A Descriptive Analysis of Undergraduate PETE Programs in the Central District

by Kristen M. Hetland, Concordia College, Moorhead, MN and Bradford Strand, North Dakota State University

Abstract

The current study described physical education teacher education (PETE) programs at institutions located within the Central District of the United States (CDAAAHPERD). Of the 72 institutions invited to participate, 44 institutions completed the survey (58% response rate). The purpose of this study was to describe the general profile/practices of undergraduate PETE programs and to provide an overview of their similarities and differences among the colleges and universities located within the CDAAAHPERD. The 61- item survey included topics related to basic program information, curricular items incorporated into each program, and coverage of various areas of course content.

Key Words: Physical Education Teacher Education Curriculum

Le Masurier and Corbin (2006) stated that the need for quality physical education is clear, based on the current trends of obesity and physical inactivity among children and adolescents. They cited ten reasons why quality physical education is necessary:

1. Regular physical activity helps prevent disease.
2. Regular physical activity promotes lifetime wellness.
3. Quality physical education can help fight obesity.
4. Quality physical education can help promote lifetime physical fitness.
5. Quality physical education provides unique opportunities for activity.
6. Quality physical education teaches self-management and motor skills.
7. Physical activity and physical education promotes learning.
8. Regular physical activity participation makes economic sense.
9. Physical education is widely endorsed.
10. Quality physical education helps to educate the total child.

Quality K-12 physical education programs depend on a highly qualified teacher. In early 2002, Congress passed a law called the No Child Left Behind (NCLB) Act (a.k.a. 2001 [Public Law 107-110, 107th Congress, January 8, 2002]). This law was established in an attempt to improve the United States educational system. Though this law has actually reduced physical education programs across the United States, it defines the general term "highly qualified teacher." The NCLB definition of a highly qualified teacher is one who has completed a bachelor's degree, holds a full state certification, and demonstrates competence in each content area taught (U.S. Department of Education, Office of Postsecondary Education [DOE], 2005).

The National Association for Sport and Physical Education (NASPE) has also helped to define a "highly qualified teacher" by developing the position paper, *What Constitutes a Highly Qualified Physical Education Teacher* (2007a). "Highly qualified physical education teachers possess the skills and knowledge to facilitate improved teaching practices, strengthen the quality of physical education instruction, and empower students to achieve and maintain healthy, active lifestyles" (p. 1).

Napper-Owen, Marston,Van Volkinburg, Afeman, & Brewer (2008) described a variety of elements that can define a highly qualified teacher. The elements fall under one of three categories: (a) designing and delivering the physical education program, (b) professional development, and (c) preservice preparation.

Quality physical education is the most effective tool for providing all children, regardless of, individual differences and capabilities with skills, attitudes, values, knowledge, and understanding for lifelong participation in physical activity. In order to design and deliver a high quality physical education program, physical educators will (a) utilize the national standards for physical education in developing program quality, (b) align assessment to the programs' standards, instruction, and outcomes, (c) exhibit those process skills (Dunkin & Biddle, 1974) and, (d) display dispositions associated with effective teaching (p. 28).

Highly qualified teachers should be able to design K-12 physical education programs using appropriate infrastructure (opportunity to learn), meaningful content defined by curriculum, appropriate instructional practices including good classroom management, student and program assessment, and evaluation (NASPE, 2007b). Teachers should also be able to design programs and base lessons on national standards for K-12 physical education (NASPE, 2004a), and establish high expectations for learning within psychomotor, cognitive, and affective domains. They should support student learning through the creation of an environment that is conducive to learning and view assessment as an integral component of the teaching-learning process (NASPE, 2007a).

Highly qualified teachers need to contribute to their schools outside of their respective classrooms as well. For example, other important responsibilities that help define a 'highly qualified teacher' are to demonstrate professionalism and ethical behavior in the learning environment through positive interactions with students, colleagues, administrators, and community members.

"PETE programs are designed to facilitate preservice teachers' progress toward being deemed 'highly qualified' upon entrance into the profession" (NASPE, 2007a). PETE programs should be accredited, based on PETE standards, and the faculty should model passion, reflection, and dedication (Napper-Owens et al., 2008).

Physical Education Teacher Education programs should provide preservice teachers with substantial pedagogical and content knowledge bases; afford many opportunities for preservice teachers to participate in an array of field experiences where they can interact with veteran teachers and diverse students at all grade levels while seeing the application of classroom principles; and develop, nurture and reinforce specific professional behaviors that facilitate student learning (NASPE,

2007a, p.1).

NASPE acknowledges that highly qualified physical education teachers will be certified to teach by virtue of having completed an accredited PETE program (NASPE, 2007a). NASPE (2004b) developed a pledge that can be used as a starting point when forming one's own idea of what it means to be highly qualified. The pledge was developed to create "Positive Physical Education" and is as follows:

•Establish a positive, safe learning environment for all students.

•Teach a variety of physical activities that make physical education class enjoyable.

•Create maximum opportunities for students of all abilities to be successful.

•Promote student honesty, integrity and good sportsmanship.

•Guide students into becoming skillful and confident movers.

•Facilitate the development and maintenance of physical fitness.

•Assist students in setting and achieving personal goals.

•Provide specific, constructive feedback to help students master motor skills.

•Afford opportunities for students to succeed in cooperative and competitive situations.

•Prepare and encourage students to practice skills and be active for a lifetime.

The current state of health problems in the world suggests that there is a need for effective and quality physical education programs (Bulger, Housner, & Lee, 2008). These programs rely on highly qualified teachers. Teaching K-12 physical education can be a very challenging profession; therefore, it is imperative that higher education institutions provide instruction and experiences that will prepare preservice teachers to make a successful transition into the teaching profession (Hill & Brodin, 2004).

The goal of PETE programs should be to produce highly competent and effective K-12 teachers (Hill & Brodin, 2004). Tinning (2002) stated that most people would agree that teacher preparation programs should prepare preservice teachers to fulfill the purpose that the profession considers to be the most important. What is that purpose? "Physical education should be devoted to optimizing the likelihood that people so value physical activity (sport, leisure activity, fitness, and dance) that they organize their lives so regular involvement occurs throughout the lifespan" (Siedentop, 1994, p. 11). To help fulfill this purpose, PETE faculty must consistently self-assess their programs based on the NASPE Initial Beginning Physical Education Teachers standards (NASPE, 2008).

An effective way to clarify one's belief is to compare his/her philosophical position on curriculum with others (Bahneman, 1996). Therefore, the purpose of this study was to describe the general profile/practices of undergraduate PETE programs and to provide an overview of their similarities and differences among the colleges and universities located within the Central District (AAHPERD).

Methods

Participants

The survey participants were PETE faculty members who were considered the point person or program coordinator for the undergraduate PETE program. These faculty members were employed by four-year colleges and universities located within the nine states in the Central District (Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming). PETE faculty were defined as those who teach physical education teacher preparation courses and were identified by a knowledgeable person at each specific university or college. Overall, 72 PETE program coordinators/point persons were selected as the potential sample for this study. In all, 44 universities returned usable results, a rate of 58%, and surveys were returned from all nine states. In an attempt to keep the results accurate, only one survey was sent to each institution.

Instrument

A 61-item survey was designed to gather information regarding the participants' specific institution's undergraduate PETE program. The programmatic items included general program demographics, student enrollment, curricular items, pre-student teaching opportunities, and the student teaching experience. The questions were answered in a variety of ways (multiple choice, yes/no, and a drop down box). The survey was reviewed for readability, and a pilot study was conducted to verify content validity.

Specific survey questions were determined after a thorough review of PETE program research conducted by Metzler and Freedman (1985), Metzler and Tjeerdsma (1998), and Strand (1992). In addition, three other documents, PETE Standards (NASPE, 2008), NASPE's (2007a) position paper on highly qualified physical education teachers, and an article on what constitutes a highly qualified physical education teacher (Napper-Owen et al., 2008) revealed common themes. Some of the questions for this study were used in previous research and other questions were developed to represent the common themes.

Procedures

A complete list of United States universities, colleges, and community colleges including links to each institution's website can be found by using the University of Texas at Austin website (http://www.utexas.edu/world/univ/). From the website, the user has the option to review the schools according to type of institution (universities or community colleges), state, or alphabetical list. This website was used to compile a list of the possible four-year institutions located within the Central District.

The Central District four-year institutions' websites were searched to identify the colleges or universities that offered a physical education teaching degree. If the websites indicated that the institution did offer PETE as an undergraduate major, the specific department's website was visited in search for names and e-mail addresses of physical education faculty members. If no point person or program coordinator for the PETE program could be found on the website, phone calls were made to the department head or administrative assistant to obtain the appropriate contact information. If the website did not indicate whether or not a degree was offered, follow-up e-mails were written or phone calls were made to the admissions office.

Data collection took place in the spring of 2009 using SurveyMonkey©, an on-line survey tool. Surveys were sent to

PETE faculty members employed by a variety of universities and colleges located within the American Alliance of Health, Physical Education, Recreation and Dance's (AAHPERD) Central District region. A detailed consent form was provided and potential participants were asked to read it before they proceeded to a link to the questionnaire. By clicking on the "Yes" button of the survey, each person gave his/her informed consent to taking the survey. The questionnaire guaranteed anonymity. In an attempt to collect as much usable data as possible, three separate e-mails were sent (two weeks apart) requesting responses. There were no incentives provided to the participants. The university Institutional Review Board (IRB) reviewed and approved the study prior to the data collection.

Data Analysis

The results from SurveyMonkey© were downloaded into an Excel file where the data were cleaned and coded to ensure that all data were accurate. Responses that included missing data and/or appeared to be inaccurately recorded were deemed unusable; therefore, they were removed from the data set. The coded Excel file was then uploaded into the SPSS (version 17.0) statistical package. Descriptive statistics such as means, percentages, and frequencies were calculated for each of the variables.

Results

The following findings are descriptive in nature and not intended to represent all institutions located within the Central District. The data were organized into the following categories; program profile, professional activity courses, skill and fitness testing, observation/field experiences, student teaching, practical teaching experiences, curriculum content, student professional organization involvement and advisory boards.

Program Profile

Data indicated that the average physical education program located within the Central District included 51.8 (SD= 32.05) total students and graduated 11.68 (SD= 9.065) students per year. Undergraduate physical education students were required to complete 122.70 (SD= 13.22) credits to graduate, and were required to maintain a minimum grade-point-average of 2.59 (2.50 and 2.75 most frequent). Nearly all of the programs (n=39; 89%) were accredited by NCATE and/or NASPE, and used semesters as their institution's measure for coursework (n=43; 97%).

Professional Activity Courses

The participants were first asked to identify whether the professional activity courses were single or multiple-credit courses. Responses indicated that 86.4% of the professional activity courses were offered as multiple-credit courses. Overall, the students were required to complete an average of 8.93 credits.

Participants were also asked to identify which class format most closely matched the one used in their professional activity courses. The format options were categorized by age (elementary, middle school or high school), type (individual, dual, team, and combative), or activity (court, net, long/short implement). The most common format indicated by the participants for the professional activity courses was a multiple-credit course, categorized by type (45.5%, n= 20). This was followed by multiple-credit course categorized by age (20.5%, n=9), single credit course (13.6%, n=6), and multiple-credit course categorized by activity (6.8%, n=3). Finally, 13.6% (n=6) of the institutions formatted their activity courses in an alternative format.

Skill and Fitness Testing

The third edition of the PETE standards (NASPE, 2008) included a requirement on fitness and skill capabilities; therefore, participants were asked if the institutions required their students to pass skill and fitness tests either as a course requirement and/or a graduation requirement. This survey found that 45.5% (n=20) of the programs required their students to pass skill tests in their courses, and 11.8% (n=5) required skill testing as a graduation requirement. Data indicated that 20.5% (n=9) of the institutions required students to pass fitness tests in courses and 4.5% (n=2) required the fitness tests for graduation.

Curricular Issues

Observations/field experiences. Table 1 displays the average number of K-12 physical education observations/field experiences hours that PETE students were required to complete during each respective year of school. The table also shows the average number of hours completed at each level of education (elementary, middle school, and high school). The findings showed that the third year in the program appeared to contain the highest number of observations with 31.45 total hours. The number of hours completed at each level of education appeared to be fairly even between the elementary level (24.73 hours) and the high school (23.16 hours). Middle school observations averaged about 17.07 total hours.

Table 1. ***Observations - Hours Per Year***

	Hours	Range
Year		
1	8.14	0-65
2	17.27	0-50
3	31.45	0-65
4/5	27.11	0-65
Education Level		
Elementary	24.73	0-65
Middle School	17.07	0-50
High School	23.16	0-65

Student teaching. Student teaching experiences averaged about 14.41 weeks. Participating universities and colleges reported that their PETE students student teach at each of the three age levels 20.5 % (n= 9) (elementary, middle school, and high school), 77.3% (n= 34) of the programs placed their student teachers in two age levels (primary and secondary), and 2.3% (n= 1) of the programs required their students to student teach at the middle school level only.

Practical teaching experiences. Practice teaching sessions (including peer teaching and teaching in the K-12 physical education class) are a common component of teacher preparation programs. On average, students had the opportunity to teach to their peers 12.75 hours (range 0-40). Undergraduate PETE students

also had the opportunity to teach to K-12 students for about 15.02 hours (range 0-25). Overall, the students averaged 27.77 hours of practice teaching opportunities prior to student teaching.

Curricular items included. There are a variety of curricular and technology/equipment options that can be incorporated into PETE programs. The survey asked participants which of the following items were incorporated into their respective PETE programs (see Table 2). The curricular items that were most frequently imbedded into a program's curriculum were the physical education national or state standards (86.4%), curriculum models (79.5%), concepts of fitness and wellness (75.0%), and the appropriate practices documents (68.2%). The top three technology items used were heart-rate monitors (72.7%), pedometers (61.4%), and FitnessGram (56.8%).

Table 2. ***Percentage of Institutions that Incorporate Curriculum Items into PETE Program***

	%	n=
Curricular Items		
National PE Standards/State Standards	86.4	38
Curriculum Models	79.5	35
Concepts of Fitness and Wellness	75.0	33
Appropriate Practices (NASPE)	68.2	30
Assessment Series (NASPE)	40.9	18
Physical Best	38.6	17
PE Metrics: Standard 1	34.1	15
SPARK	25.0	11
President's Council of Fitness and Sport	22.7	10
PECAT	18.2	8
Beyond Activities: Elementary and/or Secondary	15.9	7
Opportunities to Learn Document	15.9	7
Technology/Equipment		
Heart-rate Monitors	72.7	32
Pedometers	61.4	27
FitnessGram	56.8	25
ActivityGram	20.5	9
Climbing Wall	15.9	7
TriFit/MicroFit	15.9	7
Dance, Dance Revolution (DDR)	13.6	6
Sport Wall	4.5	2
HOPSports	2.3	1

Note. N=44

Curriculum content. The survey included a question about curriculum content delivery (see Table 3). Based on the curricular options listed, participants were asked to indicate how the curriculum was delivered to the students (separately, infused/ imbedded, separately and infused, or not covered). The most common curricular content taught in separate courses were exercise physiology (75%), administration (61.4%), biomechanics (61.4%), historical perspective (56.8%), adapted (56.8%), exercise science (50%), and social psychology (50%). Curricular topics covered separately least often were activities and materials (20.5%), fitness education (18.2%), assessment (15.9%), technology (13.6%), and behavior management (4.5%).

Table 3. ***Content Taught in PETE Curricucla***

	Separate Course		Infused		Separate & Infused		Not Covered	
	%	n=	%	n=	%	n=	%	n=
Adapted	54.5	24	6.8	3	38.6	17	0	0
Act. & Mat.	20.5	9	45.5	20	34.1	15	0	0
Administration	61.4	27	15.9	7	18.2	8	4.5	2
Assessment	15.9	7	40.9	18	43.2	19	0	0
Behavior Mgmt	4.5	2	72.7	32	22.7	10	0	0
Biomechanics	61.4	27	11.4	5	25.0	11	2.3	1
Coaching	63.6	28	4.5	2	20.5	9	11.4	5
Methods	31.8	14	25	11	43.2	19	0	0
Exercise Science	50	22	18.2	8	22.7	10	9.1	4
Exercise Phys.	75	33	2.3	1	20.5	9	2.3	1
Fitness Education	18.2	8	47.7	21	31.8	14	2.3	1
Historical	56.8	25	25	11	15.9	7	2.3	1
Motor Dev.	36.4	16	27.3	12	34.1	15	2.3	1
Motor Learning	45.5	20	11.4	5	40.9	18	2.3	1
Social Psychology	50.0	22	22.7	10	18.2	8	9.1	4
Technology	13.6	6	52.3	23	31.8	14	2.3	1

Note. N=44

The curricular areas that were infused only included behavior management (72.7%), technology (52.3%), fitness education (47.7%), activities and materials (45.5%), and assessment (40.9%). Topics with the lowest percentage infused were administration (15.9%), motor learning (11.4%), biomechanics (11.4%), adapted (6.8%), coaching (4.5%), and exercise physiology (2.3%).

The curricular areas that were separate and infused were assessment (43.2%), curriculum design/methods (43.2%), motor learning (40.9%), adapted (38.6%), activities and materials (34.1%), motor development (34.1%), fitness education (31.8%), and technology (31.8%). The areas that were lowest on the separate and infused were social psychology (18.2%), administration (18.2%), and historical perspective (15.9%).

Curricular content areas that were not covered were coaching (11.4%), exercise science (9.1%), social psychology (9.1%), and administration (4.5%). Five curricular areas covered by all respondent's institutions included adapted, activities and materials, assessment, behavior management, and curriculum design/methods.

Student Professional Organization Involvement

Participants were asked to identify whether the students were required to join a professional organization and whether students attended a professional conference within the past two years. Findings indicated that 27.3% (n= 12) of the programs required their students to join a professional organization and 79.5% (n=35) gave students the opportunity to attend a conference within the past two years.

Advisory Boards

An advisory board is a small group of K-12 physical educators that serves as both a focus group and a liaison between higher education and the K-12 community. Participants were asked to indicate whether or not they believed advisory boards were an important resource for higher education curriculum. The participants were also asked if they had used an advisory board within the past five years. Findings indicated that 36.4% (n=16)

of the institutions believed that advisory boards were important and 25% (n=11) had used an advisory board within the past five years.

Discussion

There are a variety of key elements that may be included in a typical physical education curriculum. The following elements may be included, but not limited to, professional activity courses, fitness and skill testing, curricular items, curriculum content, observations/field experiences/student teaching, practice peer and K-12 teaching experiences.

Findings from this study indicated that physical education students, on average, were expected to enroll in nine credits of professional activity courses. The third edition of the PETE standards (NASPE, 2008) included a fitness and skill standard. It may be interesting to note that nearly 46 percent of the programs required their students to pass skill tests in their courses, and about 12 percent required skill testing as a graduation requirement. In addition, about 20 percent of the institutions required students to pass fitness tests in courses and less than five percent required the fitness tests for graduation. It will be interesting to see how these numbers change as the updated PETE standards (NASPE, 2008) become a part of the accreditation process.

Technology is also a new theme imbedded into the PETE standards (NASPE, 2008). In recent years, there have been significant advances in the use of technology in physical education. The most common technology/equipment items mentioned by the participants were heart-rate monitors, pedometers, and FitnessGram. Ayers and Housner (2008) claimed that preservice physical education teachers need to have knowledge of the pedagogical applications of technology; however, less than 12% (Liang, Walls, Hicks, Clayton, & Yang, 2006) of PETE students believed they were fluent. Perhaps the PETE programs should assess the quality and quantity of technological applications so the students could feel more confident bringing technology into their K-12 classes.

It is incumbent upon teacher educators to identify the most pedagogically relevant knowledge in the academic disciplines and to provide preservice physical educators with teaching and learning experiences that demonstrate the connections between the knowledge from various academic disciplines and its relevance to professional practice (Bulger, Housner, & Lee, 2008).

"In an ideal world, PETE programs would provide prospective teachers with subject-matter knowledge related to the physiology, anatomy, and neuromuscular structures of the body, and an understanding of how these systems respond and adapt to physical activity" (Bulger, Housner, & Lee, 2008, p. 44). The data indicated that most of the programs that participated in the study are, indeed, covering these topics.

Based on the findings from this study, one could question the delivery choice of certain curricular items. For example, if a curricular area was solely "infused" into curriculums (verses offered in a separate course), would that choice of delivery affect the preservice teacher's perception of the importance of the information? Or, if a topic is taught only in a separate course (and not infused throughout the curriculum) does that choice of delivery matter to the students? Ross (1987) believed that universities and institutions do have a profound effect on the value systems of students based on the curriculum to which those students are exposed. So, the question emerges, if certain curricular topics such as behavior management or assessment are not taught, at minimum, in a discrete course, are the students less likely to value those topics? Or if topics are taught earlier in the curriculum, and not reviewed or infused in higher-level courses, are students less likely to value those areas?

Some institutions offer courses taught by professors who are not physical education specialists. In fact, they may be non-teacher educators and/or influenced little by PETE faculty regarding both course content and instructional methods (Verner, 1991). While certain disciplinary specialists may have a more complete understanding of the involved subject matter and knowledge, they may lack the ability to apply the essential pedagogical concepts that will enable preservice physical educators to apply the content in physical activity promotion settings (Bulger et al., 2008). The survey indicated that the curriculum content areas most often taught as separate courses (≥60%) were administration, coaching, biomechanics, and exercise physiology.

"As previously described, PETE programs need to employ course content, instructional methods, and teaching-learning environments that enable students to make explicit connections between the various disciplines and best practices in teaching physical education" (Bulger et al., 2008).

> It is apparent that the capacity of a PETE curriculum to positively affect the preservice socialization of prospective physical educators is significantly related to the overall quality of that curriculum. Strong, individual curricular components are insufficient to insure curricular quality. All segments of the curriculum must operate well in a coordinated manner (Weigand, Bulger, & Mohr, 2004, p. 53).

It appears as though biomechanics and exercise physiology are not typically being infused into subsequent courses.

The previously mentioned study by Collier and Hebert (2004) found that K-12 in-service teachers believed that "… Pre-professional preparation faculty must closely examine the curricular opportunities afforded pre-professionals with respect to exposure to lifetime activities, physical and health-related fitness, behavior management, and classroom organization" (p. 111). These K-12 teachers were asking for greater emphasis to be place on the aforementioned curricular areas. The results of the current study paralleled the request of the K-12 teachers in Collier and Hebert's study (2004).

In the current study, results indicated that Central District preservice teachers typically had the opportunity to teach to their peers for about 13 hours and teach in actual K-12 settings for about 15 hours. Overall, the students averaged nearly 28 hours of teaching opportunities prior to student teaching.

Field experiences are not limited exclusively to student teaching (Ayers & Housner, 2008); they can happen any time throughout the PETE program. Observations and field experiences in which the preservice teacher has the opportunity to observe and participate in authentic K-12 physical education experiences are crucial to their preparation. Professionals teaching teacher preparation courses and in-service teachers believe that it is important to integrate the preservice teachers into the K-12 system and allow them early

teaching experiences (O'Sullivan, 1990). Collier and Hebert (2004) stated that pre-professional programs must specifically analyze the depth and breadth of opportunities afforded students to work directly with children in well-supervised practicum settings. "The opportunity to apply theory to practice and receive appropriate feedback from faculty, cooperating teachers, peers, and children allows for individual growth and ultimately, growth within the profession" (p.111). It is important to note that over the last 20 years, there has been an increase in the amount of time preservice teachers have spent in K-12 physical education classes (Ayers & Housner, 2008; Nixon & Vendien, 1985; Tannehill & Zakrajsek, 1988). However, Dodds (1989) believed that simply placing the student into the K-12 system is not enough and recommended that field experiences should be progressive, increasingly complex, sequential, and well timed.

Assuming that the preservice students are imbedded in their primary pedagogy courses by their third year, it should not be surprising that the findings showed that the third year in the program appears to contain the highest number of observations/ field experiences with slightly more than 31 total hours.

A positive note is that 97% of programs had their preservice students in observations/field experiences at some point during their preservice preparation. It should be noted that half of the programs had their students in a practicum experience in their first year, 86% during the second year, 97% during the third year, and 81% during the final year in the program. In addition, 89% of the preservice students had the opportunity to teach to K-12 students prior to student teaching. These numbers appear to be much higher than those in previous studies; however, if PETE faculty are authentically preparing preservice teachers, every program should include some type of practicum experience during each year of their preservice preparation.

In addition, in-service teachers had the opportunity to share their anecdotal information on preparing tomorrow's physical educators in the Physical Education News (Jeffries, 2008). The following are some of the comments found on the website. "Students need authentic experiences such as: site visits to observe effective teachers, interactions with quality teachers, opportunities to field test lesson plans, opportunities to learn about and design differentiated curriculum based on interactions with actual school age student." "Young college students are sometimes unsure if physical education is for them. If you require these students to help with physical education classes, they will learn quickly if this is for them or not. Have the students participate with young students, help demonstrate, help keep control of the classes, etc."

Even if students start their respective programs with a fairly good idea of the grade level they would like to teach, exposing them to all age levels should increase the chance that the students would consider the possibility of teaching at other age levels as well. Data showed that the number of hours completed at each level of education appeared to be balanced between elementary and high school hours. Middle school field experiences averaged about five hours less than the hours spent at elementary and high school levels.

Student-teaching experiences averaged about 14 weeks and the majority of the institutions placed students at two age levels—elementary and secondary. An important area to note is that over 20 percent of the programs placed their students at each of the three age levels (i.e. elementary, middle school, and high school).

A contemporary approach to student teaching was presented by Wiegand, Bulger, and Mohr (2004). Generally speaking, student teaching is viewed as the culminating experience, but that placement in the curriculum may not afford the PETE student the opportunity to adequately reflect upon the lessons learned during student teaching with their peers and college supervisor. The authors suggested two options for improving the traditional student teaching model. In short, both options would change the order in which student teaching would occur and they would attempt to "bridge the gap" between the student teaching experiences and best practice. The first option would entail adding a capstone class to follow the student teaching experience. The second involved dividing the student teaching experience into two parts. The first part would be designed as a five-week block following the majority of the pedagogy courses. The second part would be designed as a capstone experience following all of the student's coursework.

Harrison and Blakemore (1992) stated that joining and getting involved in the state and national associations helps preservice and in-service teachers become true professionals. Professional development is an important element in keeping in-service teachers current, aware of trends, and involved in leadership roles (Chen, 2006). Professionals are identified by their socializations into membership and their organizations (Morocco & Solomon, 1999). However, research has shown that very few beginning teachers actually attend these professional development opportunities (Harrison & Blakemore, 1992).

Another perspective is that K-12 in-service teachers have become out of touch with the current trends related to physical education research. Regardless of which perspective is right, there does seem to be some disconnect between what K-12 physical educators and college professors believe to be the most effective and achievable curriculum. A positive recent development is the increased collaboration of K-12 teachers and teacher preparation professors (Metzler & Tjeerdsma, 2000; Strand, Anderson, & Reeder, 1996; Van der Mars as cited in Collier & Hebert, 2004). Two possible suggestions to minimize this "disconnection" include university/ college professors continually supervising student teachers and utilizing an advisory board. A survey question relating to advisory boards showed that only 36% believed that advisory boards were actually important, and only 25% of PETE programs have used an advisory board within the last five years. Though these two suggestions may not completely solve this disconnect, they may help bridge the gap and improve the communication between the two groups.

Summary

The study attempted to describe the content of undergraduate PETE programs based on a general program profile, curricular items, field experiences, and professional involvement/ development. Overall, the goal was to provide an overview of many key elements of PETE programs that would allow readers to compare their program offerings with others in a similar geographic area. Another goal was to encourage institutions to assess, and therefore improve the preparation of future physical education professionals.

Possible areas of further study include surveying and comparing other PETE programs internationally. One could also research one or more specific areas of study (e.g., student teaching and/or capstone experiences or pedagogical content knowledge for specific courses) and investigate how institutions relay this information to preservice teachers.

References

Ayers, S. A. & Housner, L. D. (2008). A descriptive analysis of undergraduate PETE programs. *Journal of Teaching Physical Education*, 27, 51-67.

Bahneman, C. P. (1996). An analysis of the undergraduate physical education teacher certification requirements within institutions which offer a doctoral degree in physical education. *The Physical Educator, 54*, 198-205.

Bulger, S. M., Housner, L. D., & Lee, A. M. (2008). Curriculum alignment: Aview from physical education teacher education. *Journal of Physical Education, Recreation and Dance, 79*(7), 44-49.

Collier, D. & Hebert, F. (2004). Undergraduate physical education teacher preparation: What practitioners tell us. *The Physical Educator, 61*, 102-112.

Dodds, P. (1989). Trainees, field experiences, and socialization into teaching. In T. J. Templin & P. G. Schempp (Eds.), *Socialization into physical education: Learning to teach* (pp.81-104). Indianapolis: Benchmark Press, Inc.

Dunkin, M. J., & Biddle, B. J. (1974). *The study of teaching*, New York: Holt, Rinehart & Winston.

Harrison, J.M., & Blakemore, C.L. (1992). *Instructional strategies for secondary school physical education* (3rd ed.). Dubuque, IA: Brown.

Hill, G., & Brodin, K. L. (2004). Physical education teachers' perceptions of the adequacy of university coursework in preparation for teaching. *The Physical Educator, 61*, 75-87.

Jeffries, S. (2008, November). *Physical Education News*. Retrieved November 18, 2008, from www.PElinks4u.org

Le Masurier, G., & Corbin, C. (2006). Top 10 reasons for quality physical education. *Journal of Physical Education, Recreation and Dance, 77*(6), 44-53.

Liang, G., Walls, R. T., Hicks, V. L., Clayton, L. B., & Yang, L. (2006). Will tomorrow's physical educators be prepared to teach in the digital age? *Contemporary Issues in Technology and Teacher Education, 6*(1), 143-156.

Metzler, M., W. & Freedman, M., S. (1985). Here's looking at you, PETE: A profile of physical education teacher education faculty. *Journal of Teaching in Physical Education, 4*, 123-133.

Metzler, M. & Tjeerdsma, B. (1998). PETE programs assessment within a development, research, and improvement framework. *Journal of Teaching in Physical Education, 17*, 468-492.

Metzler, M., & Tjeerdsma, B. (2000). *Assessment of physical education teacher education programs*. Reston, VA: NASPE.

Morocco, C. C., & Solomon, M. Z. (1999). Revitalizing professional development. In M.Z. Solomon (Ed.), *The diagnostic teacher: Constructing new approaches to professional development* (pp. 247-267). New York: Teachers College Press.

Napper-Owen, G., Marston, R., Van Volkinburg, P., Afeman, H., & Brewer, J. (2008). What constitutes a highly qualified physical education teacher. *Journal of Physical Education Recreation and Dance, 79*(8), 26-30.

National Association for Sport & Physical Education. (2004a). *Moving into the future: National standards for physical education: A guide to content and assessment*. (2nd ed.). Reston, VA: Author.

National Association for Sport & Physical Education. (2004b). *Positive physical education pledge*. Retrieved November 3, 2008, from http://www.aahperd.org/naspe/template.cfm?template=principalContest/main.html

National Association for Sport & Physical Education. (2007a). *What constitutes a highly qualified physical education teacher?* Retrieved November 3, 2008, from http://www.aahperd.org/naspe/pdf_files/HiQualified.pdf

National Association for Sport & Physical Education. (2007b) *Physical education teacher evaluation tool*. Retrieved November 3, 2008, from http://www.aahperd.org/naspe/pdf_files/pos_papers/TeacherEvaluationTool.pdf

National Association for Sport & Physical Education. (2008). *National standards for beginning physical education teachers*. Reston, VA: Author.

Nixon, J. E., & Vendien, C. L. (1985). Early field experiences: First encounters with field experiences with reality. In C.L. Vendien & J.E. Nixon (Eds.), *Physical education teacher education guidelines for sport pedagogy*, (pp.175-186). New York: MacMillian Publishing Company.

O'Sullivan, M. (1990). Physical education teacher education in the United States. *Journal of Physical Education, Recreation & Dance, 61*(2), 41-45.

Ross, S. (1987). Humanizing the undergraduate physical education curriculum. *Journal of Teaching in Physical Education, 7*, 46-60.

Siedentop, D. (1994). Curriculum innovation: Towards the 21st century. *The Journal of ICHPER•SD, 30*(2), 11-14.

SPSS, Inc. (2008). Statistical Package for the Social Sciences (Version 17.0) [Computer software]. Chicago, IL; Author.

Strand, B., Anderson, C., & Reeder, S. (1996). University/school collaborative research: Heart rate intensity in middle school physical education. *California Association for Health, Physical Education, Recreation and Dance Journal Times, 58*(8), 13-15, 34.

Strand, B. N. (1992). A descriptive profile of teacher preparation practices in physical education teacher education. *The Physical Educator, 49*, 104-112.

Tannehill, D. & Zakrajsek, D. (1998). What is happening in supervision of student teachers in secondary physical education. *The Journal of Teaching Physical Education, 4*(1), 1-12.

Tinning, R. (2002). Engaging Siedentopian perspectives on content knowledge of physical education. *Journal of Teaching in Physical Education, 21*, 378-391.

Verner, M. (1991). Anatomy and physiology offerings in physical education professional preparation programs. *Physical Educator, 48*(2), 80.

Wiegand, R. L., Bulger, S. M., & Mohr, D. J. (2004). Curricular issues in physical education teacher education. *Journal of Physical Education Recreation and Dance, 75*(8), 47-55.

The University of Texas at Austin. Retrieved January 12, 2009 from http://www.utexas.edu/world/univ/ ■