

Enhancing Motivation in Physical Education

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Promoting intrinsic motivation, enhancing perceived physical competence, and creating a mastery-oriented environment will increase students' enjoyment of physical activity.

Increasing physical activity among all individuals continues to be a national priority due to the positive physical and mental health benefits associated with maintaining an active lifestyle (U.S. Department of Health and Human Services, 1996). In spite of the interest and concern to increase physical activity for all Americans, daily physical education among high school students dropped from 42 percent in 1991 to 25 percent in 1995, and remained stable at that level until 2003 (Grunbaum et al., 2004). Of greater concern is that, when given the opportunity to participate in physical education as an elective course, fewer high school students are choosing to participate (Kolbe, Kann, & Brener, 2001). Experts stress that lifestyle physical-activity habits need to be developed early in life (Sallis & McKenzie, 1991) and that early, positive, physical activity experiences may increase the likelihood of maintaining a physically active lifestyle (Weiss, 2000). Thus, quality physical education programs and effective physical educators play a vital role in providing youngsters with early positive experiences of physical activity. Allied to this positive environment is the need to motivate individuals to initiate and maintain a physically active lifestyle.

A major objective of a quality physical education program is to educate all children and empower them with the skills necessary to enjoy the benefits of regular physical activity for the rest of their lives (Pangrazi, 2001). Physical educators can meet this goal by providing youngsters a physical-activity environment that is structured to increase their motivation to become, and remain, physically active. Several recent reviews have outlined the use of different theoretical frameworks that may prove effective in creating motivationally enhancing physical-activity environments (Kilpatrick, Hebert, & Jacobsen, 2002; Mandigo & Holt, 2000; Valentini, Rudisill, & Goodway, 1999).

The goal here is not to replicate the information from these previous reviews, but to integrate several motivational theories and extend their recommendations by including specific strategies that can be used to enhance motivation in a quality physical education program. Promoting intrinsic motivation, enhancing perceived physical competence, and creating a mastery-oriented physical-activity environment are three key areas that have been identified as important components of physical activity motivation, and

Table 1. Strategies to Increase Intrinsic Motivation

Strategies	Practical Examples
Allow students the freedom to make choices.	Engage students in the decision-making process whenever possible and provide a choice of activities (i.e., at least 2) to select from.
Modify skills and activities and allow students to modify activities.	Modify the space, equipment, or rules to help students find success. Also, allow students the creativity and flexibility to modify activities to suit their individual needs.
Provide optimal challenges for <i>every</i> student.	Match the activities to the students and have various difficulties of a task for youngsters to choose from. For instance, in a juggling lesson, provide both scarves <i>and</i> balls of various shapes for youngsters to choose from.

they will be used as a framework for the current discussion. Due to the developmental nature of children, the following guidelines are limited to strategies that can be incorporated into elementary and middle school physical education classes. It is hoped that these strategies will increase the odds that even the least motivated student will be “turned on” to physical activity and be more likely to engage in physical activity in the future.

Promoting Intrinsic Motivation

One of the primary reasons youngsters participate in physical activity and sports is for the sheer enjoyment they experience while moving and interacting with their peers. Youngsters have an innate desire to be active, and it is the responsibility of the physical education specialist to fuel these desires. The concept of promoting intrinsic motivation—the motivation to engage in an activity for sheer pleasure and satisfaction—has often been examined in the context of physical education (Biddle, 2001; Kilpatrick et al., 2002). Experts agree that intrinsically motivated youngsters are more likely to perceive their physical activity experiences as positive, thus leading them closer to a physically active lifestyle (Weiss, 2000). The following recommendations can be used to enhance children’s intrinsic motivation and thereby keep them engaged in physical activity.

To increase intrinsic motivation it is important to allow students the freedom to make choices during physical education. One of the fundamental aspects of intrinsic motivation is the perception of choice or control. Students who feel that they have more than one activity to choose from are more likely to be motivated to perform the activity than if they are required to participate in a single activity. Providing a choice of several tasks is also likely to be more developmentally appropriate, since some youngsters have more difficulty than others performing similar tasks. There are numerous opportunities for promoting student choice in physical education. For example, allowing students to choose between either a drive or a pass shot in a hockey unit achieves the desired outcome of having them practice striking skills while providing them freedom in which striking

skill to practice (Pangrazi, 2001).

Another way to promote choice or perceived control among students is to let them modify activities. Providing a choice of slower moving or larger balls in a handball unit or a lowered basket in a basketball unit are ways to increase a youngster’s intrinsic motivation to participate. The most important point is that the successful outcome of a skill performance or successful completion of a unit in a desired time frame is not as important as creating an environment where students are encouraged and motivated to experience different forms of movement. Table 1 summarizes several strategies to enhance intrinsic motivation.

Enhancing Perceived Physical Competence

Research investigating why youngsters participate in physical activities indicates that they primarily participate for inherent reasons such as enjoyment and the pleasure and sense of accomplishment that comes from learning and improving skills (Weiss & Ferrer-Caja, 2002). The willingness to try new experiences and continue to participate in physical activity often depends on a youngster’s perception of her or his ability level, or perceived competence. Students who are not given an opportunity to learn, sufficiently practice, and develop perceived competence in performing physical skills will likely develop negative feelings toward physical activity and be less likely to engage in physical activity later in life.

Several key strategies can be used to allow youngsters the opportunity to develop perceived physical competence in a quality physical education program. First and foremost, youngsters must be given enough time to practice skills with an emphasis on quality of movement (i.e., practicing correctly) rather than focusing on the number of practice trials that they should complete in a given amount of time. Too often, directions such as, “Okay, you have one minute to hit the target 25 times” are given during physical education class. This practice often encourages children to sacrifice movement quality in an attempt to achieve the desired number of trials in the allotted time. A more effective way to design practice sessions is to allow youngsters a specific amount of time to practice the skills without giving them a specific

Table 2. Strategies to Increase Perceived Physical Competence

Strategies	Practical Examples
Allow sufficient practice time.	Allow a specific amount of time to practice the skills without giving students a specific number that they should complete. Also, minimize off-task behavior by varying or changing activities.
Provide positive instructional feedback.	Deliver specific and meaningful feedback for students and make it easier for them to accept challenges and risk failure or making errors. Using meaningful feedback statements, such as "I am impressed with the way you bent your arms during catching," will help to improve motivation.
Emphasize personal improvement.	Help students establish a "baseline" value for activities or fitness and encourage them to set personal goals. For example, have students count how many times they can perform a chest pass or a bounce pass against a wall. Then, have them repeat the activity to see if they can match their previous score.
Move students into groups quickly.	Arrange students into groups and avoid allowing them to choose teams by peer comparison. Have students move randomly throughout an area and, when a whistle is blown a certain number of times, have students form groups according to the number of whistles with those closest to them.
Ask student permission for demonstrations.	Identify a student who is correctly performing the skill and ask whether that student would be willing to demonstrate the skill to others, rather than surprising the student by asking for a demonstration in front of the class. This will induce a lot less stress and will help the student to develop greater perceptions of physical competence.

number that they should complete. In addition, the length of these practice sessions should be long enough so children have the opportunity to become proficient at the skill but short enough to maintain concentration and enthusiasm toward the tasks being practiced. In order to do this, teachers must consciously monitor the classes and look for indicators such as off-task behavior or frustration, suggesting it is an appropriate time to try a new activity.

Youngsters should be instructed to focus on proper technique and be allowed to experiment when learning a skill. Emphasizing the outcome of a skill, or product (e.g., successfully making a free-throw), decreases a student's willingness to take risks or perform the skill in the future. For example, a student who uses proper technique when shooting a basketball but fails to make the shot might believe that she performed the skill incorrectly even though the technical points of the shot were performed correctly. By providing students with feedback (e.g., "Nice Barbara, you kept your elbow in and really followed through. Keep it up, your shot is looking great"), the teacher places the focus on the process rather than the outcome. Helping youngsters to focus on the process of learning a skill and providing feedback to them based on the process of their skill performance will likely increase their motivation to continue practicing the skills.

Younger students often believe that they are competent at everything. As they become older (third or fourth grade), they start to realize that some students are better in some

areas than others and begin to judge their own competence in relation to others (Weiss & Ferrer-Caja, 2002). Isolating individual students or groups of students often places their ability at center stage and places them in a situation where they perceive that others are judging their ability. There are several strategies teachers can employ to avoid these situations. One way is to avoid asking a student or group of students to demonstrate a task or skill without asking them *beforehand* whether they would feel comfortable demonstrating to the rest of the class. Another strategy is to allow students to practice skills in scattered formation rather than in a circle. When practicing skills in a circle, young students often have the perception that everyone is watching them, once again creating an uncomfortable situation for the youngster. Similarly, having students wait in a line for their turn to participate creates an audience-type situation where students may feel that their peers are judging them. Even if these students receive positive feedback from the teacher, an unsuccessful performance in front of their peers is likely to be an embarrassing experience and may have a detrimental impact on their perceived physical competence. See table 2 for strategies that enhance perceived physical competence for youngsters.

Creating a Mastery-Oriented Environment

It is becoming increasingly clear that the way the physical activity environment is structured, often referred to as the



Whether in a group swim, a parachute activity, or any other game or event, increasing intrinsic motivation, enhancing perceptions of physical competence, and providing a mastery-oriented environment will motivate students to pursue physical activity in class and throughout life.

motivational climate (Ames, 1992), has important implications for children's perceptions of competence and success in physical education (Duda & Treasure, 2001). Experts have identified salient features of the physical education environment that can be manipulated to enhance the motivation of children. The acronym TARGET (Epstein, 1988) has been suggested as a possible way to create a climate that fosters motivation among children in physical education (Todorovich, 2001; Valentini et al., 1999). The acronym stands for task, authority, recognition, grouping, evaluation, and time dimensions. These dimensions can be used effectively by providing a variety of tasks and optimal challenges, choice of activities and shared decision-making, recognition of effort and self-improvement, partner and small-group activities as well as the way groups are formed, evaluation criteria based on self-referenced standards, and an adequate pace of instruction and sufficient time for children to learn and practice movement skills (Weiss, 2000).

In this TARGET model, *task* refers to designing the learning activities (e.g., stations, skill practice, exercises) in a manner that provides students with variety, control, and appropriate challenge. *Authority* is represented by the extent to which the teacher allows the student to be involved in decision making. The student should be afforded the opportunity to make choices during the lesson. *Recognition*, as a means of fostering motivation, is typically provided in private. This is not to say students are never given positive verbal feedback publicly; however, when possible, recognition for accomplishment should be done privately, particularly with older students. To enhance motivation, *grouping* of children should be dynamic, with students changing groups often. Educators should also be careful to create heterogeneous groups, rather than grouping students by gender or skill level. In terms of the *evaluation* dimension, self-referenced evaluation is more likely to motivate students. Conversely, evaluation based on social comparisons and normative standards can be detrimental to

the motivation of students. Lastly, the *time* dimension refers to the pace of instruction during a lesson. Students should be provided sufficient time to repeat and refine skills during a lesson, thereby affording the opportunity to develop positive perceptions of physical competence.

The extent and manner in which each dimension is implemented will vary depending on the age of students. As students progress through a physical education program, it is important that the strategies used to motivate them change as the students change. For example, in elementary school, physical education students may choose one activity from several related activities provided by the teacher. Or students may be allowed to choose the type of ball they use when catching with a partner. At the middle school or high school level, while students may still be allowed to choose specific activities during a lesson, even more of the decision-making responsibility is given to them. One strategy for doing this is to provide students with a list of three or four units (e.g. volleyball, gymnastics, aerobics) and allow them to choose one to participate in for the two-week unit. Condon and Collier (2002) reported that students find such an approach appealing. Table 3 offers general strategies for using TARGET to develop a mastery-oriented environment and gives specific examples of "teacher talk" (Prusak, Vincent, & Pangrazi, 2005) to demonstrate how this model can be used in to enhance physical activity motivation in a quality physical education program or lesson.

Conclusion

A goal for all physical education specialists is to increase youngsters' motivation to engage in, and enjoy, regular physical activity (Butler & Anderson, 2002). Various motivational theories have been presented to describe and account for youngster's motivation in achievement-related areas such as participation in physical activity. It is important to identify effective strategies that can be incorporated into a

Table 3. Using TARGET to Create a Mastery-Oriented Environment

Dimensions	Strategies	Examples
Task	<ul style="list-style-type: none"> • Provide several activities of various levels of difficulty. • Modify skills and activities to make them developmentally appropriate. 	"First grade, this time try to catch the bean bag with your favorite hand, your other hand, or two hands."
Authority	<ul style="list-style-type: none"> • Let children have some responsibility for their own activity choices. 	"Choose your favorite upper-body exercise and do it while the music is on."
Recognition	<ul style="list-style-type: none"> • Focus recognition on process (not outcome) and on self-improvement. • Give positive feedback and help youngsters to focus on self-improvement and create an environment that deemphasizes peer comparisons of performance. 	Slightly louder than a whisper: "Wow Dominy, you are working hard today. I can tell because you are stepping with the other foot. Way to go!"
Grouping	<ul style="list-style-type: none"> • Form groups quickly using a "toe to toe" technique or another strategy and discourage grouping based on peer comparison. • Encourage students to find new partners frequently as a way to enhance the social aspect of the physical environment. 	"Groups of four seated. Remember, we have a PE rule that there must be one girl and one boy in each group. You'll be working with this group for a few minutes and then changing. Thanks for doing that quickly!"
Evaluation	<ul style="list-style-type: none"> • Involve students in self-evaluation that focuses on self-improvement. • Engage students in the evaluation process and make sure the evaluation of each youngster is private, specific, and meaningful. 	"Awesome, that was a great pass. I like how you are moving your feet and making a table. I see that you are remembering those cues. Good work!"
Timing	<ul style="list-style-type: none"> • Maximize the time allotted for learning and practicing skills, and do not introduce competitive play too early. • Help youngsters establish time outside of class for practicing physical skills or incorporating physical activity. • Make sure to individualize instruction and practice sessions to ensure that all students have enough time to practice and are highly motivated to do so! 	"Keep working on fielding those grounders. Hands out, and alligator the ball. We are getting lots of repetitions, but see if you can get your brother or sister to roll you some tonight and practice even more."

Adapted from Ames, 1992

physical education class in order to ensure that all learners enjoy movement and increase their likelihood of engaging in lifelong physical activity. Using the strategies outlined above, physical educators can play a significant role in shaping the class environment to promote intrinsic motivation, enhance children's perceptions of competence, and increase youngsters' enjoyment of movement and exploration in physical activity. Increasing such perceptions and emotions has been identified as a possible key to solving the mystery of motivating youngsters in physical activity (Weiss, 2000).

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