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Do High School Students Know What Practices are Appropriate in Physical Education

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The NASPE Appropriate Practices for High School Physical Education document was published for the purpose of "addressing key aspects of instructional strategies and practices that are essential to delivery of quality physical education to adolescents and young adults" (pg.3). The purpose of this study was to investigate high school student's knowledge of appropriate practices in high school physical education. Three hundred and sixty-nine high school students were surveyed regarding appropriate practices in high school physical education. It was found that picking teams in class was appropriate, that dressing out for class and attendance is a part of their grade in class and that out of class assignments is inappropriate for student to have in class.

Introduction

The Centers for Disease Control and Prevention (2001, p.7) has described the purpose of high school physical education as "increasing student participation in moderate to vigorous physical activity and to help high school students gain the knowledge, attitudes, and skills they need to engage in lifelong physical activity." This definition captures what physical educators hope students will take from their classes as they graduate from high school. It is however, hard to defend this definition in that high school students' attendance in physical education class has declined over time. Lowry, Breuer, Lee, Epping, Falton, & Eaton (2005) report that from 1991 to 2003, the percentage of students attending daily high school physical education class declined from 41.6% to 28.4%.

The literature reveals some of the reasons why student attendance in physical education has dwindled. Scantling, Strand, Lackey, & McAlesesse (1995) investigated why high school students avoided taking a physical education class. It was found that many students did not have the time in a school day to take a physical education class, instead they selected classes that prepared them to enter college. The researchers noted that these students did have a desire to take a physical education class, but simply could not find the time in their schedules to take one. Others factors that influenced
students from not taking a physical education class were: 1) doing the same activities over and over every year, 2) too much emphasis of winning and losing, 3) dressing out for class, and 4) athletes being given preferential treatment. All of these factors can be easily controlled by a teacher.

Another reason why student attendance/enrollment in physical education class has dwindled is because of the lack of relevance or significant meaning of physical education in their lives. Cothran and Ennis (1999) studied how students’ experiences in urban physical education classes affected school membership, thus affecting their concept of relevance of the topic of physical education in the students’ mind. One factor limiting the relevance of physical education was the size of the classes. Classes were large in student numbers which did not allow students the opportunity to interact with other students. Because of the size of the classes, student use of equipment was limited. Students had to wait in line or had to use equipment that was broken or inadequate for the activity. As a result of large classes, students did not have friends in their physical education classes and were not motivated to participate as much with students they did not know.

When analyzing the literature for reasons why high school physical education lacks relevance for students, the reoccurring subject of the curriculum was common. Ennis (1995) investigated how the curriculum in an urban high school physical education program influenced student’s noncompliant behavior during class time. It was observed that if students did not want to participate in a given activity they would roam around the gym, sit on the bleachers during class time, slowly retrieve a ball, walk around the track slowly, refuse to listen to the teacher explain a drill or game, and not dress for class. Ennis concluded that the teachers needed to make changes in the curriculum that were more relevant to the students. For example, the teachers should get input from students, as suggested by Graham (1995), thus giving them a sense of ownership for their classes.

As mentioned earlier, attendance/enrollment in high school physical education has declined over the years. Yet, the literature has shed light on successful high school physical education programs and what they do. One example was reported by Ennis, Solmon, Satina, Lottis, Mensch, & McCauley (1999) in which they studied the effects of the Sport for Peace curriculum in an urban high school setting. The Sport for Peace curriculum was derived from the sport education model (Siedentop, 1994) where team affiliation, student ownership of a team, game scheduling, and sport roles are emphasized. The researchers added the components of conflict negotiation (Deutsch, 1991; Girard & Koch, 1996) and care and concern for others (Noddings, 1992) to the curriculum. The results of the study suggested that the Sport for Peace curriculum helped students feel responsibility for their learning, trust and respect classmates, and have a sense of family. Both high and low skilled students felt successful and responded in a positive manner, creating a class environment more conducive to participation and engagement in the activity.

In general, high school physical education has been portrayed in a negative light: mainly because of what is happening or not happening in the gymnasium or on the field. Student attitudes as indicated by declining enrollment towards their high school physical education experience have not been enthusiastic. To a certain point, physical educators are playing a part in causing these students to be unsuccessful in regards to their participation in physical activity, thus affecting their health throughout their lives.

One tool teachers can use in guiding their planning and implementation of lessons and activities is the document published by NASPE titled Appropriate Practices for High School Physical Education (NASPE, 2004). The purpose of the document is to “address key aspects of instructional strategies and practices that are essential to delivery of quality physical education to adolescents and young adults” (p. 3). Thus, the purpose of using these documents is
to aid teachers in exposing students to appropriate practices in physical education, enabling students to be successful in activity throughout their lives. However, a literature review failed to find a study that investigated appropriate practices in high school physical education; thus, creating an opportunity to investigate if high school students know and understand appropriate practices as they participate in their physical education experience. For this reason, the purpose of this study was to investigate high school student's knowledge of appropriate practices in high school physical education.

Methods

Participants
Three hundred and sixty-nine high school students (185 males & 184 females) from four high schools in the upper Midwest participated in this study. The university Institutional Review Board granted approval to conduct this study, and parental consent was obtained as well as consent from the high school principals and physical education teachers. All of the high school students were verbally informed of the purpose of the study and were made familiar with the survey. Students were assured that nonparticipation or withdrawal from this study did not affect their grade in their physical education class.

Instrumentation
A review of literature failed to identify an instrument related to appropriate practices in high school physical education. As such, the researchers constructed a survey from statements in the high school appropriate practices document published by NASPE (2004). As a first step in the construction of the instrument, items in the appropriate practices document were placed into sentence form. Next, statements were altered (to prevent the statement from being too leading) as deemed necessary without changing the intent. The survey statements were organized in question form with an A column for appropriate and a D column for inappropriate for the students to mark.

For the next step, four highly qualified and experienced teachers were identified as survey reviewers. To establish credibility, reviewers were asked to identify each statement as either A (appropriate) or D (inappropriate). Of the answers from the survey, the reviewers correctly identified the right answer 98% of the time.

The survey focuses on four general areas of interest that apply to high school students: 1) Curriculum, 2) Learning Environment, 3) Instructional Strategies, and 4) Assessment. Five statements refer to curriculum, four to the learning environment, five to instructional strategies, and four to assessment, for a total of 18 statements on the survey.

Procedures
For this study the researchers contacted physical education teachers at four separate high schools. A total of seven physical education teachers (4 male, 3 female) averaging 15 year of teaching experience, agreed to have their students participate in the study. The researchers visited each high school and explained the study and handed out consent forms. Within a week the researchers returned and collected the consent forms and administered the survey. After the surveys were collected they were taken to the Industrial Agriculture and Communications Center for statistical analysis. Results for this paper are reported as percentages.

Results
As shown in Table 1, data indicate that for 14 of the 18 statements the majority of students in this sample selected correctly. Conversely, for four of the statements a majority of students selected the incorrect responses. Female students had a higher percentage of identifying appropriate practices in high school physical education than did their male counterparts for 14 statements. The percentage of male and female subjects selecting the correct answer was the same for two statements.
<table>
<thead>
<tr>
<th>Question</th>
<th>Total Students (369)</th>
<th>Male (185)</th>
<th>Female (184)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td><strong>Curriculum</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The curriculum should include a balance of motor development and motor learning activities, such as individual sports, aquatics, dance and outdoor activities.</td>
<td>87%</td>
<td>13%</td>
<td>78%</td>
</tr>
<tr>
<td>2. The curriculum should provide a variety of activities from non-competitive to highly competitive activities.</td>
<td>86%</td>
<td>14%</td>
<td>80%</td>
</tr>
<tr>
<td>3. Learning activities should be selected by the teachers' personal preference. Pre-assessment of students is not necessary.</td>
<td>20%</td>
<td>80%</td>
<td>26%</td>
</tr>
<tr>
<td>4. Activities in physical education class should have real life or game like application.</td>
<td>79%</td>
<td>21%</td>
<td>76%</td>
</tr>
<tr>
<td>5. The fitness component of high school physical education should consist of mass exercises following a designated leader.</td>
<td>43%</td>
<td>57%</td>
<td>39%</td>
</tr>
<tr>
<td><strong>Learning Environment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. The teacher should use verbal and non verbal feedback to have a positive classroom environment.</td>
<td>91%</td>
<td>9%</td>
<td>90%</td>
</tr>
<tr>
<td>7. One method for teachers to implement social interaction among students is to let students randomly select teams for activities.</td>
<td>66%</td>
<td>34%</td>
<td>66%</td>
</tr>
<tr>
<td>8. When forming teams or groups they should be done by gender, social, or ethnic characteristics.</td>
<td>14%</td>
<td>86%</td>
<td>20%</td>
</tr>
<tr>
<td>9. Teachers should select activities for student participation that range from non-competitive to more competitive for the purpose of satisfying the interests of all students.</td>
<td>83%</td>
<td>17%</td>
<td>76%</td>
</tr>
<tr>
<td><strong>Instructional Strategies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. The teacher should control the curriculum with students not being allowed to have input regarding the kinds of activities, or equipment used for practice.</td>
<td>25%</td>
<td>75%</td>
<td>32%</td>
</tr>
<tr>
<td>11. In order to maximize participation the teacher should increase the number of individual trials, and provide students with the proper equipment.</td>
<td>80%</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>12. Teachers should have students warm-up on their own before the class activities begin.</td>
<td>54%</td>
<td>46%</td>
<td>63%</td>
</tr>
<tr>
<td>13. Outside of class assignments are not necessary for high school physical education.</td>
<td>83%</td>
<td>17%</td>
<td>85%</td>
</tr>
</tbody>
</table>
The curriculum data indicate that a majority of the students agree that a balanced curriculum, a variety of activities that are competitive and non-competitive, and that the activities they participate in should have real-life implications are appropriate practices in physical education. Statement 5 on the survey stated that students should participate in mass exercises with a designated class leader. The majority of the students disagreed with the statement, yet it wasn't an overwhelming majority (43% agreed; 57% disagreed). One note to statement 5, for females, 48% indicated that it was appropriate that the class should exercise as a class with the designated class leader, compared to 52% who thought it was inappropriate.

The data from the statements regarding the learning environment suggest that high school students want teachers who can facilitate an environment that will make them feel comfortable during physical education class. There was one statement from the survey in this section of statements that the majority of students incorrectly identified as appropriate. Statement seven, which states that students should be allowed to randomly select other students for team play/games was incorrectly identified as appropriate by 66% of the subjects, while 34% disagreed with the statement. Also, both male and female students answered this statement with identical percentages.

The instructional strategies data suggest that high school students desire input in the curriculum. According to student responses, findings suggest they wanted time to work on and improve their skills for the given activity. And also student responses suggest they would like to be introduced to technology such as pedometers, heart rate monitors and software programs. There was one statement that students identified as appropriate, yet was not. For statement 13, an overwhelming majority, 83% of students, indicated that outside of class assignments or homework, were inappropriate. The data was similar for males and females responses to this question. Eighty-five percent of the males and 82% of females indicated that they think class assignments and homework in physical education are inappropriate.
And finally, the data regarding assessment had some interesting findings. Of the four statements in the section of the survey, students identified two of the statements as appropriate, which are not deemed appropriate. Statement 15 dealt with the teacher giving general feedback regarding a students’ performance in class. From the data 61% of the students identified this statement as appropriate while 39% indicated it was inappropriate. The second question that was answered as appropriate, but was not, was statement 17. The statement stated that students should be graded on attendance, dressing for class, and complies with classroom rules as part of a student’s grade. The data revealed that 86% of students identified the statement as appropriate and 14% disagreed. Interestingly, 90% of the females agreed that this statement described an appropriate practice.

Discussion
The purpose of this study was to investigate high school students’ knowledge of appropriate practices in high school physical education. Findings from this study indicate that high school students do not sense certain practices in which they participate during their physical education classes as appropriate or inappropriate. For this reason, there are a couple of topics that should be brought to light.

First, the results identified some common inappropriate practices that have been occurring in physical education for many years, that students believe are appropriate. For example, the majority of students in this study were of the opinion that it was appropriate to randomly select teams among students. Contrary to this belief, Siedentop (1994) presents five appropriate methods of selecting teams that can help the learning environment. He suggests that: 1) a teacher can select the teams ahead of time, 2) teacher selects a student sport council to help in the select of teams, 3) the teacher selects captains, after which the teacher and captains choose their teams fairly, 4) students select a sports committee, that in turns select teams based on the sports committee knowledge of their peers, and 5) skills test, trials can be used to rank students, that in turn can be used in team selection. Other scholars have made similar suggestions (Rink, 2002 & Darst & Pangrazi, 2002).

The students who participated in this study came from communities considered as “tight” or one in which students know each other very well. In many of these students’ cases, the students have gone through their formal educational experience with their classmates from when they were in kindergarten to high school. Because of this, picking teams amongst each other may not be considered an inappropriate practice.

Another obvious point to be discussed is from statement 17 which states a “student’s grade should be based on attendance, dressing for activity and compliance to classroom rules.” The results from this statement indicate that 86% of the students think this is an appropriate method of receiving a grade in physical education. These results point to the idea that there is a culture or certain mind set, that this is the way a student can earn a passing grade in physical education class. This belief is easy to understand because for many years physical educators have used these areas to grade students. However, because of this practice, the purposes and importance of physical education classes have been questioned by parents and administrators.

Another point of discussion deals with homework and outside of class assignments. The results showed that 83% of the students think that outside of class assignments, or homework, are inappropriate in their physical education experience. This statement again illustrates a culture where this appropriate practice has not been a part of physical education classes. Homework and out of class assignments present a great opportunity for physical educators to be creative in encouraging students to be physically active after their day of school. For example, physical educators can assign students to go on a walk with a family member or to walk the dog and then report on how far they walked, what they saw on their walk, or if they saw friends or neighbors out when they were out walking. During the students’ walk they could be given a pedometer to help with their out of class assignment (Pangrazi, 2007). Additionally, with a concept of fitness course, home and out of class assignments are a vital part of the curriculum Strand, Scantling, & Johnson, (1997).
One last point of discussion is that 61% of high school students think general feedback regarding their performance of skills during class is appropriate. Darst & Pangrazi (2002) have stated that feedback should be positive in nature and specific, for the purpose of informing the student what they did successfully, or what needs to be done to successfully execute the skill. In visiting with high school physical educators, they are of the opinion that students at this age do not need or want to receive specific feedback regarding their performance of skills (K. Ringdahl, personal communication, February 18, 2004). It does appear that 39% of high school students believe it is appropriate for their teachers to observe and give specific feedback. This is one area that high school physical educators may have overlooked and can be capitalized on when teaching students.

The findings from this study add to the literature and provide a good guide for high school physical educators. It is obvious that high school students still have certain perceptions regarding physical education that need to be corrected. By instructing students on what is appropriate and inappropriate in physical education, there is a greater likelihood that student's experiences will be more successful. Hopefully, more successful experiences will result in positive feelings about activity and lead to a greater chance for students to be active throughout their lives and receive the benefits of physical activity.

Implications for High School Physical Educators

From this study, we learn that high school students think it is appropriate to randomly pick students for team activities in front of their peers; that homework is not a part of a physical education class; and that if students shows up for class, and dress in attire appropriate for physical education, they will get a passing grade. It is relatively easy for high school physical educators to change what high school students think physical education class is suppose to be.

First, teachers must model appropriate behaviors and procedures. For example, when selecting teams teachers can designate captains and in a private setting, facilitate with the captains the selection of teams. During the process teachers can teach students why it is inappropriate to pick teams the “old way”.

Second, teachers can explain to students why certain practices are inappropriate. For example, instructing students that their grade does not hinge on just attending class and dressing out for activity, but rather that their grade will be based on the work they perform in class.

The reason the appropriate practices document was published was to “address key aspects of instructional strategies and practices that are essential to delivery of quality physical education to adolescents and young adults” (p. 3). High school physical educators have a huge opportunity to affect student attitudes in a positive direction. When students mature they will assume the role of voter, parent, school board member, and politician, and will make important decisions concerning physical education in the schools (Acinena, 1991). For this reason, high school physical educators need to think seriously about the importance of their classes being guided by appropriate practices.

References


