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Perspectives of Physical Education Specialists who Teach in Large Class Settings

Dr. Michael K. Gross¹ & Dr. Alice M. Buchanan²

Abstract

This paper examines the perspectives of eight elementary physical education specialists who teach children's physical education in classes with large student: teacher ratios. The physical education specialists taught classes with student: teacher ratios of up to 54:1 per class. Interviews were conducted with each physical education specialist. The questions were written to inquire about specific variables that effect elementary physical education: biggest issue faced when teaching, delivering daily quality physical education, class management time, adequate equipment, safe learning environment, learning opportunities, adequate opportunity for moderate to vigorous physical activity, class size ratios, administrator attitudes toward physical education and class sizes, professional consideration from peers, discouraging issues, and promising things that kept them going. Results indicated that large class sizes interfered with their ability to offer quality physical education programs to children. The physical educator specialists indicated that they, as well as their profession, were marginalized by others' attitudes. In spite of teaching environments that include large class sizes, lack of administrative support, peer apathy toward physical education as a legitimate academic discipline, and insufficient equipment to provide maximum participation for all students, the participants in this study were driven by a desire to see their students excel and develop a positive attitude toward physical activity.

Keywords: large classes, class management, quality instruction, marginalization

1. Introduction

Providing a quality physical education program for young children is critical in the battle against childhood overweight and obesity.

¹Department of Physical Education and Exercise Science, Auburn University at Montgomery, Montgomery, AL, USA. Email: Mgross3@aum.edu

²Department of Kinesiology, Auburn University, Auburn, AL, USA.

Participation in a quality program during these formative years will likely instil in the child a favourable attitude toward physical education and a love for physical activity that may last a lifetime (Wuest & Bucher 2009). Physical education specialists, in spite of large class size ratios, work hard to provide quality programs in the wake of societal concerns about physical activity behaviours of children and adolescents. Thus this study examines the perspectives of physical education specialists concerning teaching large classes and the effects of such large classes on their teaching.

The recent concerns about child/youth overweight and obesity in the United States have resulted in many states increasing their requirements for physical education (Siedentop, 2009). The State of Alabama, USA, mandates physical education for grades kindergarten through eighth grade, and a mandate of one year for high school students. Within this mandate is the requirement of an average of 30 minutes of physical education per day for each student (Alabama Department of Education 2007).

Conducting a quality physical education program requires dedicated and competent physical education specialists. One challenge facing physical education specialists is providing a high-quality physical education program for all their students. Children should have the opportunity to learn meaningful content with the appropriate instruction when in physical education class (Wuest & Bucher 2009). In order to provide daily, quality, developmentally appropriate physical education, physical education specialists must overcome many variables that affect the delivery of their lesson content, and affect their attitude and outlook on their profession.

Every day physical education specialists face a myriad of instructional, managerial, and institutional level tasks that mould and shape their teaching philosophy and demeanour (Wuest & Bucher 2009). Research reveals a variety of obstacles that affect physical education specialists' ability to deliver quality physical education, not the least of which is large classes. The amount of students that physical education specialists are teaching on a daily basis can be mentally and physically draining. In spite of a recommendation from the National Association for Sport and Physical Education (NASPE) and the Council for Physical Education for Children (COPEC), little progress has been made to reduce class size in elementary physical education. NASPE (2006) recommends that elementary physical education classes have a student: teacher ratio of 25:1.

In the State of Alabama, the State-wide Committee to Review the State of Health of America's Youth with Particular Emphasis on Alabama's Youth Task Force recommended student: teacher ratios of 25:1 for kindergarten through second-grade and 33:1 for third through sixth grade (2006).

Research in the classroom concerning class size has shown that larger classes affect student learning ability. The Tennessee Student Teacher Achievement Ratio (STAR) Project examined students that were placed in class sizes of 13-17 students during their kindergarten through third-grade years. The results showed that these students out performed students in standard sized classes of 22-25 students. Not only were the students studied while they were in the primary grades, but they were observed and tested throughout their public school education. The final report pointed to a possible lifetime of benefits from smaller classes (NEA 1999). A followup study from the findings of Project STAR found the following attitudes toward smaller classes from teacher interviews (Pate-Bain, Boyd-Zaharias, Achilles, & McKenna 2001): (1) basic instruction was completed more quickly, providing increased time for covering additional material, (2) there was more use of supplemental texts and enrichment activities, (3) there was more in-depth teaching of the basic content, (4) there were more frequent opportunities for children to engage in first-hand learning activities using concrete materials, (5) there was an increased use of learning centres, and (6) there was an increased use of practices shown to be effective in the primary grades. In a later follow-up to the Project STAR study (Krueger & Whitmore, 2001); researchers investigated participants in the original study when they were in secondary school. While the test score effects on children who had been in small classes in grades K-3 "appears to have declined by at least half...a persistent, positive effect can be measured through the eighth grade "(p. 25). Moreover, when the students were in their last year of high school they were more likely to take a college entrances exam than those in the regular size classes. Finally, the effects reported were stronger in minority students and those students in free/reduced lunch programs (Krueger & Whitmore, 2001).

Many classroom studies of the effects of class size on achievement have mathematics and language scores as the dependent variable. The meta-analysis in Indiana known as Prime Time (McGiverin, Gilman, & Tillitski (1989) found that children in smaller classes actually learned more effectively.

The results indicated significantly higher achievement of reading and mathematics scores for children in smaller classes. The U.S. Department of Education (1999) reported the following conclusions after examining the findings from various studies: research indicates that class-size reduction in the early grades leads to higher student achievement, and students, teachers, and parents all report positive effects from the impact of class size reductions on the quality of classroom activity.

An exploration of international studies that looked at the effects of class size revealed equivocal findings. Urquiola (2006) isolated class size effects in an attempt to determine the impact, if any, on achievement in Bolivia. He reported on two studies, both of which determined that large-class-size effects, while non-linear, are indeed present. He said that, "...despite several necessary caveats in their interpretation, both strategies suggest that [large] class size has negative and significant effects on achievement." (p. 15). Research in junior high schools in France (Gary-Bobo & Mahjoub, 2006) found non-significant negative effect of small class size on grade promotion and retention. However, this effect had disappeared in high school.

While many class-size studies, understandably, are done by educational researchers, economics researchers have also engaged in such studies; often in order to explore cost-benefit effects. Dobbelsteen, Levin, and Oosterbeek (2002) determined that large class sizes do not have a negative effect on the achievement of Dutch students in elementary grades. In this economics study the authors controlled for a great many variables such as parental choice and school policy. They attribute the lack of difference to the positive effects suggested by social cognitive learning theory. Hoxby (2000) also controlled for parental choice and school policy in her economics study, and this methodological change may explain why her findings dispute the achievement results of other studies. Hoxby found no significant improvement in elementary school classes that were 10% smaller.

These findings are contradicted by a study in Sweden, in which (Fredriksson, 2011) determined that greater class sizes had negative short-term as well as long-term effects. Smaller classes resulted in significant cognitive and non-cognitive effects during school. A long-term follow-up found that the same children, now adults in the workplace, made significantly higher wages than those in larger classes. Further exploration of the data determined that the benefits of smaller class sizes outweighed the cost of providing the smaller classes.

All of the international studies reviewed, as well as the economic ones, were done with regular classrooms – not physical education classes. Although most studies show that large class size is shown to be a detriment to daily quality education in the classroom, there is little empirical research concerning class size and its effects in physical education. Hastie and Saunders (1991) identified class size and equipment availability as variables that can hinder teacher decision making and student participation levels in physical education. Analysis was conducted on elementary physical education class sizes of 12, 24, and 44 students and equipment availability was unlimited or restricted to minimal levels. The results supported the contention that changes in class size and the amount of available equipment will affect student lesson involvement, as more students were off-task in larger classes.

Hastie, Sanders, and Rowland (1999) examined the practices of elementary physical education specialist as they attempted to provide quality learning experiences to classes as large as 75 students. Of the three key findings that emerged from this study, two were directly related to teacher attitudes: (1) perceptions of marginalisation and (2) perceptions of hopelessness. The sense of professional isolation and powerlessness led to the perceptions of marginalization, as the teachers became frustrated professionally at not being able to enact high quality programs. Hopelessness ensued as repeated attempts to reduce the size of daily physical education classes fell on the deaf ears of administrators, classroom teachers, and even parents (Hastie, Sanders, and Rowland 1999).

Only three research articles concerning class size in physical education could be identified in the twenty-first century. Barroso, McCullum-Gomez, Hoelscher, Kelder, and Murray (2005) addressed the issue of class size when investigating barriers to quality physical education. The investigation centred on surveying elementary physical specialists in Texas that had attended the CATCH (Coordinated Approach to Child Health) training. The specialists answered questions concerning barriers to quality physical education. The top two barriers were low academic value of physical education and large class sizes. Keating and Silverman (2005) hypothesized that class size, among other variables, was a factor influencing teachers' use of fitness testing. Their research concluded that attitudes toward fitness testing, grade level, and school type were the top three factors, not class size. AAHPERD (2002) addressed class size as an issue in physical education in the *Status of Physical Education in the USA: Shape of the Nation Report, 2001*, but did not address class size in the 2006 report.

Gross (2008) examined the effects of class size on the amount of moderate to vigorous physical activity and class management content using the System of Observing Fitness Instruction Time (SOFIT). He concluded that physical education specialists in elementary schools face higher levels of management as opposed to content in larger classes. Despite some of the known effects of large class sizes in elementary physical education, there is little evidence of an impending reduction in student/teacher ratios.

2. Purpose

The purpose of this study was to determine the effects of teaching large classes on the professional and personal attitudes of elementary physical education specialists that teach in settings with large student: teacher ratios. Physical education specialists are a very small percentage of the professional work-force within a school, usually receiving little support from administration and classroom peers. Concerns and suggestions quite often are disregarded and ignored by administration personnel who seek to appease larger segments of the teaching profession. It is important that physical education specialists are given an opportunity to voice their perspectives concerning the environments in which they are required to teach. The assumption of this research is that regularly teaching large classes will adversely affect the perspectives of physical education specialists, and will have an effect on their ability to deliver daily quality physical education.

3. Method

3.1 Participants

Eight physical education specialists who teach in elementary schools participated in this study. Seven of the physical education specialists teach in a county school system and one physical education specialist teaches in a city school system. The teaching experience of the eight physical education specialists ranged from a first-year physical education specialist to one with 28 years in elementary physical education (Table 1). The physical education specialists consisted of four females and four males who teach daily classes as large as 54 students per teacher. All of the teachers were recruited from a state conference to participate in studies regarding class size. From the teachers the ones who taught in the local metropolitan area were purposively sampled, and these eight participants volunteered.

Permission to conduct the study was acquired from the school systems as well as the university Institutional Review Board.

Table 1. Participant Demographics

Physical Education	Teaching	Highest Education	Gender
Specialist	Experience (yrs.)	Degree	
#021619 (A l ice)	22 years	M. Ed.	Fema l e
#231619 (Kendall)	10 years	M. Ed.	Female
#130519 (Will)	1 year	B.S.	Male
#160305 (Sarah)	17 years	E. Sp.	Female
#030519 (Austin)	18 years	M. Ed.	Male
#200519 (Conner)	7 years	M. Ed.	Male
#070519 (Thomas)	2 years	B.S.	Male
#160519 (Bailey)	25 years	M.Ed.	Female

Table 2. Participant Class Size Information

Physical Education Specialist Number	# of Students per Class	# of Specialist # of Aides at School		Largest Student/	Gym
And Pseudonym				Teacher Ratio	
#021619 (Alice)	40-56	2	0	28:1	no
#231619 (Kendall)	36-72	2	2	36:1	yes
#130519 (Will)	36-72	2	2	36:1	no
#160305 ((Sarah)	36-54	2	0	27:1	yes
#030519 (Austin)	36-72	2	0	36:1	yes
#200519 (Connor)	90-130	3	1	33:1	yes
#070519 (Thomas)	180-210	5	0	42:1	yes
#160519 (Bailey)	100-108	2	2	54:1	yes

In the U.S., a physical education "specialist" is one who is specifically certified to teach physical education. The specialist may be the physical educator at a particular school, or alternatively the specialist may be an itinerant teacher who travels from school to school, and only sees a given group of children once or twice per week. In the latter case a "non-specialist" will be the primary teacher of physical education. This person might be the elementary classroom teacher, who is certified to teach children, but not certified to teach the content area of physical education, or might be another school employee such as a paraprofessional. In this case the specialist sees the children infrequently and helps the non-specialist with lesson plans and other ideas. None of the physical education specialists who participated in this study were itinerant.

Each physical education specialist taught in a different professional environment, which brought a variety of views to the responses. All of the participants' team-taught with at least one other certified physical education specialist and two of the participants had paraprofessionals assigned to assist in physical education. Only four of the specialists taught in a gymnasium, but those who did shared the gymnasium with the other specialist. We obtained participants' perspectives on variables considered to have an effect on teaching in a large class (defined in this work as a student: teacher ratio of 40+ to 1).

3.2 Data Collection

The first author visited each participant two times and gave each an openended survey with the questions to be answered. He spent about 15 minutes with each participant discussing the items, answering questions, and asking questions before leaving the survey. Each participant was asked to answer each question as honestly and frankly as possible and was reminded that each survey was coded so that no one but the researcher would know his/her answer. The answers were transcribed exactly using a word processor.

Questions focused on the physical education specialists' perceived effects of large classes and if, then how, large classes limited their ability to deliver daily quality physical education instruction.

The questions were written to inquire about specific variables that effect elementary physical education: biggest issue faced when teaching, delivering daily quality physical education, class management time, adequate equipment, safe learning environment, learning opportunities, adequate opportunity for moderate to vigorous physical activity, class size ratios, administrator attitudes toward physical education and class sizes, professional consideration from peers, discouraging issues, and promising things that kept them going. The questions were derived and modified from the *Teaching Large Class Sizes in Physical Education: Guidelines and Strategies* (NASPE 2006).

3.3 Data Analysis

The open-ended survey data for each question were recorded and analysed for common attitudes and perspectives in teaching large classes. The responses were typed into a word processing program and printed, and then physically removed from the questions (unless the question was needed for context, in which case it was notated). Then each unit of meaning was parsed out from the transcripts and organized into categories (Lincoln & Guba 1985; Merriam 2002). As categories emerged, "membership" in categories was determined, and units of meaning were revisited and re-sorted using constant comparison. If one unit of meaning could belong to two categories, then we made a copy so that it could be put into both. The initial unitizing was done by the second author, and then both of us revisited and resorted the units, completed the categories, and drew assertions based on the results. Pseudonyms were assigned to each participant for clarification purposes in reporting participant's quotes.

4. Results

4.1 Biggest Issue Faced: Management and Discipline

Discipline and/or management issues were two of the most reoccurring answers from the open-ended surveys, and were consistently named as the "biggest issue faced" when teaching large classes. Discipline was a concern as it related to off-task behaviour, and management as it related to control of the class during presentation of the lesson.

Participants spoke often about how difficult management was in large classes; and that consequently, management problems led to discipline problems. Will said, "When students realize you have more students to manage and you cannot always see them all at the same time, they tend to try and get away with more...whether it be during lining up, forming groups, etc." Participants indicated that such problems led to reduction in student engagement and in student learning. Bailey said that when time was spent on discipline problems "we can't use the time to teach effectively." Connor said, "Sometimes you have to manage the class so much there is not enough time to teach."

Kendall who said that her students were very organized, and that management was not a problem disconfirmed this category. All of the other participants provided data confirming the category.

Teachers' comments indicated concerns regarding on- and off-task behaviours. Will also said that "keeping students on task...it is very difficult trying to get a lot of students together at the elementary level and have them stay still and quiet long enough to explain a new activity." Thomas expressed frustration in saying, "The best I can do is to show them an activity and hope they are doing it correctly as I walk up and down watching for fights and bad behaviour."

4.2 Deterrent to Producing Daily Quality Physical Education

All of the participants indicated a desire to produce and deliver a quality physical education program in their respective schools. Participants communicated making a strong effort to deliver quality lessons to the students within a balanced and sequenced curriculum despite the challenges attributed to class size. Will noted, "For me it [large class size] affects the quality by limiting what I can teach, I am still going to provide a quality physical education program for the children, but I believe the children will be bored with the program and I think it might discourage P.E. in their future."

Austin said that large classes are difficult to "talk over.... It takes forever to get them all quiet so everyone can hear instructions.... The best I can do is to show them an activity and hope they are doing it correctly." Alice summarized the situation nicely in saying, "having large classes is overwhelming, but you have to take what is given to you and make your program as beneficial as possible to your students."

Others expressed frustration that, even if they taught well early in the day, or in the week, that by later in the day they knew they were not being as effective due to fatigue. Kendall said that, "... my instruction is not delivered as well or effectively later in the day/week."

Other factors, addressed more specifically in other categories, directly or indirectly impacted teachers' ability to deliver quality programs. For instance, large classes limited equipment availability, thus limiting what they could do with varying age groups. Large classes also limited teachers' ability to work individually with students who might be struggling. Sarah said, "I am not as able to give one on one instruction because there are so many other children to watch."

4.3 Difficult to Provide One-On-One Instruction

Related to the desire to deliver quality physical education programs was the desire to provide quality individualized instruction to each student. One on one instruction is at the core of teaching, as it allows each teacher the opportunity to address individual needs related to a given skill. All of the participants in this study teach in settings that allow for very little one on one time with their students. Therefore, participants did not mince words when discussing the lack of opportunity to work one-on-one with a child, for having large classes hampered the opportunity to work with individual students to the extent they wanted. Bailey said that large classes cause "the inability to work with each student individually." Alice said that large classes are "a negative in the sense that you can't devote too much time to one student if they are having trouble with a skill."

Further comments from the participants served to confirm their desire and struggle to provide quality instruction at the individual level in large class settings.

According to Sarah, "There is no way to have interaction with every child."

Thomas stated, "I am not as able to give one on one instruction because there are so many other children to watch."

Connor said, "It is hard to get around to observe all students and give them feedback on skills."

"And Will offered a powerful statement that summarized the issue:

"Anytime you can have one on one time with a student it creates a greater learning experience. If you have a large class it is impossible to make it around to each student during your 30 minute period so therefore it would take a couple of days to get that one on one training that is so productive....by that time you have gotten further behind with the ones that you started with."

4.4 "Providing Each Student with an Individual Piece of Equipment is Very Expensive."

Equipment, or a lack of equipment, was a common concern among the participants who were striving to produce lessons containing maximum participation for each student. They found it increasingly difficult to deliver quality instruction if students are standing and waiting to take a turn with a particular piece of equipment. We address money and equipment together in this category, as they are far too interrelated to separate, as evidenced in this quote from Kendall: "It is expensive to purchase equipment for every student when you have anywhere from 40-100 children in a class." Equipment was indicated by the participants to be a major issue due to large class size and the expense of buying large quantities to meet the needs of each class. The expense was further exacerbated by a dismal economy and prorated state funds. Sarah noted that, "PE equipment is expensive, instructional funds are being cut, and we have to provide appropriate equipment for all of our K-6 students." And Sarah went on to state "What is appropriate for 6th may not be appropriate for lower grades." The physical education specialists not only needed more, and more varied, equipment in order to deliver a quality curriculum, their efforts were further confounded during inclement weather according to Austin: "We don't have enough money to buy a piece of equipment for each child. We have 120 to 180 students per class. On rainy days they have to share equipment and wait for a turn."

The participants' voices are powerful on this issue, perhaps best indicated by Will:

- "...due to the small amount of money that P.E. teachers get allocated to them each year it is not possible to provide equipment for the whole class, it takes a long time to build your inventory up and by the time you get it established the equipment is worn out."
- 4.5 Challenged to Provide a Safe Learning Environment

In our litigious society in the USA, physical education specialists are expected to use prudence in delivering developmentally appropriate lessons. They are constantly challenged to ensure a safe learning environment to protect themselves from lawsuits. Participants indicated the need to err on the side of caution and limit the activities that they offer during a physical education lesson; even to the point of reducing the amount of activity during the lesson.

When discussing safety participants often commented on the lack of space for such large classes. The lack of space became more problematic for many teachers during inclement weather. Bailey commented that "large classes make it difficult to see every potential dangerous situation that can occur." Efforts to make the classes safer often limited opportunities for students to learn and to engage. Here are some partial quotes:

Kendall stated, "There are some games that I cannot teach simply because of the large class sizes and students bumping into each other."

Austin said, "I plan every lesson with safety in mind, which means that lots of kids are sitting or standing in line...."

"...there may not be enough space to safely move," according to Connor.

And Sarah summed up safety in saying, "You cannot see everything that goes on in any environment, but 60 kindergarteners make it impossible."

All of the schools in the study are in the southeastern US, and thus were able to have physical education outdoors on a regular basis. However, rain or other such inclement weather sometimes prevented class from being outdoors. The issue of large class sizes became even greater, and the safety problems increased, when the class moved to a small indoor space due to inclement weather. In such situations teachers had to use the space that was available. For some that was a small activity room or old gymnasium, but for others it meant a classroom: "We have 120-180 students per class. On rainy days they have to share equipment and wait for a turn," stated Austin. On a similar note Alice stated "we only have a small room during inclement weather."

And Kendall noted that s/he has to "change lesson plans when we are inside during inclement weather."

Even the teachers who had a gymnasium had to modify for large classes during inclement weather, as it meant that multiple classes were in the gym. Connor noted that the large classes limited safety "...when you have to keep all classes in the gym on bad weather days." Kendall also objected that "there are some games that I cannot teach simply because of the large class sizes and students bumping into one another. I especially have to change lesson plans when we are inside during inclement weather."

Teachers also stressed that safety was not only an issue during bad weather, but also due to the large class sizes that they teach on a daily basis. Thomas expressed that the large classes reduced "...the overall safety of the class as a whole, as it is generally impossible to keep your eyes and ears on the entire class." This concern was reiterated by Will who said, "Due to the size of the class and the large area covered in pe you could be talking to this group and in the meantime the group in the back is getting out of control," thus, "Large classes make it difficult to see every potential dangerous situation..." as stated earlier by Bailey.

The participants called attention to the fact that large classes make it "extremely hard to teach your lesson when your main concern is also on safety." Some of them pointed out that the issue of large class size and safety also affected the amount of activity they could offer during a lesson. Austin noted that large classes "do limit the activities we can do." Bailey indicated that "safety issues make it very difficult for students to receive any significant level of aerobic activity;" while Sarah remarked that "sometimes we have to give up vigorous movement in order to reduce safety problems."

4.6 Hard to Provide Enough Moderate to Vigorous Physical Activity

The Council for Physical Education in Children (2003) recommends that children should accumulate at least 60 minutes, and up to several hours, of age-appropriate physical activity on all or most days of the week. This directive becomes particularly important in light of the increasing overweight and obesity levels among children and adolescents.

Although schools are not expected to provide time for all recommended moderate to vigorous physical activity (MVPA), large classes severely limit the ability to provide an adequate portion of the daily recommendations.

Consideration for safety and limited space due to large classes are variables that sometime limit MVPA. Sarah said that MVPA was limited because "...there may not be enough space to safely move. Sometimes we have to give up vigorous movement in order to reduce safety and discipline problems." And Connor added that "... children don't get to play as much with large numbers."

Difficulty engaging students in MVPA was closely tied to safety concerns addressed previously, and Kendall noticed that getting a lot of MVPA for the children was not a problem when the class was outdoors. Indoors was a different story:

"If inside, there is a lot of wait time and not enough fitness most times because locomotive type movements that get their heart rate up are limited when large groups are confined to our small room or gym with multiple classes."

Bailey confirmed the issue of lack of MVPA by tying it to many of the other variables that impact teaching when facing large class sizes: "Management, discipline, and safety issues and the time constraints created by these issues [large classes], make it very difficult for students to receive any significant level of aerobic activity."

4.7 "All they Care About is not Having Discipline Problems in the Office"

This category is named for a quote from one of the participants. The data revealed how the teachers felt they, their degree, and their profession were undervalued as evidenced by comments and actions of administrators and classroom teachers as stated by Thomas, "The most demoralizing issue that I face is the outlook on [physical education - author] 'specialists' as a whole. Teachers and administrators in some cases often believe that we have the easiest schedules, and simply throw a ball out or just let classes play on the playground. Often times classroom teachers will make the statement that PE teachers are not really teachers, they are babysitters. Well, that is true in cases where we have extra classes 'dumped' on to our already high class sizes."

The participants expressed frustration when discussing their colleagues; both administrators and peers. Although many physical educators said that they liked their classroom teacher colleagues at a personal level, they (the participants) were nonetheless troubled by the general attitude that physical education was not important.

This manifested itself in classroom teachers' requests and decisions that had immediate bearing on Alice's classes: "The main issue involved... is the fact that classroom teachers often argue that it is unfair or unjust to prevent them from having 'planning' time." Will complained that the classroom teachers often would discipline students "by asking me to have them 'sit-out' for my class, not understanding that the child would actually be missing content. Similarly, Bailey was frustrated that "...peers don't believe what I teach is important. They don't respect me as a teacher. All they want is for the students to come back exhausted so they won't have to deal with discipline problems." Similar misconceptions came from parents as well; such as when one was surprised to find that being a physical education specialist required a bachelor's degree.

Thomas pondered that administrators' interpretation of the profession was a key reason that physical education specialists were assigned large classes:

"It is possible that higher student: teacher ratios are a reflection of how physical education is viewed in the eyes of key administrators. It is possible that their thoughts are, "All they do is throw a ball out there or let them play." So why not give them double or in some cases triple classes."

A more cynical response was that administrators did not care how many students were in the physical education classes according to Austin; "They don't care how many students we have. All they care about is not having discipline problems in the office so they can go off campus to eat lunch." Participants further indicated that administrative policy decisions such as the scheduling of classes and duty time showed a lack of thought for the teaching of physical education. Austin also complained of having duties such as morning, lunch, and/or after school on a regular basis, "When all the other teachers (homeroom and non-homeroom) have it once every 6 weeks." Teaching the entire elementary school, grades kindergarten through sixth, presented its own challenges to Sarah when schedules were made. "I would like to be able to schedule similar age groups together, instead of having a 5th grade class, followed immediately by K, followed immediately by 6th with no time in between.

Most participants would agree with Will who said things were unlikely to change "because Physical Education is not as important to the people making decisions."

Alternatively, Sarah did offer a piece of disconfirming evidence when she indicated a very "supportive and understanding" administration. But Sarah went on to say, "however, I don't think this is true in most schools."

4.8 Marginalisation of Profession due to Inequities in Ratios

Participants spoke passionately about the profession, how others thought of it, and the discrepancy of student: teacher ratios between physical education and the regular classroom. Such talk included the subordination and marginalisation of the content; demoralization and hopelessness felt by the physical educators; and the fatigue and burnout they often felt by the end of the day/week/semester.

Hastie, Sanders, and Rowland (1999) determined that two outcomes of physical education specialists that teach in large class settings are perception of hopelessness and perception of marginalization. Specialists are saddled with a prevailing attitude that their teaching situations will not change and they will continue to teach in environments that marginalize their career and professional education. Participants indicated having the same degree as other teachers, yet they were required to teach very large classes. This professional marginalization led to resentment toward other teaching professionals, and for some even produced a sense of dread toward teaching that arose from the sense of hopelessness produced from teaching in large class settings on a daily basis with no relief in sight according to Connor, "It is not right, not fair. I should be able to teach my lesson/unit with appropriate numbers and time--just like classroom teachers." Austin referred to the inequity of student: teacher ratios as a "double standard." And Alice expressed hopelessness in saying, "I have never really thought that it would change so you just deal with it."

One indication of the marginalisation of the profession was a state wide reading initiative that required grade level teachers have a common planning time, thus excluding physical education specialists. Such a top-down directive spoke volumes to the participants about the perceived worth of their profession.

When asked if they thought student: teacher ratios in physical education would ever improve, Sarah replied, "No, especially with proration and the ARI [Alabama Reading Initiative] requiring all teachers on grade level to have a shared planning time."

Austin made a strong assertion that was spoken by several others, as well: "Physical education in the state of Alabama is not for the kids. It is so classroom teachers can have a break."

Bailey pointed out an issue that did not come up in other surveys, but addressed a dilemma for schools that might attempt to tackle the issue of ratios: that of needing more physical education specialists. "The time frame for a regular day would not allow the students to have daily physical education [with the current number of teachers]. More physical education teachers are needed to adequately handle the load.

The data clearly indicate that the participants were tired. Nearly every comment indicated fatigue, burnout, frustration, or all three: "You come work my job for one day, out in the hot blistering sun, and have morning and afternoon duty everyday...then I would like to know how easy my job is," said Thomas, who had been told, or insinuated to, repeatedly that his job was an easy one.

While these data indicate a great deal of discouragement among participants, Will indicated hope for the future:

"I believe that physical educators will continue to fight for the cause. As we educate these kids of today about the importance of physical education and choosing to live a healthy lifestyle, that when they become our future, they will have this seed planted in their minds and along with the continuing effort of the physical educators that have sacrificed and fought in the past and present we will reach this goal."

4.9 "The Children are my Saving Grace"

In the surveys teachers were asked what the one thing was that motivates him or her to keep going. To a person, the answers all related to the children, and generally fell into four categories: that the children were having fun; their (participants') love for the children, and the children's expressions of love for them; making a difference in the lives of the children; and similarly, but more specifically, seeing the children being active and succeeding at physical activity.

Nearly all of the teachers expressed how good they felt when the children showed how much they enjoyed the teacher. They stated that the children's hugs, their interactive and cooperative behaviour, and their expressions of adoration for the teacher and/or for physical education, were all things that were encouraging to them. They also spoke of former students who told them what a difference the teacher had made in their lives, and of students who recognized them outside of class and spoke to them cheerfully. This was true for Bailey, who said, "Being around my students. I have always strived to make a difference in their lives. Letting them know that I care about them is very important to me. All the smiles and hugs are the most rewarding parts of my job. To also see them succeed is one of the highlights of my day. To have students come up to me years later and tell me how much fun they had in my class, is very special."

Alice summed up the good feelings by saying; "The one thing that brings me back every day is my love for the students and their love for me."

The teachers spoke of caring for the students and wanting to make a difference in their lives. Connor stated, "Letting them know that I care about them is very important to me" and "teaching them about lifetime physical activity, interactive and cooperative behaviour, and they are having a wonderful time in the process."

The reciprocation of the love between teacher and student was mentioned by the teachers as part of their saving grace as indicated by Thomas, "The fact that I cannot walk down the hallway without being run over by little kindergarteners who wrap their tiny arms around my legs" and "the older students that holler your name, 'WHAT'S UP COACH' from across the way."

Thomas also indicated it was the recognition that they are sometimes more than a teacher, "The one thing that keeps me coming back is my relationship with my students, the fact that I am making a difference in the lives of children. That I am a positive role model, and to some the only male figure they have."

5. Discussion

Although there is no indication that the reduction of student: teacher ratios for physical education are forthcoming in public schools, there is continued hope for such a change. Even with NASPE's (2006) recommendation that elementary physical education classes have a student: teacher ratio of 25:1, there seems to be a marked difference between what is desired and what is expected. Our data show that physical education specialists believe that in the eyes of administrators and classroom teachers, physical education is not a legitimate academic discipline.

Superintendents and principals are the leadership of school systems and schools. Teachers look to their administrators for guidance, structure, and opportunity to teach in a receptive environment. Physical education specialists are no exception to this rule, desiring equal opportunity to apply their trade to the lives of the students in their charge. Yet, physical education is constantly under attack through large classes, the shortening of class time to accommodate other school functions, and the requiring of physical education specialists to perform tasks at school not required of classroom teachers. Smartschan (2004) says that school leaders need to see the harm they might commit by reducing instruction in physical education, as well as second languages and the arts in order to maximize time for preparing students for high-stakes tests. Administrators are under pressure for academic accountability but it cannot come at the expense of physical education.

5.1 Recommendations

The participants in our study work hard and make the best of the difficult situations in which they find themselves. Many expressed that they like their colleagues and administrators as people, but that their colleagues did not respect the physical education profession – and thus the physical educators as teachers. As physical education professionals continue to advocate for children as well as for our field, we offer some recommendations based on our findings.

Many of the participants thought other teaching professionals did not respect them, or their profession. This means, then, that the physical education specialists must work harder in order to be recognized as legitimate.

Note that we do not mean that they do not already work hard! We mean that marginalised groups often must work harder than normal in order to be recognized. Thus, physical education specialists can do the following:

Get the classroom teachers on your side. Find out what the classroom teachers are doing in their classes, and integrate that into the physical education content. One of the best resources for integrating content that we have found is chapter 16 in Hastie and Martin (2006). Many other resources exist, as well. Encourage the children to report back to their teachers and parents about what they are doing.

Get the administrators on your side. Send a newsletter to the school administration and central office with news of what is happening in physical education class. Have the children write articles, take pictures, and create art for the newsletter. Collaborate with the media centre and with the language arts teachers.

Get the faculty and staff at the school involved in what you are doing. For example, invite them to participate with and challenge the children when they complete fitness and skill assessments. Include not only teachers and administrators, but also cafeteria, housekeeping, maintenance, and other staff.

Have a capstone event. Create a festival type atmosphere and have a class or classes perform for the school, parent-teacher association, and/or community. Such as event might be a Sport Education tournament, a gymnastics meet, a multicultural dance, a circus, or many other things. This is also a great way to get parents and classroom teachers involved.

Lobby the state capital. Invite your legislators to visit your class, and to the capstone event. Send them the newsletter, and be relentless in showing off your program and how it helps children.

Use professional resources in order to learn strategies for working with large classes. Seek out and engage in in-service programs at the district, state, regional, or national level. A good program is easy to advocate for, while a lacklustre one is not. Once the administrators see what you are capable of under the burden of large classes, and then enlighten them as to what you could do under better circumstances.

While we, as physical education professionals, did not create this burden, the onus is on us to make positive changes.

5.2 The Human Spirit

Ann Richards, the former governor of the state of Texas, during the keynote address at the 1988 Democratic Convention said, "Teaching was the hardest work I had ever done, and it remains the hardest work I have done to date" (http://www.quotationspage.com/quote/39134.html). There is both confirmation and hesitancy in this statement. Teaching is hard work. And depending on the subject matter, the degree of difficulty in teaching can increase or decrease. Most of the time the difficulty is not found in the subject content, but as indicated by the responses of the teachers in this study, within the variables that encompass their educational domain. As seen in the results of this study, insufficient levels of equipment, lack of administrative support, large number of students per lesson, inadequate teaching facilities, and a lack of professional respect for physical education from their peers, does make teaching more difficult in most situations. And although some teaching professionals do not view physical education as an important component in the academic structure of education, this view in no way justifies the professional settings many physical education specialists are forced to teach within. Yet in spite of these overcrowded conditions, most physical education specialists press on toward the goal of educating the students within the realm of their influence.

Although the physical education specialists that participated in this study indicated their frustration with many aspects of teaching in large class setting, they also indicated that their desire to teach was greater than the obstacles before them. Their love for teaching and desire to see their students succeed motivates them to go forward. Their enthusiasm for imparting knowledge and to see that knowledge grow in the life of each student is at the heart of their passion for teaching.

The physical education setting offers many opportunities for students and teachers to form emotional bonds (Buchanan 2001; Hellison 1995). Despite the administrative hurdles faced by the participants, they felt a strong sense of fondness and responsibility for the children and for their futures. They saw themselves not only as teachers, but also as role models and friends, for to teach is to touch a life forever. Carl Jung, the famous Swiss psychologist said of teachers, "An understanding heart is everything in a teacher, and cannot be esteemed highly enough.

One looks back with appreciation to the brilliant teachers, but with gratitude to those who touched our human feeling. The curriculum is so much necessary raw material, but warmth is the vital element for the growing plant and for the soul of the child" (www.quotationspage.com/quote/39134.html). Well said Carl. Well said indeed.

6. References

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