Kirchner, 1992). According to Graham (1990), it is not unusual for physical education classes to consist of 50 to 75 students in one setting. As the number of students in physical education increases, so does the number of possible risks involved in activities (Reiken, 1992).

Characteristics of an effective physical education program include maintaining sufficient small and large equipment so that the entire class can participate at the same time with no students waiting in line, no students taking turns with the equipment, and minimal management

episodes (Alabama State Course of Study, 1989; National Association for Sports and Physical Education [NASPE], 1988, 1993; Pangrazi & Dauer, 1995). Of these three characteristics, teachers have most commonly been concerned with class management (Ratliffe et al., 1991).

It is the opinion of most observers that students spend too much time during physical education classes involved in managerial tasks (Siedentop, 1991). According to the National Association for Sports and Physical Education (1993), activities should be designed so that continuous activity can be maximized. The amount of time that a physical education student is involved in practice or "engaged time" correlates with increased learning (Siedentop, 1991).

A standard prerequisite for learning during a physical education class is a combination of quality engaged time and the actual time the students practice (Mustain, 1990; Siedentop, 1991). Learning does not occur simply because students are moving (Nichols, 1994). The number of quality learning experiences must be increased in order for the physical education student to improve motor skills (Buck & Harrison, 1990). The management of time is paramount and must be minimized for optimal improvement.

Buck and Harrison (1990) and Mustain (1990) advocated that management time should be reduced to a minimum. The time that students are waiting before, between, and after

instruction must be lessened in order to provide more "hands-on" practice time so that opportunity to learn is provided. Lessening the amount of time spent involved in management tasks not only will enhance the learning process by providing more practice time, but also will reduce the chances that undesirable student actions will occur (Nichols, 1994; Siedentop, 1991). Prosperous, satisfactory, and quality practice time is a must for effective teaching and learning (McKenzie, Clark, & McKenzie, 1984). Students on the sidelines or in a line waiting to participate in an activity learn little or nothing (Pangrazi & Dauer, 1995).

In the elementary physical education setting, students spend approximately 25% of their time during management episodes and 20% to 30% waiting. Waiting time includes time before, between, and after instruction, management, and practice time. Reducing this time is not easy for physical education teachers, especially when classes consist of large numbers of students, large teaching spaces, and the nature of the subject matter (Siedentop, 1991).

Establishing an effective learning environment is especially critical with younger students. A number of obstacles are faced when working with younger children, and management problems are escalated with larger class sizes. It is not unusual for physical education teachers to become depressed and frustrated when working with large physical education classes that are difficult to manage. Teachers

can be faced with abandoning some of the ideas of effective teaching in order to tolerate the setting in which they have been placed. Positive teacher attitudes can be hard to maintain on a daily basis when ongoing problems exist. It is crucial for teachers in less than desirable working conditions to view the environment from a distance to avoid discouragement, frustration, and labeling themselves as personal failures (Ratliffe et al., 1991).

The smaller the class in number, the easier it is to manage. With less class time devoted to class management, physical education teachers can spend more time instructing, and physical education students can spend more time participating (Kirchner, 1992; Pangrazi & Darst, 1991; Pangrazi & Dauer, 1995). Physical education instructional activities which involve the entire class at the same time minimize class management problems. If teachers are provided with reasonable class numbers, they can better plan and organize to enhance management of the classes (Belka, 1991; Mustain, 1990). However, many physical education classes have too many students and too few qualified teachers for simultaneous participation to exist (Siedentop, 1991). According to Pangrazi and Dauer (1995), if a class is unmanageable, it is unteachable.

Physical Education Teaching Stations
and Facilities

A major problem faced by many physical education teachers is coping with inadequate facilities or teaching stations. This problem is prevalent at all levels of education. It is the opinion of many administrators that the physical education class can accommodate more students and manage with less materials and equipment than other subject areas. Because of these inadequacies, physical education students inevitably stand in longer lines and spend more of their physical education time waiting to participate. If students are not exposed to these inadequate or inappropriate learning conditions in other academic areas, they should not face them in the physical education class (Pangrazi & Darst, 1991).

Common physical education settings where physical education activities are conducted include the gymnasium, multipurpose room, or classroom. Due to inclement weather days, substantial time may be spent in indoor facilities as opposed to outdoor areas. In most cases, a single indoor area which accommodates all classes meeting on a daily basis is insufficient (Kirchner, 1992).

The areas available to physical education teachers generally dictate the activities which can be offered to the students. The available physical education settings, coupled with the number of students assigned to a particular

setting, also dictate whether an effective learning environment is possible (Pangrazi & Darst, 1991). Teaching areas should be large enough to avoid inactive and crowded situations (Alabama State Course of Study, 1989). Limited teaching space can reduce practice time (Pangrazi & Dauer, 1995). As the number of students increases, so should the physical education setting in order to ensure safety (Reiken, 1992).

A physical education space, facility, or setting where a group of physical education students can safely learn physical activities taught by one qualified physical education teacher is called a teaching station. When scheduling students for physical education classes, the teaching station concept needs to be considered. The National Facilities Conference, in 1985, established a formula to determine the number of teaching stations necessary in physical education that would promote an effective learning environment (see Appendix B). Individuals controlling scheduling can utilize this formula not only to determine the number of necessary physical education teaching areas, but also to determine the number of physical education teachers needed for effective teaching and learning to take place (Bucher & Krotee, 1993).

The Physical Education Teacher
and the Paraprofessional

According to the Alabama State Course of Study (1989), all physical education programs must be taught by a certified physical education teacher. Certified elementary classroom teachers are only allowed to teach physical education within their own class. A teacher's aide is only allowed to teach physical education under the supervision of a certified physical education teacher.

Any individual supervising or instructing students in physical education should have proper training which includes an in-depth comprehension of the human composition and function, as well as the specific needs of children with regard to their developmental age. Given a variety of motor experiences, individuals conducting a physical education class should know students' physiological responses in order to choose the appropriate activities to teach. These individuals should be able to prepare and administer special services for the exceptionalities, which include modifying activities so that safe participation occurs (Nichols, 1994; Pangrazi & Darst, 1991; Pangrazi & Dauer, 1995; Rink, 1993). In addition, these individuals should possess a knowledge and understanding of the activities which they are required to teach so that proper instruction is administered (Henderson, 1985). Knowledge and understanding of the activities include the prerequisites needed to successfully

perform the skills and the progressions involved when assisting students in migrating from competency to competency (Nichols, 1994; Rink, 1993). Physical education teachers must be able to offer instruction in a variety of ways to provide for the various sensory modalities through which children learn (Harrison & Blakemore, 1992; Strom, Bernard, & Strom, 1987). Physical education teachers should possess the ability to recognize or foresee potential risks involved in the skills taught and convey these risks to physical education students (Gray, 1990; Nichols, 1994; Pangrazi & Darst, 1991). Appropriately trained physical education teachers should continuously evaluate equipment to ensure the safety and success of physical education participants (Gray, 1990; Kaiser, 1987; Pangrazi & Darst, 1991). All teachers should possess the ability to design and implement a risk management plan in order to reduce injuries in the physical education setting and reduce the severity of injuries which might occur (Gray, 1991). Teachers and assistants should possess the knowledge and ability to react appropriately in emergency situations and provide "first aid" (Nichols, 1994; Pangrazi & Darst, 1991; Rink, 1993). Physical education teachers should be aware of official school policies regarding the steps to take when an accident occurs (Bayless & Adams, 1985). According to Lumpkin (1994) and Nichols (1994), instructors should

possess up-to-date first aid and cardiopulmonary resuscitation certifications.

Physical education teachers are responsible for general and specific supervision duties. Any time an activity occurs, general supervision is necessary (Lumpkin, 1994; Pangrazi & Darst, 1991). General supervision requires that the physical education teacher always be present in the physical education setting in the event that a student needs assistance (Pangrazi & Darst, 1991). Knowing where to stand, knowing how to actively supervise, knowing what to listen for, knowing what to look for, and knowing the steps to take if a problem occurs are examples of general supervision. When teaching a higher risk activity, closer and specific supervision is warranted (Lumpkin, 1994). Specific supervision requires that the physical education teacher is working directly with a certain group of physical education students in order to provide immediate and qualified assistance (Nichols, 1994; Pangrazi & Darst, 1991).

Physical education teachers should be familiar with the needs and interests of the students comprising each physical education class, along with knowing the people who make up the surrounding community (Pangrazi & Darst, 1991). Physical education teachers may be responsible for influencing and changing the opinions of the people of the community by utilizing public relations skills. The

physical education program and the manner in which it is conducted tend to be the strongest form of communication between the public and the physical education profession (Bucher & Krotee, 1993).

Teachers must be able to communicate with administrators to stress the importance of the physical education program. Ongoing, active efforts by physical educators to gain the support of the administration are imperative to improve the conditions of public school physical education. Positive communication between the physical education teacher and the administration is paramount (Pangrazi & Darst, 1991).

Pangrazi and Darst (1991) indicated that administrators can assist physical education in the following ways:

- (1) Determining the number of staff members and class size;
- (2) Hiring staff to fill specific departmental needs;
- (3) Constructing or developing facilities and teaching areas;
- (4) Purchasing equipment and teaching aids;
- (5) Supporting innovative ideas or new activities;
- (6) Maintaining existing teaching stations;
- (7) Supporting staff development with in-service workshops, professional conferences, and current literature;
- (8) Providing useful and meaningful feedback to teachers on their teaching performance. (pp. 48-49)

The number of physical education teachers employed at the elementary level is on the rise. Low physical fitness test scores and an increased interest in healthy, physically active children appear to be the reasons for this increase. However, physical education teachers are often employed so that a planning period can be provided for the regular

classroom teacher while children are in "gym" (Graham, 1990).

Pickett et al. (1993) point out that expanding responsibilities have been placed on teachers in order to fulfill the obligations of educating youth today. Not only are teachers expected to be quality instructors, they are also expected to be "educational managers." As a result of increased responsibilities, more assistance is needed to meet the needs of the students.

Paraprofessionals can be the resources who can assist the teacher to meet those responsibilities. When properly trained and supervised, paraprofessionals have demonstrated an ability to enhance the learning environment in a variety of settings (Steckelberg & Vasa, 1986). A paraprofessional is

an employee whose position is either instructional in nature or who delivers other direct services to students and/or their parents and who serves in a position for which a teacher or another professional has the ultimate responsibility for the design, implementation, and evaluation of instructional programs and student progress. (Pickett et al., 1993, p. 2)

According to the Utah State Board of Education (1990), paraprofessionals are employed on the philosophical basis that they can "provide educators more time to practice, and to reflect on, their professional responsibilities and opportunities" (p. 9).

Over recent years, the employment of paraprofessionals has seen a tremendous growth (Green & Barnes, 1989; Lindeman

& Beegle, 1988; Pickett, 1986; Pickett et al., 1993). The origin of paraprofessionals, sometimes called paraeducators, teacher aides, or teaching assistants, seems to have begun in the American public school system. During the 1950's, because of a shortage of teachers, alternatives were considered to help provide services in public education. As a result, teacher assistants were hired to conduct clerical and administrative tasks so that teachers could spend more time instructing students. The major concern of the utilization of these aides was that certified teachers were being replaced by "cheap labor" and that by hiring these additional staff members larger classes could be justified (Pickett, 1986, 1989, 1990). In 1965, there were less than 10,000 paraprofessionals utilized in the public schools in the United States (Lindeman & Beegle, 1988; Pickett, 1986). In 1989, paraprofessionals numbered over 400,000. Today paraprofessionals can be found assisting in the areas of speech therapy, occupational therapy, physical therapy, early intervention and preschool programs, transition training, vocational education programs, parent training/child find programs, social work/case management, libraries, health services, and various other educational programs (Pickett, 1989, 1990; Pickett et al., 1993).

The rise in the employment of paraprofessionals has prompted a change in responsibilities. During the early years, paraprofessionals performed general clerical duties

or noninstructional tasks. These included supervising playgrounds, lunchrooms, hallways, and extracurricular activities (Green & Barnes, 1989; Pickett, 1986, 1989; Pickett et al., 1993). The duties of paraprofessionals today lean more toward providing assistance to teachers in all components of instruction (Lindeman & Beegle, 1988; Pickett, 1986, 1989, 1990; Pickett et al., 1993). Examples of instructional tasks include assisting with instructional programs, tutoring pupils individually, diagnosing class needs, following teacher-designed lesson plans, presenting information, and evaluating progress under the direction of the teacher (Lindeman & Beegle, 1988; Pickett, 1986).

Studies from the 1980's indicated that paraprofessionals reported spending 60% to 70% of their day involved with instruction (Lindeman & Beegle, 1988). When paraprofessionals are assigned only clerical functions, students do not gain as much from this additional staff member, and the staff member is likely to suffer job dissatisfaction as well. On the other hand, a true injustice to students and paraprofessionals transpires when tasks are delegated which are advanced beyond the training level of the paraprofessional. Paraprofessionals should be expected to perform tasks in which they are trained and should only act as supporters or as assistants to their supervising teachers. There is a consensus among teachers and administrators that paraprofessionals are the greatest

asset when they are capable of assisting with instructional tasks (Green & Barnes, 1989).

Paraprofessional use is common in the special education setting, and paraprofessionals are frequently used in adapted physical education (Jansma & French, 1994; Pickett, 1986; Steckelberg & Vasa, 1986). The special education program has been greatly enhanced by individuals working as teacher's assistants (Jansma & French, 1994; Lindeman & Beegle, 1988). These individuals have helped the challenged students in developing skill levels under the direct supervision of a certified physical educator (Jansma & French, 1994). According to Pickett (1986), the majority of paraprofessionals work with children who are disadvantaged, are disabled, or possess a limited language deficiency.

Certification requirements and job prerequisites for teaching assistants vary among state and local school districts, and most states have no formal training requirement as a prerequisite for employment. Generally, a teaching assistant has completed a training program at a community college (Kirchner, 1992). Specific professional training and supervision are left to the public school teacher, who generally has no preparation to train these individuals (Pickett et al., 1993).

The duties which can be legally assigned to paraprofessionals vary from state to state (Pickett et al., 1993). According to Pickett (1988), no two states have the

same guidelines for preparing paraprofessional responsibilities. Regardless of assigned responsibilities, it is the teacher who should determine what type of instruction is needed, dictate the types of teaching strategies which are needed, and make the final evaluation for each student (Pickett et al., 1993). The State of Alabama Education Department provides no written job responsibilities and offers no policy in the hiring of paraprofessionals. However, the Alabama State Course of Study (1989) clearly proclaims that a teacher's aide may instruct students in physical education, but only under the supervision of a certified physical education teacher.

Many school systems assign paraprofessionals to assist teachers with no consideration to their previous experiences or training (Auxter, Pyfer, & Huettig, 1993). Pickett et al. (1993) pointed out that the best situation which clarifies the role of the paraprofessional is when there are district-wide policies established for administrators, teachers, and paraprofessionals. Most school systems offer a job description of the paraprofessional or teacher's aide, but these descriptions are typically not clear regarding specific roles and responsibilities (Auxter et al., 1993). Paraprofessionals or teacher's aides, as well as the physical education teacher, should be provided with specific job descriptions. The physical education teacher should work with the principal in developing a specific job

description for any assistant in the physical education setting. A specific job description should reduce problems, reduce the apprehension of the paraprofessional; stress the importance of the position; make responsibilities clear; provide a method by which paraprofessionals can be evaluated; and serve as a tool for recruiting, interviewing, and hiring. As a result, children will be served more efficiently and effectively by professionals working together (Auxter et al., 1993; Pickett, 1988; Pickett et al., 1993).

Paraprofessionals utilized in physical education should only be given tasks that are appropriate to their training level (Dunn, Morehouse, & Fredericks, 1986; Pickett et al., 1993). Preservice or inservice training which is recommended for the physical education teacher is also recommended for the paraprofessional or teacher's aide especially in the absence of a paraprofessional certification program (Green & Barnes, 1989).

According to Pickett et al. (1993) and Pickett (1988, 1990), rarely does one find formal training opportunities or methods available by which paraprofessionals can enhance their careers. The school and the teacher share the responsibilities for training paraprofessionals. Training should begin before the paraprofessional is on the job working independently with students. Effective paraprofessional training should provide a progressive

method of learning. Minimal suggestions for training any paraprofessionals should include (1) a three-day orientation session to set the foundation for the position, (2) 20 hours of inservice training during the course of the school year to supplement skill development and knowledge, and (3) formative on-the-job training by the teacher. In addition, paraprofessionals should be provided opportunities to earn academic credit or to attend programs related to professional preparation.

During the orientation session, the paraprofessional should be familiarized with the school, the work area, and the position. General topics should be covered, including the goals of the program, the procedures to follow during an emergency, the policies of the school, and standards of ethics. The physical education teacher should cover issues, such as philosophy, management strategies, supervisory styles, discipline strategies, classroom rules and organization, utilization of teaching materials, motivational techniques, the program structure, and teaching styles. Paraprofessionals should be afforded time to observe the students and to observe the teacher working with students before assuming instructional duties.

Inservice training encompasses many of the topics addressed during the paraprofessional's orientation, but is much more detailed. Topics which should be discussed during inservice training include instructional strategies,

learning styles and methods, students' developmental characteristics, and various management strategies. More general topics include confidentiality, legal issues, ethical issues, and school policies. The needs of the paraprofessional should be the deciding factor determining the topics discussed. Supervising teachers should be included in this type of inservice training.

During the training year, paraprofessionals should be provided with information and experiences necessary for individualized and group instruction. They should be given daily and weekly schedules and daily lesson plans and should be required to confer with the teacher periodically. On-the-job training, with close supervision of a supervising teacher, provides opportunities for paraprofessionals to try new responsibilities, to practice skills, and to become accomplished with the topics discussed during the orientation and inservice training sessions. During on-the-job training, the supervising teacher should demonstrate methods of delivering instruction, provide the paraprofessional with materials to use actively, and supervise the paraprofessional while working with students using these strategies and materials.

Though the number of paraprofessionals utilized in public schools has grown, little has transpired in the way of preparing public school teachers to train paraprofessionals (Lindeman & Beegle, 1988; Pickett et al.,

1993; Reetz, 1987). Many times supervising teachers are uncomfortable assigning tasks to another adult, or they may simply lack the important time needed to provide for paraprofessionals (Pickett et al., 1993).

With the demand of paraprofessionals in the public school work force and the increase of employment of these assistants, it would seem that opportunities for training would have increased as well. This is not the case. Over the years, random training has reflected the variety of requirements established by local school districts. Paraprofessionals are often hired and given only one day of preservice opportunity before facing the teaching setting (Pickett, 1986).

In a study of 594 paraprofessionals employed in Central and Southern California, Ochoa and Wright (1983) found that between 46.0% and 65.6% never or only seldom received any type of inservice training. The purpose of this study was to determine the career ladder needs of individuals employed as paraprofessionals and to use the data collected to make recommendations to school districts as they decided which federal and state mandates to implement regarding employment criteria and training.

Pickett (1986) suggested that a consistent certification program should be established for all paraprofessionals. The benefits of a quality certification program for assistants would be numerous. The quality of

educational services provided would likely be raised and guaranteed; responsibilities would be more clear and appropriate at different levels; opportunities for paraprofessionals to progress up a career ladder would exist; and the importance of paraprofessionals in the school setting would be clearly established. A quality certification program would ensure that there would be established a true career ladder which motivates and inspires individuals to progress systematically as they improve upon their teaching assistant skills. In addition, reasonable training services must be provided. The nature of the pay scale for aides and the outside responsibilities which are required of many of these individuals are important reasons that paraprofessionals should be provided opportunities to be certified.

Until a nationwide certification program is enacted, sufficient training programs and materials must be provided to optimally prepare future paraprofessionals and teacher aides in the field (Lindeman & Beegle, 1988). Though the state of Alabama has not formally established requirements for hiring paraprofessionals, Auburn University at Montgomery has established the first certificate program designed to provide services to better equip the paraprofessional for working in the public or private K-12 school setting. A certificate program for teacher assistants is offered through the Continuing Education

Department with a choice of specialty tracks. Each participant must first complete a 30-hour core curriculum and then select and complete three of five specialty tracks. A combined 60 hours must be completed in order to earn a certificate.

Though there is no specialty track for assistants in physical education, the core curriculum of the Auburn University at Montgomery certificate program would be beneficial for any type of teaching assistant. Core curriculum areas include child growth and development, motivational activities, cooperative learning strategies, learning styles, questioning techniques, discipline/classroom management, creating learning environments, use of technology, school-community relations, diversity issues, professional image, oral and written communication skills, legal aspects of public school work, and school safety (Eberhart, 1995).

Utilizing teaching assistants can alleviate some of the problems which exist in the physical education setting, within reason. In the early 1970's, educational legal codes mandated that paraprofessionals should not be used so that classroom numbers could increase (Nielsen, 1977) so, clearly, paraprofessionals are not substitutes for the certified physical education teacher. The Utah State Board of Education (1990) indicated that the role of the paraprofessional is to be "an assistant and responsible to a

member of the professional staff in charge of the service. The educator's primary responsibility is to the children; whereas, the primary responsibility of the paraprofessional is to the educator" (p. 9). Regardless of the background and training of paraprofessionals, the responsibilities delegated to the physical education professional cannot be given to another individual (Siedentop, 1991). As pointed out by Merriman (1993), in the event that a physical education teacher must leave the physical education setting, an individual hired as a paraprofessional is never a qualified replacement.

CHAPTER 3

Research Methods

This study examined the current conditions of selected elementary, elementary/middle, and middle school physical education settings in North Alabama. A survey instrument was used to investigate the following: (1) the average number of participants per class meeting and per day in physical education classes in the selected schools for comparison with the guidelines and recommendations of the 1989 Alabama State Course of Study (see Appendix A), (2) the average number of sections of classes reporting to a physical education teacher each period in the selected schools for comparison with the guidelines and recommendations of the 1989 Alabama State Course of Study, and (3) the average number of teaching stations available in the selected schools for comparison with the guidelines of the 1985 National Facilities Conference (see Appendix B). The secondary purpose of this study was to determine the training opportunities provided for physical education paraprofessionals and the training opportunities desired by physical education paraprofessionals. The research methods are discussed in this chapter, which features descriptions of the subjects, the research instrument, procedures, and analysis of the data.

Subjects

The participating schools consisted of 60 elementary, elementary/middle, and middle public schools selected by systematic sampling throughout the following school systems in North Alabama: Athens City, Cullman City, Decatur City, Huntsville City, Scottsboro City, Lauderdale County, Lawrence County, Limestone County, Madison County, and Morgan County. Subjects consisted of 123 physical education teachers and 29 physical education paraprofessionals. Of the 123 teachers; 17 taught in city elementary schools; 59 taught in city middle schools; 21 taught in county elementary schools; and 26 taught in county elementary/middle schools. Of the 29 paraprofessionals, 16 were employed by city elementary schools, 3 were employed by county elementary schools, and 10 were employed by county elementary/middle schools. City middle schools employed no paraprofessionals in the physical education setting.

Elementary, elementary/middle, and middle public schools were classified as follows: elementary public schools were schools consisting of grades kindergarten through 5 or 6; elementary/middle public schools were schools consisting of grades kindergarten through 8; and public middle schools were schools ranging from grades 5 through 8. Equal numbers of county system and city system schools were randomly selected.

Eligibility for participation in this study required that the schools provided active employment of certified physical education teachers who taught physical education classes exclusively during their regular work day. Schools that utilized elementary classroom teachers to teach physical education were omitted. Paraprofessional subjects included any public school employee who provided instruction or any other direct services to the students. Unemployed teacher aides were not eligible for this study.

The Research Instrument

Experts in the areas of physical education, surveys and statistics, and paraprofessional training reviewed the survey instrument in this study for appropriateness (see Appendix C). A letter, accompanied by the survey instrument, was mailed to these experts requesting that they review the survey instrument's appropriateness (see Appendix D). Those parts of the survey identified as being inappropriate were eliminated, and appropriate modifications were made based on suggestions made by these professionals. Copyright permission for the National Facilities Conference formula was secured (see Appendix E).

A pilot study was conducted using the modified survey instrument. Page 1 of the survey instrument was administered to 30 physical education teachers. This information was compared to administrative records for the purpose of identifying inappropriate test questions. Pages

2, 3, and 4 of the survey instrument were administered to public school physical education paraprofessionals. Fifteen schools employing two physical education paraprofessionals at each site were utilized for the purpose of identifying inappropriate survey items. Each pair of paraprofessionals was hired during simultaneous years. Information collected from each pair of paraprofessionals was compared in order to eliminate inappropriate survey items.

A cover letter explaining the study was included on the first page of the survey instrument (see Appendix F). A statement regarding the confidentiality of all information was included in the cover letter.

Procedures

Before the surveys were delivered, the researcher determined the number of physical education teachers and paraprofessionals employed by each school surveyed. This was accomplished by contacting the local school board or the respective school. The survey instrument (see Appendix G) was delivered by hand to each school utilized in the study.

Each school was coded and classified as elementary, middle, or elementary/middle and as city or rural. All physical education teachers were classified according to gender, and each was asked to indicate the frequency of physical education class meetings. The following information was obtained based on school records as of May 5, 1995: the number of students taught each period, the

grade levels taught each period, the number of sections of classes which make up each period taught, the total number of students taught each day, and the total number of teaching stations available for physical education classes.

Schools utilizing paraprofessionals were coded and classified as elementary, middle, or elementary/middle and as city or rural, and paraprofessionals were classified by gender. Each paraprofessional was asked to read descriptions of types of training support divided into three categories: (1) orientation training, (2) inservice training, and (3) on-the-job training by their supervising physical education teacher. Paraprofessionals were asked to indicate if any of these three types of training had been provided. If no training had occurred in a category, subjects were directed to designate a desired level of training for orientation, inservice, and on-the-job training opportunities. If training had occurred in a category, paraprofessionals were asked to designate specific examples of each type to which they had been exposed.

Analysis of the Data

Means were used to determine the average pupil-teacher ratios for each certified physical education teacher and the number of sections of classes combined into each physical education class period. Means were compared to the 1989 Alabama State Course of Study guidelines. The criterion

used for rejecting Null Hypothesis 1 and Null Hypothesis 2 was the simple t -test, $p < .05$.

The data collected at each school indicating the total number of grade levels and number of classes in each level, the frequency at which physical education classes met each week, and the total number of periods in each school were compared to the National Facilities Conference Minimum Teaching Station Standard Formula (see Appendix B). This method was employed to determine the number of teaching stations needed for an effective learning environment. The average number of physical education teaching stations available was compared to the National Facilities Conference Minimum Teaching Station Standard Formula results. The criterion used for rejecting Null Hypothesis 3 was the simple t -test, $p < .05$.

All paraprofessional survey information was compared to the minimum training standards established by Pickett et al. (1993). The paraprofessional data utilized the "technique of summation" or Likert technique. A series of items which demonstrated a wide range of attitudes toward paraprofessional training support from extremely positive to extremely negative was used. A six-point continuum with a range of 1, 2, 3, 4, 5, and 6 was assigned. In this continuum, the direction of response was determined by the favorableness or unfavorableness of the item. The scale used for this survey was as follows: Strongly Agree = 6,

Moderately Agree = 5, Slightly Agree = 4, Slightly Disagree = 3, Moderately Disagree = 2, and Strongly Disagree = 1. The results were analyzed to determine the number and percentages of responses in each category.

CHAPTER 4

Presentation and Analysis of Data

The purpose of this study was to determine if the conditions of the elementary, elementary/middle, and middle school physical education settings of selected North Alabama public schools were consistent with the guidelines and recommendations of the 1989 Alabama State Course of Study and the 1985 National Facilities Conference formula. The conditions of this study, investigated through survey, were the average number of participants per class meeting and per day in physical education classes in the selected schools for comparison with the guidelines and recommendations of the Alabama State Course of Study, the average number of sections of classes reporting to a physical education teacher each period in the selected schools for comparison with the guidelines and recommendations, and the average number of teaching stations available in the selected schools for comparison with the guidelines of the National Facilities Conference. The secondary purpose of this study was to determine the training opportunities provided for physical education paraprofessionals and the training opportunities desired by physical education paraprofessionals.

Number of Students Taught Each Day
in Physical Education

Table 1 presents the means and standard deviations for the participating teachers showing the average number of physical education students taught. The data represent daily averages for all teachers within respective categories, along with a daily average for all teachers surveyed.

Table 1
Number of Students Taught Each Day in
Physical Education

Group	No. of teachers	Mean	(+/-)	<u>SD</u>
City elementary	17	371	+/-	102
City middle	59	170	+/-	66
County elementary	21	323	+/-	172
County elementary/ middle	26	345	+/-	167
All systems	123	261	+/-	148

Note. Recommended daily pupil-teacher ratio by the 1989 Alabama State Course of Study.

The following null hypothesis was formulated for this portion of the study: There was no significant difference at the .05 level between the number of participants per class

meeting and per day in the physical education classes in the selected schools and the guidelines of the 1989 Alabama State Course of Study. The number of students taught each day by physical education teachers was statistically analyzed, utilizing the simple t-test for comparison of differences between the average number of students taught and the recommendation set forth by the 1989 Alabama State Course of Study. The quantitative analysis of the data indicated that the average number of students taught differed significantly from the Alabama State Course of Study recommendation. The simple t-test results = 2.61, $p < .05$, $df = 123-1$; thus, the null hypothesis was rejected.

The average pupil-teacher ratio recommended by the 1989 Alabama State Course of Study falls within the range recommended by Bucher and Krotee (1993), who recommend 200 students per one full-time physical education teacher each day and that teachers should not teach more than 250 students. The average number of students taught by one physical education teacher in this study was 261. However, it is important to note that the average city middle school physical education teacher taught 170 students each day, while county elementary school physical education teachers averaged 323, county elementary/middle school physical education teachers averaged 345, and city elementary school physical education teachers averaged 371. Figure 1 shows the mean group scores compared to the recommendations set

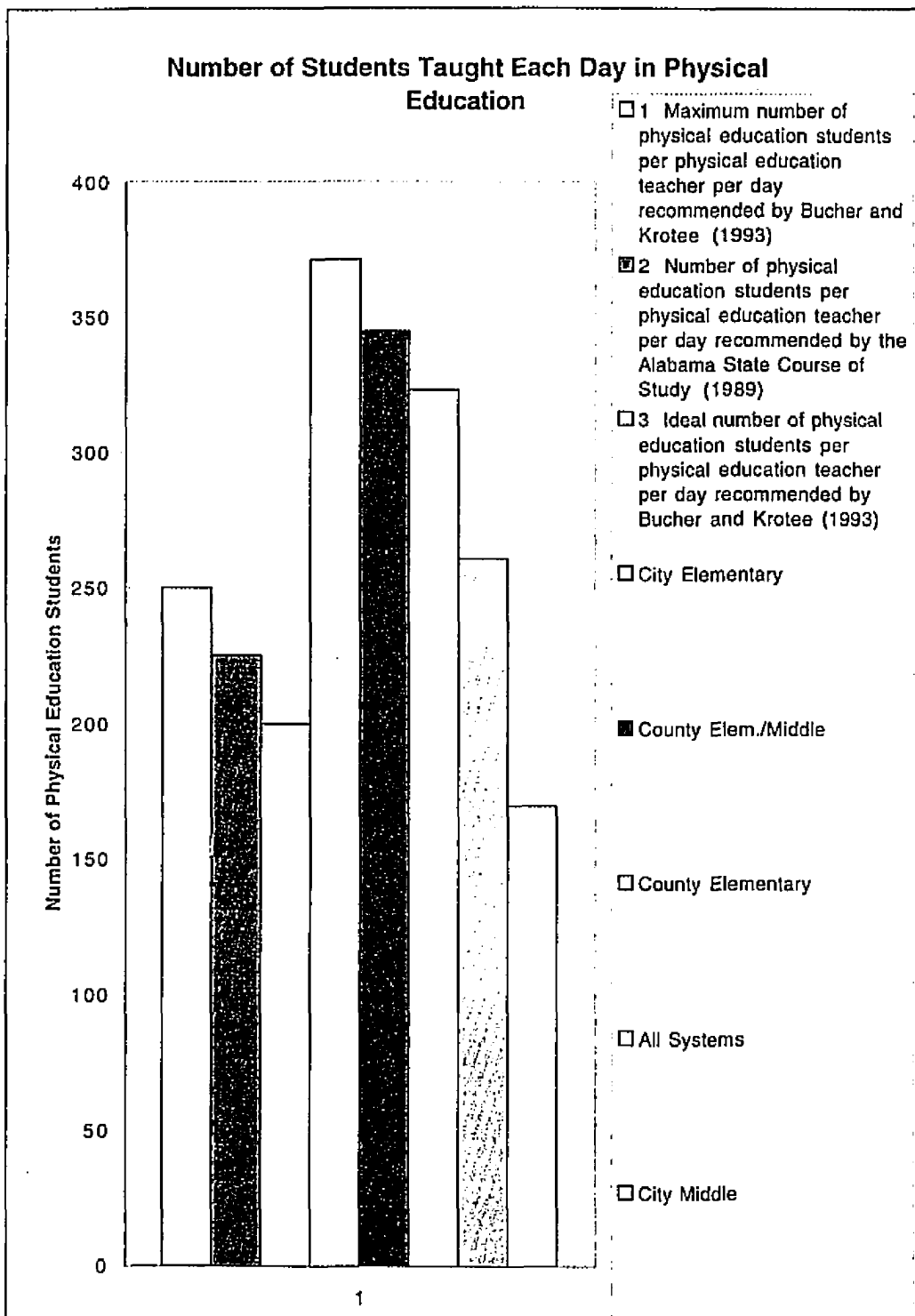


Figure 1. Number of Students Taught Each Day in Physical Education

forth by the 1989 Alabama State Course of Study and of the recommendations by Bucher and Krotee (1993).

Number of Sections of Classes Reporting
to Physical Education

The average number of classes taught in one day by the sampled physical education teachers was 11. It was determined that the average number of periods taught by physical education teachers for all systems in North Alabama was 7. The average number of sections of classes reporting to each city middle school physical education teacher was 7, while an average of 14 sections of classes reported to county elementary physical education teachers, 16 sections of classes reported to county elementary/middle physical education schools, and 17 sections of classes reported to city elementary physical education teachers. Table 2 depicts the means and standard deviations for all physical education teachers, showing the total number of sections of classes reporting daily to physical education classes.

The following null hypothesis was formulated for this portion of the study: There was no significant difference at the .05 level between the average number of sections of classes reporting to physical education and the average number of physical education classes in the selected schools and the guidelines of the 1989 Alabama State Course of Study. The data were statistically analyzed, utilizing the simple t-test. These data were analyzed to assess how each

compared with the recommendation set forth by the 1989 Alabama State Course of Study. The quantitative analysis of the data indicated that the average number of sections of classes reporting to physical education differed significantly from the average number of physical education classes, with the 1989 Alabama State Course of Study recommended ratio between the two being 1:1. The simple t-test results = 7.95, p < .05, df = 123-1; thus, the null hypothesis was rejected.

Table 2
Number of Sections of Classes Reporting to
Physical Education

Group	Mean	(+/-)	<u>SD</u>
City elementary	17	+/-	3
City middle	7	+/-	3
County elementary	14	+/-	6
County elementary/middle	16	+/-	9
All systems	11	+/-	7

Note. Average number of physical education periods per day = 7.

Figure 2 shows the mean scores as they compared to the recommendation set forth by the 1989 Alabama State Course of Study.

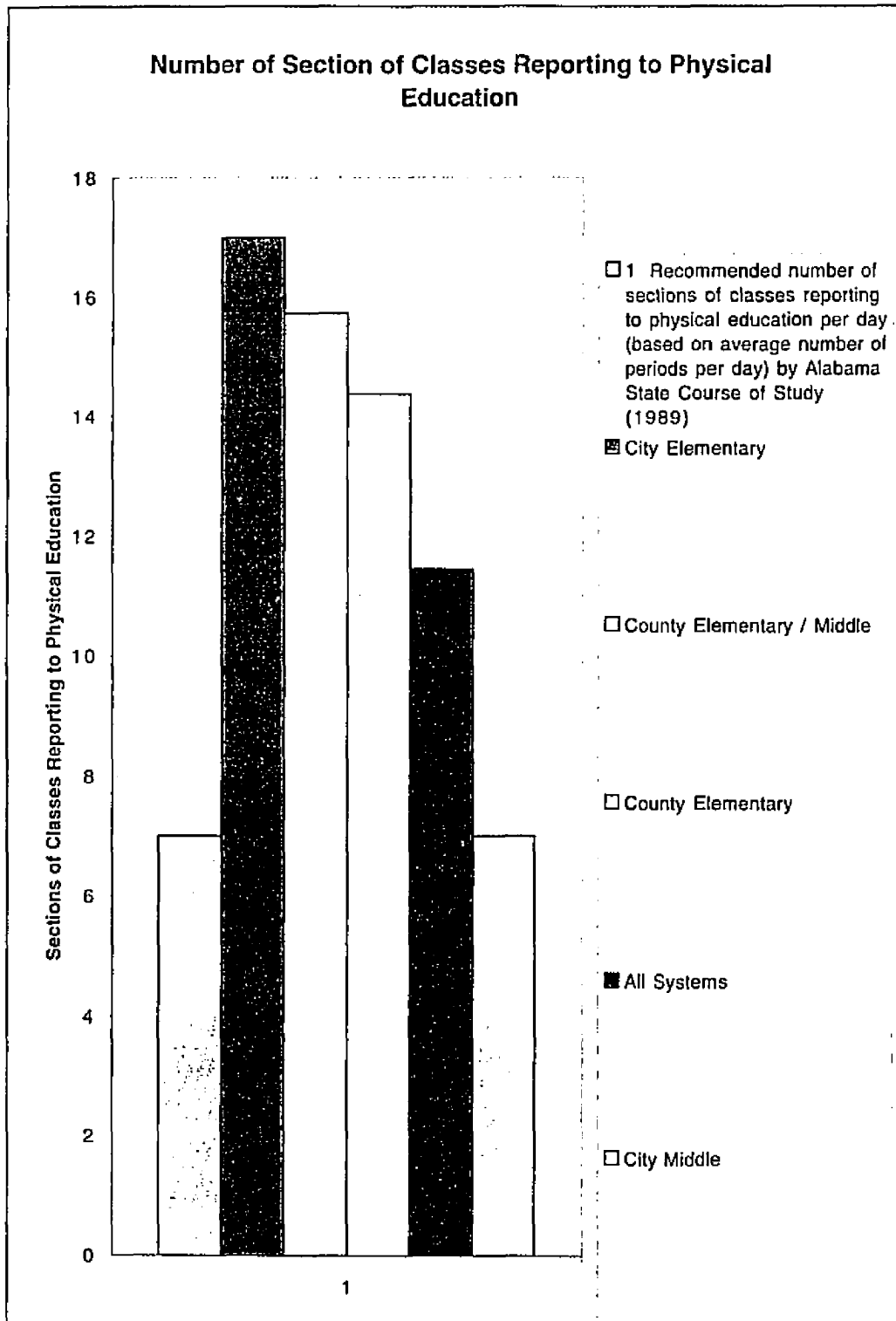


Figure 2. Number of Sections of Classes Reporting to Physical Education

Teaching Stations Available in the
Physical Education Setting

The recommended number of teaching stations, based on the National Facilities Conference formula, was determined for all school systems sampled. Information used in the formula included the average number of sections of classes, identified as units, reporting to physical education daily; the average number of periods in a week a class meets; and the average total number of periods in a week.

Utilizing the National Facilities Conference formula, the number of teaching stations recommended for all systems was 1.7. All groups met this recommendation standard for total teaching stations available, which included indoor and outdoor teaching stations. County elementary/middle schools reported 7.6 available teaching stations; city middle schools reported 7.1; city elementary schools reported 5.5; and county elementary schools reported 5.4. The average number of teaching stations for all schools was 6.7.

It must be noted that even though all schools met the recommendation for total available teaching stations, the average number of indoor teaching stations available in the selected schools varied. County elementary/middle schools reported 2.5 available teaching stations; city middle schools reported 2.1; county elementary schools reported 1.6; and city elementary schools reported 1.4.

Table 3 presents the means and standard deviations for the number of teaching stations available for physical education classes in each system. The total number of available teaching stations for each group was also separated into indoor and outdoor teaching categories.

Table 3
Number of Teaching Stations Available in the
Physical Education Setting

Group	Outdoor	Indoor	Mean	(+/-)	<u>SD</u>
City elementary	4.1	1.4	5.5	+/-	1.5
City middle	5.0	2.1	7.1	+/-	1.4
County elementary	3.8	1.6	5.4	+/-	1.6
County elementary/ middle	5.1	2.5	7.6	+/-	2.4
All systems	4.7	2.0	6.7	+/-	1.9

Note. Total teaching stations recommended by the National Facilities Conference, based on all systems = 1.7.

The following null hypothesis was formulated for this portion of the study: There was no significant difference at the .05 level between the average number of teaching stations available for physical education and the minimum teaching station standard recommended by the National Facilities Conference. Teaching station availability was statistically analyzed, utilizing the simple t-test to

determine if any differences existed between the stations available and the number recommended by the National Facilities Conference. The quantitative analysis of the data indicated that the average number of physical education teaching stations did not differ significantly from the standard recommended by the National Facilities Conference. The simple t -test results = 1.73, $p < .05$, $df = 123-1$; thus, the null hypothesis was accepted.

Figure 3 shows the mean scores as they compared to the standard recommended by the National Facilities Conference.

Paraprofessionals

A secondary purpose of this study was to ascertain the training opportunities provided for physical education paraprofessionals and the training opportunities desired by physical education paraprofessionals within the participating North Alabama public schools. Training opportunities provided for physical education paraprofessionals were broken down into the following categories: (1) orientation training prior to beginning working with students, (2) inservice training, and (3) on-the-job training provided by the supervising teacher. Figure 4 represents the spectrum of training opportunities reported by the paraprofessionals in this study.

Of the 29 paraprofessionals surveyed, 6.9% had received two days of orientation training; 41.4% had received one day of orientation training; and 51.7% had received no

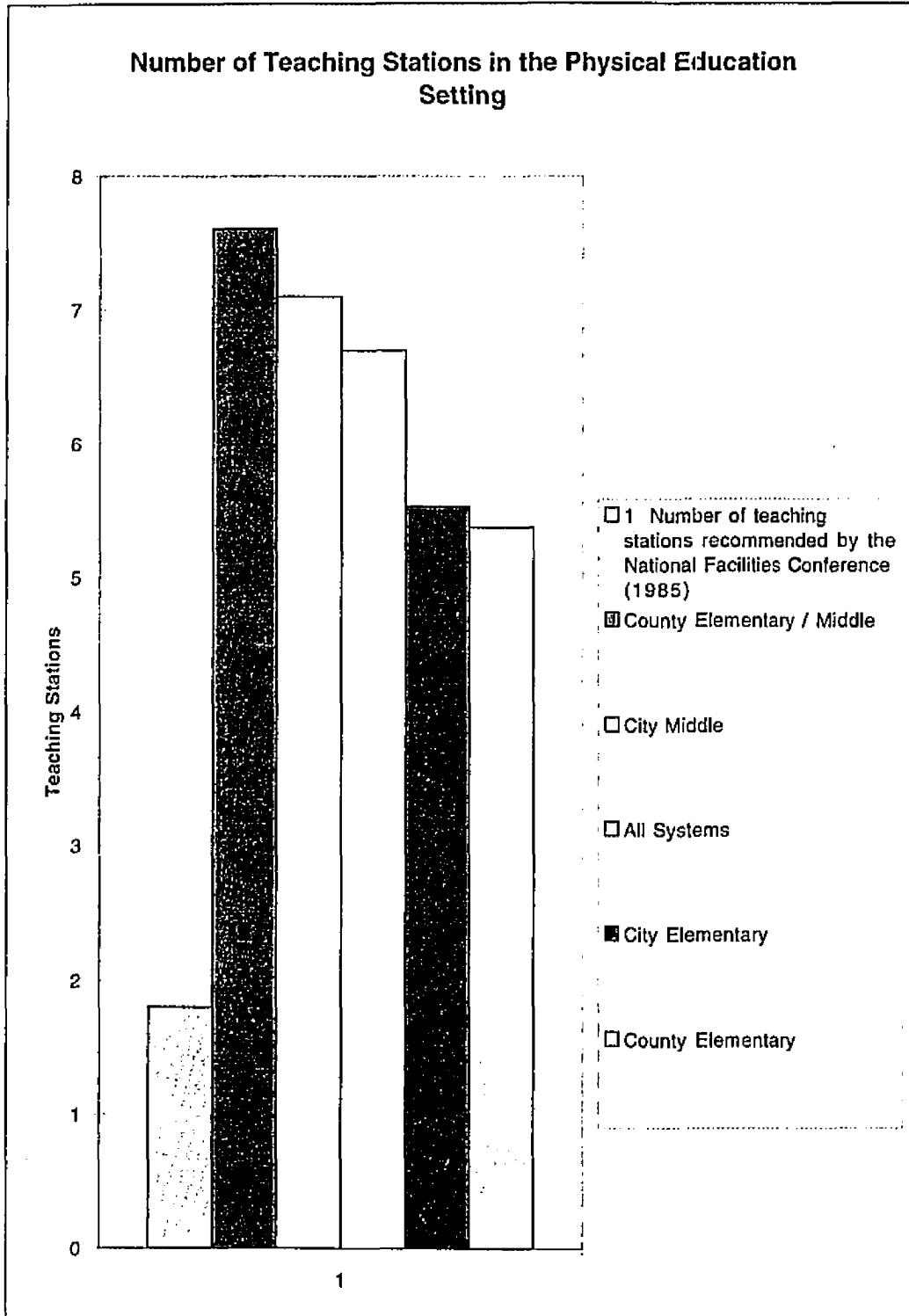


Figure 3. Number of Teaching Stations in the Physical Education Setting

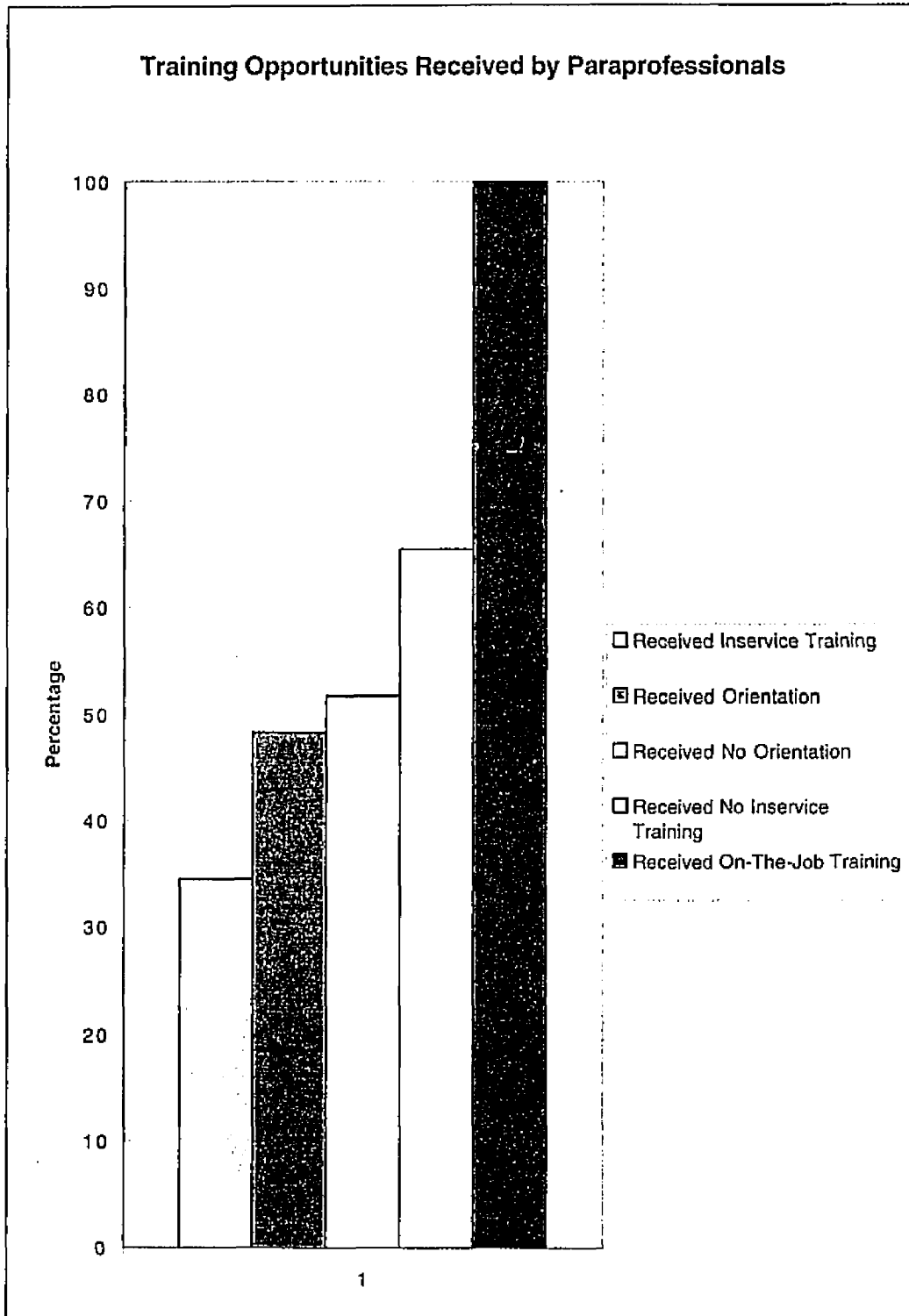


Figure 4. Training Opportunities Received by Paraprofessionals

orientation prior to beginning a new job working with students in physical education. The majority of respondents who had been provided with some type of orientation responded positively to the following areas: familiarization with the school, physical education setting, and procedures to follow during an emergency; the program structure; the utilization of teaching materials; classroom rules; and classroom organization. Responses varied on the topics of familiarization with the paraprofessional position, goals of the program, policies of the school, and the standard of ethics to follow. The majority responded negatively to the issues of discussing a personal philosophy with the teacher, management strategies, motivational techniques, supervisory styles, discipline strategies, and teaching styles. Only one respondent agreed that adequate time was provided to observe the teacher and students involved in instructional episodes and management episodes, respectively (see Table 4).

Of the 29 paraprofessionals surveyed, 34.5% indicated some level of inservice training, while 65.5% reported having received no inservice training opportunities. All 10 of the paraprofessionals having some degree of inservice training expressed inadequacies in inservice training. Nine of the 10 paraprofessionals responded positively to being provided information regarding school policies, and 9 reported that the supervising teacher attended inservice

Table 4
Orientation Received by Paraprofessionals

Type of orientation training received	Response	Percent	<u>N</u>
Familiarized with school	Strongly agree	6.9%	2
	Moderately agree	41.4%	12
Familiarized with physical education setting	Strongly agree	10.3%	3
	Moderately agree	37.9%	11
Familiarized with paraprofessional position	Moderately agree	13.8%	4
	Slightly agree	17.2%	5
	Slightly disagree	10.3%	3
	Moderately disagree	6.9%	2
Familiarized with goals of the program	Moderately agree	13.8%	4
	Slightly agree	13.8%	4
	Slightly disagree	3.4%	1
	Moderately disagree	17.2%	5
Familiarized with the procedures to following during an emergency	Moderately agree	20.7%	6
	Slightly agree	24.1%	7
	Moderately disagree	3.4%	1
Familiarized with the policies of the school	Strongly agree	3.4%	1
	Moderately agree	20.7%	6
	Slightly agree	20.7%	6
	Slightly disagree	3.4%	1

Table 4, continued

Type of orientation training received	Response	Percent	<u>N</u>
Familiarized with the standard of ethics to follow	Moderately agree	3.4%	1
	Slightly agree	13.8%	4
	Slightly disagree	13.8%	4
	Moderately disagree	10.3%	3
	Strongly disagree	6.9%	2
Discussed with physical education teacher:			
Personal philosophy	Slightly agree	10.3%	3
	Slightly disagree	6.9%	2
	Moderately disagree	24.1%	7
	Strongly disagree	6.9%	2
Management strategies	Slightly agree	10.3%	3
	Slightly disagree	20.7%	6
	Moderately disagree	6.9%	2
	Strongly disagree	10.3%	3
Motivational techniques	Slightly disagree	24.1%	7
	Moderately disagree	13.8%	4
	Strongly disagree	10.3%	3
Program structure	Strongly agree	6.9%	2
	Moderately agree	17.2%	5
	Slightly agree	13.8%	4
	Slightly disagree	3.4%	1
	Moderately disagree	3.4%	1
	Strongly disagree	3.4%	1

Table 4, continued

Type of orientation training received	Response	Percent	<u>N</u>
Supervisory styles	Slightly agree	10.3%	3
	Slightly disagree	20.7%	6
	Moderately disagree	10.3%	3
	Strongly disagree	6.9%	2
Discipline strategies	Slightly agree	10.3%	3
	Slightly disagree	27.6%	8
	Moderately disagree	6.9%	2
	Strongly disagree	3.4%	1
Utilization of teaching materials	Strongly agree	3.4%	1
	Moderately agree	41.4%	12
	Slightly agree	3.4%	1
Classroom rules	Moderately agree	34.5%	10
	Slightly agree	13.8%	4
Classroom organization	Moderately agree	31.0%	9
	Slightly agree	17.2%	5
Teaching styles	Moderately agree	3.4%	1
	Slightly agree	6.9%	2
	Slightly disagree	13.8%	4
	Moderately disagree	20.7%	6
	Strongly disagree	3.4%	1

Table 4, continued

Type of orientation training received	Response	Percent	<u>N</u>
Provided adequate time to observe the teacher and students involved in instructional episodes	Slightly agree	3.4%	1
	Slightly disagree	10.3%	3
	Moderately disagree	17.2%	5
	Strongly disagree	17.2%	5
Provided adequate time to observe the teacher and students involved in management episodes	Slightly agree	3.4%	1
	Slightly disagree	3.4%	1
	Moderately disagree	24.1%	7
	Strongly disagree	17.2%	5

Note. Received orientation = 48.3% (N = 14). Received no orientation opportunities = 51.7% (N = 15).

training sessions. Six of 10 reported covering issues related to confidentiality. Eight of 10 responded negatively to the provision of information learning styles and methods. Nine of 10 responded negatively to being provided instructional strategies and information related to legal issues, and all responded negatively to the provision of information on developmental characteristics of students, management strategies, and ethical issues (see Table 5).

All paraprofessionals reported having some type of on-the-job training by the supervising teacher. The majority of respondents reported being provided with verbal information (93.1%), materials (96.6%), daily lesson plans (68.9%), and daily and weekly schedules (86.2%). Most respondents expressed inadequacies in being provided weekly conferences (93.1%), close supervision (89.7%), and feedback and suggestions (96.5%). Table 6 depicts the responses of the respondents.

Of the 29 paraprofessionals surveyed, 51.7% desired orientation training, and the majority favored additional training in the following areas: familiarization with the paraprofessional position; familiarization with the goals of the program; familiarization with the procedures to follow during an emergency; familiarization with the policies of the school; familiarization with the standard of ethics to follow; and discussion with the physical education teacher about a personal philosophy, management strategies,

Table 5
Inservice Training Received by Paraprofessionals

Type of inservice training received	Response	Percent	N
Adequate inservice training	Slightly disagree	3.4%	1
	Moderately disagree	6.9%	2
	Strongly disagree	24.1%	7
Provided instructional strategies	Slightly agree	3.4%	1
	Slightly disagree	10.3%	3
	Moderately disagree	6.9%	2
	Strongly disagree	13.8%	4
Provided information on learning styles/methods	Slightly agree	6.9%	2
	Slightly disagree	3.4%	1
	Moderately disagree	10.3%	3
	Strongly disagree	13.8%	4
Provided information on developmental characteristics of students	Moderately disagree	17.2%	5
	Strongly disagree	17.2%	5
Provided information on management strategies	Slightly disagree	3.4%	1
	Moderately disagree	17.2%	5
	Strongly disagree	13.8%	4
Special attention given to confidentiality	Moderately agree	3.4%	1
	Slightly agree	17.2%	5
	Moderately disagree	3.4%	1
	Strongly disagree	10.3%	3

Table 5, continued

Type of inservice training received	Response	Percent	N
Special attention given to legal issues	Slightly agree	3.4%	1
	Moderately disagree	13.8%	4
	Strongly disagree	17.2%	5
Special attention given to ethical issues	Slightly disagree	3.4%	1
	Moderately disagree	17.2%	5
	Strongly disagree	13.8%	4
Special attention given to school policies	Strongly agree	10.3%	3
	Moderately agree	10.3%	3
	Slightly agree	10.3%	3
	Moderately disagree	3.4%	1
Supervising teacher attended inservice training sessions	Strongly agree	27.6%	8
	Slightly agree	3.4%	1
	Strongly disagree	3.4%	1

Note. Received inservice training = 34.5% (N = 10). Received no inservice training = 65.5% (N = 19).

Table 6
On-the-Job Training Received by Paraprofessionals

Type of on-the-job training received	Response	Percent	<u>N</u>
Physical education teacher provided:			
Verbal information	Moderately agree	48.3%	14
	Slightly agree	44.8%	13
	Slightly disagree	3.4%	1
	Moderately disagree	3.4%	1
Materials	Strongly agree	6.9%	2
	Moderately agree	62.1%	18
	Slightly agree	27.6%	8
	Slightly disagree	3.4%	1
Daily lesson plans	Strongly agree	3.4%	1
	Moderately agree	20.7%	6
	Slightly agree	44.8%	13
	Slightly disagree	17.2%	5
	Moderately disagree	10.3%	3
	Strongly disagree	3.4%	1
Daily and weekly schedules	Strongly agree	27.6%	8
	Moderately agree	48.3%	14
	Slightly agree	10.3%	3
	Slightly disagree	10.3%	3
	Moderately disagree	3.4%	1

Table 6, continued

Type of on-the-job training received	Response	Percent	N
Weekly conferences	Slightly agree	6.9%	2
	Slightly disagree	41.4%	12
	Moderately disagree	27.6%	8
	Strongly disagree	24.1%	7
Close supervision	Slightly agree	10.3%	3
	Slightly disagree	55.2%	16
	Moderately disagree	27.6%	8
	Strongly disagree	6.9%	2
Feedback/Suggestions	Slightly agree	3.4%	1
	Slightly disagree	41.4%	12
	Moderately disagree	37.9%	11
	Strongly disagree	17.2%	5

Note. Received on-the-job training = 100% (N = 29).

motivational techniques, program structure, supervisory styles, discipline strategies, utilization of teaching materials, and teaching styles. All respondents indicated a desire to be provided adequate time to observe the teacher and students involved in instructional episodes and management episodes. Table 7 depicts the responses of the paraprofessionals.

Of the 29 paraprofessionals surveyed, 65.5% desired inservice training, and the majority favored additional training in the areas of confidentiality and school policies. All of the 65.5% indicated a desire for further inservice training in the following areas: instructional strategies, learning styles and methods, developmental characteristics of students, management strategies, legal issues, and ethical issues. All respondents felt there was a need for adequate inservice training and that it was important that the supervising teacher attend inservice training sessions (see Table 8).

.

Table 7

Orientation Opportunities Desired by Paraprofessionals

Type of orientation training desired	Response	Percent	<u>N</u>
Familiarization with school	Slightly agree	10.3%	3
	Slightly disagree	20.7%	6
	Moderately disagree	20.7%	6
Familiarization with physical education setting	Moderately agree	3.4%	1
	Slightly agree	10.3%	3
	Slightly disagree	27.6%	8
	Moderately disagree	10.3%	3
Familiarization with the paraprofessional position	Strongly agree	3.4%	1
	Moderately agree	34.5%	10
	Slightly agree	13.8%	4
Familiarization with goals of the program	Moderately agree	6.9%	2
	Slightly agree	20.7%	6
	Slightly disagree	10.3%	3
	Moderately disagree	13.8%	4
Familiarization with the procedures to follow during an emergency	Moderately agree	24.1%	7
	Slightly agree	24.1%	7
	Slightly disagree	3.4%	1

Table 7, continued

Type of orientation training desired	Response	Percent	N
Familiarization with the policies of the school	Moderately agree	3.4%	1
	Slightly agree	34.5%	10
	Slightly disagree	6.9%	2
	Moderately disagree	3.4%	1
	Strongly disagree	3.4%	1
Familiarization with the standard of ethics to follow	Strongly agree	13.8%	4
	Moderately agree	31.0%	9
	Slightly agree	6.9%	2
Discussion with physical education teacher:			
Personal philosophy	Moderately agree	13.8%	4
	Slightly agree	34.5%	10
	Moderately disagree	3.4%	1
Management strategies	Strongly agree	3.4%	1
	Moderately agree	34.5%	10
	Slightly agree	13.8%	4
Motivational techniques	Strongly agree	3.4%	1
	Moderately agree	37.9%	11
	Slightly agree	10.3%	3

Note. Desire orientation opportunities = 51.7% (N = 15). Received orientation = 48.3% (N = 14).

Table 8
Inservice Opportunities Desired by Paraprofessionals

Type of inservice training desired	Response	Percent	N
The need for adequate inservice training	Strongly agree	41.4%	12
	Moderately agree	20.7%	6
	Slightly agree	3.4%	1
Instructional strategies	Strongly agree	3.4%	1
	Moderately agree	37.9%	11
	Slightly agree	24.1%	7
Information on learning styles/methods	Strongly agree	3.4%	1
	Moderately agree	37.9%	11
	Slightly agree	24.1%	7
Information on developmental characteristics of students	Strongly agree	31.0%	9
	Moderately agree	31.0%	9
	Slightly agree	3.4%	1
Information on management strategies	Strongly agree	6.9%	2
	Moderately agree	48.3%	14
	Slightly agree	10.3%	3
Special attention given to confidentiality	Strongly agree	3.4%	1
	Moderately agree	24.1%	7
	Slightly agree	34.5%	10
	Moderately disagree	3.4%	1

Table 8, continued

Type of inservice training desired	Response	Percent	N
Special attention given to legal issues	Strongly agree	24.1%	7
	Moderately agree	37.9%	11
	Slightly agree	3.4%	1
Special attention given to ethical issues	Strongly agree	27.6%	8
	Moderately agree	34.5%	10
	Slightly agree	3.4%	1
Special attention given to school policies	Strongly agree	3.4%	1
	Moderately agree	20.7%	6
	Slightly agree	37.9%	11
	Strongly disagree	3.4%	1
Desire for supervising teacher to attend inservice training sessions	Strongly agree	48.3%	14
	Moderately agree	17.2%	5

Note. Desire inservice training = 65.5% (N = 19). Received inservice training = 34.5% (N = 10).

CHAPTER 5

Summary, Conclusions, and Recommendations

Summary

The purpose of this study was to determine if the conditions of the elementary, elementary/middle, and middle school physical education settings of selected North Alabama public schools were consistent with the guidelines and recommendations of the 1989 Alabama State Course of Study and the 1985 National Facilities Conference formula. The conditions of this study, investigated through survey, were the average number of participants per class meeting and per day in physical education classes in the selected schools for comparison with the guidelines and recommendations of the 1989 Alabama State Course of Study, the average number of sections of classes reporting to a physical education teacher each period in the selected schools for comparison with the guidelines and recommendations, and the average number of teaching stations available in the selected schools for comparison with the guidelines of the 1985 National Facilities Conference. The secondary purpose of this study was to determine the training opportunities provided for physical education paraprofessionals and the training opportunities desired by physical education paraprofessionals.

A survey instrument, modified by experts in the field and pilot study tested, was utilized to determine the

condition of the elementary, elementary/middle, and middle school physical education learning environment. The instrument was hand-delivered to 60 elementary, elementary/middle, and middle public schools randomly selected throughout 10 North Alabama school systems, resulting in a 100% response. The condition of the physical education learning environment was determined by tabulation of survey data. Results were statistically analyzed and compared to the recommendations and standards, utilizing the simple t -test. Training opportunities received and desired by paraprofessionals were reported descriptively.

Conclusions

Characteristics of the Respondents

One hundred and twenty-three physical education teachers and 29 physical education paraprofessionals were the subjects for this study. Of the 123 physical education teachers, 17 taught in the city elementary schools; 59 taught in the city middle schools; 21 taught in the county elementary schools; and 26 taught in the county elementary/middle schools. Of the 29 paraprofessionals, 16 were employed by city elementary schools, 3 were employed by county elementary schools, and 10 were employed by county elementary/middle schools. City middle schools employed no paraprofessionals in the physical education setting.

Elementary public schools consisted of grades kindergarten through 5 or 6; elementary/middle public

schools consisted of grades kindergarten through 8; and public middle schools were consisted of grades ranging from 6, 7, and 8 or 5, 6, 7, and 8. The sample included equal numbers of both rural (county system) and urban (city system) public schools.

Number of Students Taught Each

Day in Physical Education

The quantitative analysis of the data indicated that the number of students taught by physical education teachers each day differed significantly from the 1989 Alabama State Course of Study recommendation. The daily average of physical education students taught by all systems was 261. The Alabama State Course of Study recommended 226. While city middle school numbers were reasonable (170), the average number of students taught by city elementary physical education teachers numbered 371, by county elementary schools numbered 323, and by county elementary/middle schools numbered 345.

Number of Sections of Classes Reporting

to Physical Education

The results of this study showed that all physical education teachers surveyed were assigned more sections of classes than recommended by the 1989 Alabama State Course of Study. The average number of sections of classes reporting to physical education each day versus the average number of physical education periods was compared to the

recommendation set forth by the 1989 Alabama State Course of Study. The quantitative analysis of the data indicated that the average number of sections of classes reporting to physical education differed significantly from the average number of physical education classes, with the 1989 Alabama State Course of Study recommended ratio between the two being 1:1. The average number of classes reporting to physical education class was 11, while the average number of physical education classes was 7.

Teaching Stations Available

The results of this study showed no significant statistical difference between the total number of teaching stations available for the conduction of physical education class and the recommendation established by the National Facilities Conference. All systems reported adequate number of available indoor and outdoor teaching stations. The National Facilities Conference formula recommended an average of 1.7 teaching stations. However, this formula does not take into consideration inclement weather days and the number of days physical education students are taught in indoor teaching stations. City elementary and county elementary schools reported 1.4 and 1.6 indoor teaching stations, respectively.

Orientation Opportunities Received and
Desired by Paraprofessionals

The results of this study indicated that no paraprofessional surveyed met the minimal three-day orientation session recommendation. Of the 29 paraprofessionals surveyed, 6.9% had received two days of orientation training, and 41.4% had received one day of orientation training. Prior to beginning a new job working with students in physical education, 51.7% had received no orientation.

The results of this study showed specific areas in which physical education paraprofessionals desire to be trained during orientation opportunities prior to beginning working with students. Of the 29 paraprofessionals surveyed, 51.7% desired orientation training, and the majority favored additional training in the following areas: familiarization with the paraprofessional position; familiarization with the goals of the program; familiarization with the procedures to follow during an emergency; familiarization with the policies of the school; familiarization with the standard of ethics to follow; and discussion with the physical education teacher about a personal philosophy, management strategies, motivational techniques, program structure, supervisory styles, discipline strategies, utilization of teaching materials, and teaching styles. One hundred percent of the respondents

indicated a desire to be provided adequate time to observe the teacher and students involved in instructional episodes and management episodes.

Inservice Opportunities Received and
Desired by Paraprofessionals

Of the 29 paraprofessionals surveyed, 34.5% indicated some level of inservice training, while 65.5% reported having received no inservice training opportunities. All 34.5% of paraprofessionals having some degree of inservice training expressed inadequacies in inservice training.

The results of this study showed specific areas in which physical education paraprofessionals desired to be trained during inservice opportunities provided throughout the school year. Of the 29 paraprofessionals surveyed, 65.5% desired inservice training, and the majority favored additional training in the areas of confidentiality and school policies. One hundred percent of the 65.5% indicated a desire for further inservice training in the following areas: instructional strategies, learning styles and methods, developmental characteristics of students, management strategies, legal issues, and ethical issues. All respondents felt there was a need for adequate inservice training and that it was important that the supervising teacher attend inservice training sessions.

On-the-Job Training Opportunities

Received and Desired by

Paraprofessionals

The results of this study indicated a need for improvement in the current on-the-job training opportunities for physical education paraprofessionals and showed specific areas in which physical education paraprofessionals desire to be trained during on-the-job training by the supervising teacher. Of the 29 paraprofessionals surveyed, 100% reported having had some type of on-the-job training by the supervising teacher. The majority of respondents reported being provided with verbal information, materials, daily lesson plans, and daily and weekly schedules. Even though all respondents reported receiving some type of on-the-job training, 27 expressed inadequacies in being provided weekly conferences; 26 desired closer supervision by the supervising teacher; and 28 reported a need for feedback and suggestions.

Based upon the findings of this study, the physical education teachers of North Alabama are challenged with many dilemmas as a result of large classes. Large numbers can result in physical educators being unable to supervise adequately. The conditions in which physical education teachers must instruct and the conditions in which students attempt to learn is a critical rationale to use to see a reduced pupil-teacher ratio in the physical education

setting. The review of related literature clearly specifies appropriate pupil-teacher ratios, yet many of the North Alabama school systems surveyed combine two or more sections of classes into one physical education class and exceed the recommended daily pupil-teacher ratio. By adhering to recommendations and guidelines, certified professionals are more likely to be sufficiently staffed, and the overloading of a physical education teacher should be prevented.

Recommendations for Future Study

An increased awareness of the conditions of the elementary, elementary/middle, and middle public schools' physical education setting should provide insight that could improve the effectiveness of the learning environment. Based upon the results of this study, the following recommendations are suggested by the investigator:

1. Rather than incorporate additional periods into the school day, employ adequate numbers of physical education teachers to meet state daily pupil-teacher ratio recommendations.

2. Employ adequate numbers of physical education teachers so that the ratio of sections of classes reporting to physical education and the number of scheduled physical education classes is 1:1.

3. Conduct research to investigate solutions to improving the current physical education setting and

creating a more effective learning environment in the public school systems.

4. Educate parents and the community of the importance of physical education and the need for reduced class sizes through parent-teacher conferences, media, and all other available resources.

5. Using the instrument in this study, conduct research in other geographic locations to determine the conditions of physical education settings.

6. Using the instrument in this study, conduct research to determine differences in pupil-teacher ratios, number of sections of classes reporting to physical education, and number of physical education teaching stations among elementary, elementary/middle, and middle school physical education settings.

7. Conduct research to determine the number of school days students participate in physical education indoors and the adequacy of indoor teaching stations in the physical education setting.

8. Establish a clear job description for paraprofessionals utilized in the physical education setting and for physical education teachers responsible for training paraprofessionals.

9. Provide physical education paraprofessionals with thorough orientation opportunities before the school year begins.

10. Investigate more comprehensive and numerous inservice opportunities for physical education paraprofessionals.

11. Provide physical education teachers with the information and time necessary to properly provide on-the-job training to physical education paraprofessionals.

12. Conduct research on appropriate paraprofessional certification standards and establish a standard certification procedure for paraprofessionals in Alabama.

APPENDICES

APPENDIX A
1989 ALABAMA STATE COURSE OF STUDY
PUPIL-TEACHER RATIOS

APPENDIX A
1989 ALABAMA STATE COURSE OF STUDY
PUPIL-TEACHER RATIOS

Kindergarten	20 to 1
Grades 1-3	30 to 1
Grades 4-6	32 to 1
Grades 7-8 (Based on 9-12 Ratio)	35 to 1

Determination of Pupil-Teacher Daily Ratios
Based on Theoretical School Schedules

Examples:

Grades K-8 (Based on 9 periods)		Grades K-6 (7 periods)		Grades 6-8 (6 periods)		Grades 5-8 (8 periods)	
20	K	20	K	32	6th	32	5th
30	1st	30	1st	32	6th	32	5th
30	2nd	30	2nd	35	7th	32	6th
30	3rd	30	3rd	35	7th	32	6th
32	4th	32	4th	35	8th	35	7th
32	5th	32	5th	35	8th	35	7th
32	6th	32	6th	204		35	8th
35	7th		206			35	8th
35	8th					268	
276							

Grades K-5
(Based on 6 periods)

20	K
30	1st
30	2nd
30	3rd
32	4th
32	5th
174	

Mean = 226

APPENDIX B
NATIONAL FACILITIES CONFERENCE FORMULA FOR
DETERMINING THE MINIMUM NUMBER OF TEACHING
STATIONS NECESSARY FOR EFFECTIVE
TEACHING AND LEARNING

APPENDIX B
 NATIONAL FACILITIES CONFERENCE FORMULA FOR
 DETERMINING THE MINIMUM NUMBER OF TEACHING
 STATIONS NECESSARY FOR EFFECTIVE
 TEACHING AND LEARNING

$$\frac{\text{Number of Classes or Units of Students} \times \text{Number of Physical Education Periods Per Week Per Class}}{\text{Total Periods in School Week}} = \text{Minimum Number of Teaching Stations}$$

Example:

For a school with seven grades, with three classes at each level, ten 30-minute periods designated for physical education each day, and physical education classes meeting every day of the week, the calculation to determine the number of teaching stations necessary is:

$$\frac{21 \text{ units} \times 5 \text{ periods/week}}{50 \text{ total periods in school week}} = \frac{105}{50} = 2.1$$

2.1 = Minimum number of teaching stations necessary for effective teaching and learning.

APPENDIX C
EXPERTS WHO REVIEWED THE SURVEY INSTRUMENT

APPENDIX C

EXPERTS WHO REVIEWED THE SURVEY INSTRUMENT

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Athens State College
Athens, AL 35611

APPENDIX D
REQUEST FOR REVIEW OF THE SURVEY INSTRUMENT
BY EXPERTS

APPENDIX D
REQUEST FOR REVIEW OF THE SURVEY INSTRUMENT
BY EXPERTS

March 27, 1995

Dear Colleague:

I am currently conducting work on my doctoral dissertation at Middle Tennessee State University. The members of my committee suggested I contact various experts for the purpose of assessing the appropriateness of the enclosed survey instrument. This survey instrument is a newly constructed instrument. I have also enclosed a copy of the null hypotheses which will be used in my dissertation.

After making the recommended revisions or additions to this instrument, I plan to establish the instrument's reliability and validity by conducting a pilot study. Public school physical education teachers, administrative faculty, and paraprofessionals will be members of this pilot study. For this pilot study, physical education teachers will complete page one of the survey instrument. The data collected from each teacher will be compared to administrative records in the office of each school. In addition, two paraprofessionals employed at the same public school will complete pages two and three of the survey instrument. A minimum of thirty responses from each group will be collected.

I would appreciate your review of the enclosed information and would value the recommended changes or additions you feel would make this instrument appropriate. I sincerely appreciate your time and consideration and look forward to hearing from you in the near future.

Thank you again,



Yvette Bolen
Physical Education Department
Athens State College
Athens, AL 35611

APPENDIX E
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TEACHING STATION FORMULA

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Athens State College

300 North Beaty Street
Athens, AL 35611
205 233-8100

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March 1, 1995

Till Davenport
Manager of Library Services and Permissions
Mosby-Yearbook, Inc.
11830 Westline Industrial Drive
St. Louis, MO 63146

Dear Ms. Davenport:

I am an assistant professor at Athens State College and am currently working on my doctoral dissertation at Middle Tennessee State University in Murfreesboro, Tennessee. In my dissertation I am investigating the condition of the physical education setting in elementary, elementary/middle, and middle schools, which relates to the number of teaching stations available.

I also teach Physical Education 400 - Organization and Administration at Athens State College and utilize your textbook *Management of Physical Education and Sport*, 10th ed. by C. A. Bucher and M. L. Krotee, published in 1993. I am hopeful that Mosby-Yearbook, Inc. will grant me permission to use the minimum teaching station formula on page 252 for my dissertation project.

Thank you for your consideration, and I look forward to hearing from you as soon as possible.

Sincerely,

Yvette Bolen

Yvette Bolen
Physical Education Department
300 N. Beaty Street
Athens State College
Athens, AL 35611

Mosby-Year Book, Inc.
11830 Westline Industrial Drive
St. Louis, MO 63146

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Till Davenport
Permissions Department

APPENDIX F
SURVEY INSTRUMENT COVER LETTERS

APPENDIX F
SURVEY INSTRUMENT COVER LETTERS



Athens State College

300 North Beaty Street
Athens, AL 35611
205 233-8100

May 11, 1995

Dear Physical Education Teacher,

Thank you for taking time out of your busy schedule to complete the attached survey. The information obtained from this survey will be used confidentially in a dissertation at Middle Tennessee State University. In addition, this information will be used to research the current state of the physical education setting. It is hoped this data will spawn ideas and solutions for improving and alleviating any undesirable conditions.

No verbal instructions will be provided prior to or during the completion of this survey. Please read all written directions carefully. This survey will be collected promptly from you when you finish.

Thank you again for your cooperation in this study.

Sincerely,

A handwritten signature in cursive script that reads "Yvette Bolen".

Yvette Bolen
Assistant Professor
Physical Education Department
300 N. Beaty Street
Athens, AL 35611



Athens State College

300 North Beaty Street

Athens, AL 35611

205 233-8100

May 11, 1995

Dear Paraprofessional,

Thank you for taking time out of your busy schedule to complete the attached survey. The information obtained from this survey will be used confidentially in a dissertation at Middle Tennessee State University and this information will be used to research the current training trends of paraprofessionals employed to assist in physical education classes. It is hoped this data will spawn ideas and solutions to broaden and enhance the training opportunities afforded to paraprofessionals and improve the physical education setting in the process.

No verbal instructions will be provided prior to or during the completion of this survey. Please read all written directions carefully. This survey will be collected promptly from you when you finish.

Thank you again for your cooperation in this study.

Sincerely,

A handwritten signature in cursive script that reads "Yvette Bolen".

Yvette Bolen
Assistant Professor
Physical Education Department
300 N. Beaty Street
Athens, AL 35611

APPENDIX G
SURVEY INSTRUMENT

APPENDIX G
SURVEY INSTRUMENT

SURVEY INSTRUMENT FOR THE PHYSICAL EDUCATION PARAPROFESSIONAL
(Teacher Aide or Teaching Assistant)

(Completed by every paraprofessional assisting in physical education in the elementary, middle school and elementary-middle schools studied)

Classification of School:	(Circle one)	Elementary	Middle	Elementary/Middle
Classification of System:	(Circle one)	City System	County System	
Gender of Paraprofessional:	(Circle one)	Male	Female	

Please read the descriptions below of various types of training support. As a paraprofessional, compare your training support experiences with the three types listed and circle the appropriate response.

As a new employee, and before working with children were you provided one to three days of orientation? YES NO
If you answered **yes**, complete form A, Section 1 - **ORIENTATION TRAINING**

If you answered **no**, complete form B, Section 1 - **ORIENTATION OPPORTUNITIES**

Have you ever received any type of inservice training? YES NO
If you answered **yes**, complete form A, Section 2 - **INSERVICE TRAINING**

If you answered **no**, complete form B, Section 2 - **INSERVICE OPPORTUNITIES**

Have you received any on-the-job training by your supervising teacher? YES NO
If you answered **yes**, complete form A, Section 3 - **ON-THE-JOB TRAINING BY THE SUPERVISING TEACHER**

If you answered **no**, complete form B, Section 3 - **ON-THE-JOB TRAINING OPPORTUNITIES**

FORM A

Page 2

Please read the following orientation training experiences and circle the appropriate score by referring to the legend below:

1-Strongly Disagree 2-Moderately Disagree 3-Slightly Disagree
4-Slightly Agree 5-Moderately Agree 6-Strongly Agree

Section 1 - ORIENTATION TRAINING

During orientation, you were familiarized with the:

school	1	2	3	4	5	6
physical education setting	1	2	3	4	5	6
paraprofessional position	1	2	3	4	5	6

General topics covered included:

the goals of the program	1	2	3	4	5	6
the procedures to follow during an emergency	1	2	3	4	5	6
the policies of the school	1	2	3	4	5	6
the standard of ethics to follow	1	2	3	4	5	6

During this time the physical education teacher discussed issues such as:

personal philosophy	1	2	3	4	5	6
management strategies	1	2	3	4	5	6
motivational techniques	1	2	3	4	5	6
the program structure	1	2	3	4	5	6
supervisory styles	1	2	3	4	5	6
discipline strategies	1	2	3	4	5	6
utilization of teaching materials	1	2	3	4	5	6
classroom rules	1	2	3	4	5	6
classroom organization	1	2	3	4	5	6
teaching styles	1	2	3	4	5	6

Adequate time was allowed to observe the teacher and students involved in instructional episodes before beginning paraprofessional responsibilities	1	2	3	4	5	6
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Adequate time was allowed to observe the teacher and students involved in management episodes before beginning paraprofessional responsibilities	1	2	3	4	5	6
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Please indicate the approximate number of days you have received orientation training by placing a circle around the appropriate response:

0 1 2 3 4 5+

Form A, Page 3

Please read the following inservice training experiences and circle the appropriate score by referring to the legend below:

1-Strongly Disagree	2-Moderately Disagree	3-Slightly Disagree
4-Slightly Agree	5-Moderately Agree	6-Strongly Agree

Section 2 - INSERVICE TRAINING

Adequate hours of inservice training were provided	1	2	3	4	5	6
Topics discussed in-depth included:						
instructional strategies	1	2	3	4	5	6
learning styles and methods	1	2	3	4	5	6
various developmental characteristics of students	1	2	3	4	5	6
management strategies	1	2	3	4	5	6
Special attention was given to:						
confidentiality	1	2	3	4	5	6
legal issues	1	2	3	4	5	6
ethical issues	1	2	3	4	5	6
school policies	1	2	3	4	5	6
Supervising teacher attended inservice training sessions	1	2	3	4	5	6

Please read the following on-the-job training experiences provided by the supervising teacher and circle the appropriate score by referring to the legend below:

1-Strongly Disagree	2-Moderately Disagree	3-Slightly Disagree
4-Slightly Agree	5-Moderately Agree	6-Strongly Agree

Section 3 - ON-THE-JOB TRAINING BY THE SUPERVISING TEACHER

To enable you to conduct individualized and group instruction, the supervising teacher provided:						
verbal information	1	2	3	4	5	6
materials	1	2	3	4	5	6
daily lesson plans	1	2	3	4	5	6
Daily and weekly schedules were provided	1	2	3	4	5	6
Weekly conferences between you and the supervising teacher were scheduled	1	2	3	4	5	6
As you instructed students and tried new tasks, the supervising teacher provided:						
close supervision	1	2	3	4	5	6
feedback/suggestions	1	2	3	4	5	6

FORM B

Page 4

Please read the following orientation training opportunities. Indicate the degree to which you would like to receive these training experiences by circling the appropriate score. Please refer to the legend below:

1-Strongly Disagree	2-Moderately Disagree	3-Slightly Disagree
4-Slightly Agree	5-Moderately Agree	6-Strongly Agree

Section 1 - ORIENTATION OPPORTUNITIES

Orientation in which you would be familiarized with the:

school	1	2	3	4	5	6
physical education setting	1	2	3	4	5	6
paraprofessional position	1	2	3	4	5	6

Coverage of the following general topics:

the goals of the program	1	2	3	4	5	6
the procedures to follow during an emergency	1	2	3	4	5	6
the policies of the school	1	2	3	4	5	6
the standard of ethics to follow	1	2	3	4	5	6

Discussion with the physical education teacher on issues such as:

personal philosophy	1	2	3	4	5	6
management strategies	1	2	3	4	5	6
motivational techniques	1	2	3	4	5	6
the program structure	1	2	3	4	5	6
supervisory styles	1	2	3	4	5	6
discipline strategies	1	2	3	4	5	6
utilization of teaching materials	1	2	3	4	5	6
classroom rules	1	2	3	4	5	6
classroom organization	1	2	3	4	5	6
teaching styles	1	2	3	4	5	6

Adequate time to observe:

teacher and students involved in instructional episodes before beginning paraprofessional responsibilities	1	2	3	4	5	6
--	---	---	---	---	---	---

Adequate time to observe:

teacher and students involved in management episodes before beginning paraprofessional responsibilities.	1	2	3	4	5	6
--	---	---	---	---	---	---

Please read the following inservice training opportunities. Indicate the degree to which you would like to receive these training experiences by circling the appropriate score. Please refer to the legend below:

1-Strongly Disagree 2-Moderately Disagree 3-Slightly Disagree
4-Slightly Agree 5-Moderately Agree 6-Strongly Agree

Section 2 - INSERVICE OPPORTUNITIES

The need for adequate hours for inservice training	1	2	3	4	5	6
In-depth discussion of the following topics:						
instructional strategies	1	2	3	4	5	6
learning styles and methods	1	2	3	4	5	6
various developmental characteristics of students	1	2	3	4	5	6
management strategies	1	2	3	4	5	6
Special attention given to:						
confidentiality	1	2	3	4	5	6
legal issues	1	2	3	4	5	6
ethical issues	1	2	3	4	5	6
school policies	1	2	3	4	5	6
Attendance of supervising teacher during inservice training sessions	1	2	3	4	5	6

Please read the following on-the-job training opportunities provided by the supervising teacher. Indicate the degree to which you would like to receive these training experiences by circling the appropriate score. Please refer to the legend below:

1-Strongly Disagree 2-Moderately Disagree 3-Slightly Disagree
4-Slightly Agree 5-Moderately Agree 6-Strongly Agree

Section 3 - ON-THE-JOB TRAINING OPPORTUNITIES

To enable you to conduct individualized and group instruction, you would benefit from the supervising teacher providing:						
verbal information	1	2	3	4	5	6
materials	1	2	3	4	5	6
daily lesson plans	1	2	3	4	5	6
Schedules provided daily and weekly by the supervising teacher	1	2	3	4	5	6
Weekly conferences scheduled between you and the supervising teacher	1	2	3	4	5	6
As you instruct students and try new tasks, you would benefit from the supervising teacher providing:						
close supervision	1	2	3	4	5	6
feedback/suggestions	1	2	3	4	5	6

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