

Rethinking Middle School Physical Education: Combining Lifetime Leisure Activities and Sport Education to Encourage Physical Activity

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Abstract

Physical education represents an area of the middle school curriculum that has the potential to impact adolescents' developing knowledge, attitudes, beliefs, and behaviors in positive and meaningful ways that may endure across the lifespan. Despite the well-documented benefits of engaging in regular physical activity (e.g., American Heart Association, 1996; USDHHS, 1996), it appears that many physical education programs are not adequately promoting physical activity and health-related fitness among young people. The authors suggest that specific solutions to this problem for middle school physical education require a shift in thinking about what is typically taught (content) and how that content is typically taught (instructional methods) during students' adolescent years. The purpose of this article is to describe a double faceted approach to rethinking middle school physical education, one that involves changes to the content and instructional methods. This approach has the potential to enhance the number of individuals participating in regular physical activity during the adolescent years and throughout adulthood.

The middle school years are recognized as an important time in the development of adolescents' knowledge, attitudes, beliefs, and behaviors (Malina, 1996; Rowland, 1999; Sallis & Patrick, 1994). This developmental period impacts adolescents far beyond the middle school years into adulthood. In light of this, few would argue that

physical education represents an area of the middle school curriculum that has the potential to impact adolescents' developing knowledge, attitudes, beliefs, and behaviors in positive and meaningful ways that may endure across the lifespan.

The mission of middle school physical education, or physical education at any level, is to assist learners to become physically educated persons (National Association for Sport and Physical Education [NASPE], 1995). In order to accomplish this lofty goal physical education teachers should design and implement their programs in light of the six NASPE content standards (NASPE, 2004). Central to this over-arching mission is the physical educator's responsibility to provide children with developmentally appropriate opportunities that foster the knowledge, skills, and dispositions necessary for engaging in regular physical activity (Darst, 2001). In light of this part of the physical educator's mission, and a lack of evidence to suggest that adolescents, in general, are exhibiting physically active lifestyles (e.g., McKenzie, 1999; USDHHS, 1996) this article focuses specifically on assisting physical education teachers to facilitate student obtainment of NASPE content standard three: A physically educated person participates regularly in physical activity (NASPE, 2004).

Despite the well-documented benefits of engaging in regular physical activity (e.g., American Heart Association, 1996), it appears that many physical education programs are not

adequately promoting physical activity and health-related fitness among young people (Bulger, Mohr, Carson, & Wiegand, 2001). Accordingly, guidelines for activity promotion among young people and national health goals have been established (CDC, 1997; USPHS, 2000). Questions remain, however, as to how physical education teachers can best alter their programs and implement such guidelines to meet NASPE content standard three (NASPE, 2004) and achieve goals such as those outlined in Healthy People 2010 (USPHS, 2000).

Answers to these and many other similar questions are not altogether clear or simple. However, some solutions have been offered to promote physical activity, calling for the implementation of new and innovative strategies that include promoting physical activity early in childhood, instructing about physical activity within and beyond the physical education class, garnering social support from friends, family, and significant others (Wright, Patterson, & Cardinal, 2000) and creating an environment that is positive and success oriented, accounting for student choice in the curriculum, and advocating physical activity through multi-media (Darst, 2001). In addition, specific solutions for middle school physical education require a shift in thinking about what is typically taught (content) and how that content is typically taught (instructional methods) during the adolescent years.

Due to the onset of physical inactivity during adolescence and the increasing trend of sedentary living during adulthood, it appears that physical education's role is more important than ever in meeting important public health goals for the future. However, to meet our potential as a profession, perhaps a change in the type of activities we offer, as well as the way in which we instruct these activities is prudent. The purpose of this article is to describe a double faceted approach to rethinking middle school physical education, one that involves changes to the content and instructional methods. This double faceted approach has the potential to enhance the number of individuals

exhibiting a physically active lifestyle during the adolescent years and throughout adulthood.

Rethinking What We Teach

The typical physical education curriculum in middle school is comprised primarily of team-oriented sport activities such as basketball, soccer, and flag football (Ennis, 1996; Locke, 1992). Many reasons exist to explain why this curricular approach remains a popular choice in middle school physical education. For example, American culture holds in high regard such sport activities and many middle school-aged children enjoy these activities, as well (Hastie & Carlson, 1998; Tannehill & Zakrajsek, 1993). However, an area of concern with this curricular approach is that relatively few people continue to engage in the types of activities that dominate the curricular landscape of middle school physical education during adulthood. The lack of adult participation in these types of activities may be attributed to limited access to resources such as space, facilities, equipment, and transportation, not to mention the relatively large number of skilled and knowledgeable participants required to play these games. The nature of these types of activities, logistical considerations, and the aging process itself may interact, thus limiting many adults' participation in team-oriented sport activities. If this is the case, then we must rethink *what* we are teaching in middle school physical education.

Rethinking How We Teach

A popular instructional methodology used to teach team-oriented sport activities in the middle school and promote lifelong physical activity is known as the multi-activity approach (Siedentop, 1994; Siedentop, Mand, & Taggart, 1986). The multi-activity approach is characterized as an exposure-oriented methodology sometimes referred to as a "smorgasbord" of activities. This approach calls for a compilation of numerous, brief sport activity units offered over the course of an instructional year with little or no variation or progression in activity offerings from year-to-year.

Within the multi-activity unit, students typically receive a few days of skill instruction and decontextualized drill practice, followed by several days of playing full-sided, adult versions of the games being taught. Game play persists until student and/or teacher boredom sets in and prompts the next short unit. Over the course of the middle school years, for example, students might experience eighteen two-week activity units during the sixth grade, while these same units, taught in the same manner are offered again at the seventh and eighth grade levels. Support for the multi-activity approach is derived from the notion that children who are exposed to a wide range of activities, ultimately discover through experimentation, activities that they can perform naturally or with limited practice and instruction (Siedentop, Mand, & Taggart, 1986).

Criticisms of the multi-activity approach include: limited student involvement, superficial exposure to skill and strategy development, and lack of time to develop skill proficiency (e.g., Collier, 1998; Mohr, Townsend, & Bulger, 2001; Siedentop, 1994). In many cases the multi-activity approach is merely roll-out-the ball supervised recreation (Siedentop, Mand, & Taggart, 1986). Given these problems, this approach all too often provides opportunities for many students to “discover” that they are neither naturally gifted nor proficient at most activities. If this is the case, then we must rethink *how* we are teaching in middle school physical education.

Lifetime Leisure Activity Defined

Lifetime leisure activity can be thought of as lifelong, individualized, and health-related (AAHPERD, 2005). Therefore, a lifetime leisure activity is any activity that can be done on a regular basis throughout the lifespan, that a person voluntarily engages in, and that has the potential to maintain or improve an individual's health- and/or skill-related fitness. The intensity requirements of lifetime leisure activities typically range from low to moderate, and on occasion are vigorous. Accordingly, individuals can

continue to participate in these types of activities as they age, without experiencing many of the adverse physical effects commonly associated with non-adherence to rigorous, high intensity exercise. As individuals are experiencing increased life expectancies, it is important for physical education teachers to think about the types of activities that are taught. Many adults tend to seek out activities that fit into their lifestyle and that require minimal space, equipment, facilities and numbers of people.

If adults tend to seek out lifetime leisure activities and these activities comprise the majority of activities for this population, the question arises, “Should we teach middle school students the activities, in a developmentally appropriate manner, that we know people are engaging in across the lifespan?” It has been suggested that physical education teachers need to promote student's health as a key component of their development and that that instruction should be tailored to their interests and individual pace (Ernst, Pangrazi, & Corbin, 1998). Ultimately then, we should teach activities that are popular, interesting, and that can be engaged in across the lifespan. It is important to mention that moving to a curriculum entirely devoid of team-oriented sport activities is not being suggested. Team-oriented sport activities are a valued part of our culture and since some people do maintain fitness through skill-based team-oriented activities, sacrificing these types of activities completely for lifetime leisure activities could be self-defeating (Corbin & Pangrazi, 1998). Therefore, a well-rounded middle school physical education curriculum includes lifetime leisure activities and skill-based team-oriented sport activities, in addition to any other activities that are important to a particular school and the community in which it is situated.

Considerations for Implementation & Instruction

Once a physical educator chooses to augment their curriculum with lifetime leisure activities,

two considerations must be addressed before selecting an activity: reasonableness and developmental readiness. To determine if an activity is reasonable, you should answer the following questions. Is it reasonable within your community and instructional context that you can provide quality instruction in a particular activity? Do you have knowledge and experience in the activity? Do you have adequate space, facilities, equipment, time, and so forth? It is important that teachers instruct the activity within the setting of their own school, when possible. It is difficult and often impractical to coordinate travel and arrange for sound instruction when activities are held in a location other than the school or adjacent areas, although, many lifetime leisure activities will require modifications based on particular teaching contexts. For example, bowling and cross country skiing may take place in the gym, biking on the campus grounds, and camping and orienteering indoors and out are all possible with some creative instructional planning.

Secondly, the students' developmental readiness and the appropriateness of the activity must be taken into account when implementing lifetime leisure activities. Individual student interest, skill, and knowledge levels should be assessed to determine what content to include in your curriculum. To ensure inclusion of all students, the content selected must be adapted, if necessary, to accommodate all individuals, while guarantying a safe and nurturing learning environment. The age, previous experience, and skill and responsibility levels of students will dictate the inclusion of leisure activities in your curriculum.

Many lifetime leisure activities represent non-traditional curricular offerings in middle school physical education programs. Accordingly, such novel activities can result in improved levels of student attention, enthusiasm, and motivation. Pennington and Krouscas (1999) found improved attitude in students who engaged in lifetime leisure activities. Students reported enjoying the change of pace from traditional team-oriented sport activities, being excited about the opportun-

ity to learn different activities, and suggested that they would continue to participate in these types of activities beyond the school day.

Providing alternative activities solely, however, is not enough. Any lifetime leisure activity taught using the previously described multi-activity approach limits the instructional potential of such novel content offerings. Therefore, offering lifetime leisure activities must be augmented with a change in instructional methodology, as well. If you desire for your students to realize the full potential of the lifetime leisure activities, we suggest using the sport education model as an alternative instructional vehicle to the typical multi-activity approach.

Sport Education In Brief

Sport education has been described as "a curriculum and instruction model designed to provide authentic, educationally rich sport experiences for girls and boys in the context of school physical education" (Siedentop, 1998, p. 18). However, the name "sport education" does not imply that sport is the only content appropriate for this curriculum and instructional model. Siedentop (1994) indicates that the model can easily accommodate a variety of activities in addition to typical team-oriented sport activities. In light of its accommodating characteristics, the sport education model has the primary goal of educating students to be competent, literate, and enthusiastic sports [activity] persons (Siedentop, 1994). In order for students to fully realize this important educational goal, it is recommended that the physical education teacher initiate a number of key curricular revisions while applying a combination of alternative instructional strategies not typically used in traditional approaches to physical education teaching.

Sport education contrasts the multi-activity approach in that it requires the physical education teacher to make the following changes: (a) extend the length of the activity unit, (b) use a combination of teaching styles, such as direct instruction, cooperative learning, and peer teaching, (c)

provide authentic opportunities for skill and strategy practice, application, and assessment, and (d) immerse the student in the culture of the activity through increased responsibility. To accomplish the goals of sport education, the teacher must make the aforementioned curricular and instructional changes while accounting for the inclusion of six key features of sport education: seasons, affiliation, formal competition, culminating events, record keeping, and festivity (Siedentop, 1994) (see Table 1).

Advantages of Sport Education

The research on sport education indicates that a number of benefits exist for both physical education students and teachers (e.g., Alexander, Taggart, & Luckman, 1998; Hastie, 1998). For students the reported benefits include: (a) an enhanced personal investment in physical education, (b) improved opportunities for females and lowered skilled students to participate, and (c) increased levels of student achievement. For teachers the benefits involve: (a) increased freedom from direct instruction, (b) more opportunities to focus on the individual needs of students, and (c) a renewed interest in teaching. When used in combination with lifetime leisure activities, the sport education model represents an effective alternative to more traditional approaches to teaching physical activity as part of a healthy lifestyle.

Lifetime Leisure Activity & Sport Education: An Example Season

While it is beyond the scope of this article to describe the process of developing an entire “full scale” sport education season, Mohr, Townsend, and Bulger (2001; 2002) have provided a comprehensive framework for planning sport education seasons with a pedagogical focus, as well as, a detailed description for planning and instructing on a daily basis when using the sport education model. The intent here is to provide an overview of a lifetime leisure activity taught via sport education. To ensure that the integrity of the sport

education model is upheld, the overview is organized around the six key features of the model: seasons, affiliation, formal competition, culminating event, record keeping, and festivity.

We chose to use strength and conditioning as the content for an example lifetime leisure activity season. Strength and conditioning can be considered a lifetime leisure activity because many individuals engage in these types of activities across the lifespan. People strength train and condition their bodies for a variety of reasons such as to enhance levels of health, increase performance, and improve psychological wellbeing. Strength and conditioning activities can be individual in nature, engaged in at moderate levels of intensity, and require minimal equipment.

Seasons

In sport education, a traditional multi-activity strength and conditioning unit is extended from the typical 6-10 lessons to a season comprised of 18-25 lessons. Extending the unit to a season provides students with increased opportunities to become immersed in the content, affording them time to develop the skills, knowledge, and values required to be life-long physical activity participants. A season is divided into three phases: a pre-season, an in-season, and a postseason. The pre-season phase is characterized by pre-assessment and pedagogically focused instruction aimed at developing skill competence and knowledge, literacy, and enthusiasm needed to engage in the particular lifetime leisure activity. Students are provided with multiple opportunities to practice within teams to become competent in developing their own strength and improving upon their current level of conditioning. For example, students may engage in a pre-season fitness assessment used to develop individualized fitness goals and strategies for the remainder of the season. The results may also be used to develop equitable fitness teams. Additionally, the teacher is responsible for delivering most of the instruction during the pre-season. Team competitions are initially

simple and become more complex as the season progresses.

During the in-season phase students are introduced to more complex concepts such as the FITT (Frequency, Intensity, Time, and Type) guidelines and training principles of progressive overload, reversibility, etc. and engage in instructional activities to apply these concepts to develop individualized strength and conditioning training programs. While students during the pre-season are engaged in modified games that specifically focus on the content being taught, the in-season phase provides opportunities for skill and knowledge development and refinement in more challenging conditions. For example, during the in-season students may engage in cognitive competitions that afford them the opportunity to design a training program for the school's faculty, staff, or administration after pre-assessing these individuals. Next, these students may assist in monitoring the person for whom they designed the training program. In addition to providing practice in designing strength and conditioning programs, the results of any in-season learning activities can be used to prepare students for a final post-season event. For the post-season phase, students engage in a final competition and a culminating event, bringing the season to a festive crescendo. During a strength and conditioning season, the culminating event might include requiring students to engage in post-assessments, design and provide a healthy snack bar, and voting for various individual awards.

Affiliation

Although strength and conditioning is individual in nature the social benefits of participation should not be underestimated. Individuals can be placed in groups called conditioning—teams, fitness clubs, or any other creative terms a teacher may develop. In sport education, individual participants are assigned to a team or group early in the season and remain on the same team or group for the duration of the season. By allowing students to remain with the same group through-

out the strength and conditioning season, the teacher is providing opportunities for students to interact, resolve conflict, enjoy other's company, and demonstrate growth as a team. Techniques used to foster camaraderie within groups may include allowing teams to select team names, color, cheer, club nicknames, representing countries, and so forth.

In a strength and conditioning sport education season, students learn about the activity by performing roles in addition to that of the performer. Actually, the successful implementation of a season is contingent upon students engaging in multiple roles. By fulfilling these additional roles, which serve to aid the teacher in managing a season, students are further affiliated because every team is relying on each team member to fulfill their individual roles. For instance, a strength and conditioning team could have a strength-endurance trainer, a strength-power trainer, a flexibility trainer, a cardio-coach, a nutritionist, an equipment technician, a fitness data manager, and any other roles important for managing a strength and conditioning season. These roles augment the implementation of the activity, give the students a heightened sense of responsibility, and offer more authentic opportunities to learn about strength and conditioning from multiple perspectives.

Formal Competition

During the in-season and post-season phases of the strength and conditioning season, a formal schedule of competitions or events is established and made available to the students. Appropriate competitions engage students in activities that help them to become competent, literate, and enthusiastic sports [activity] persons. Typically, competition refers to various states of rivalry. However, competition takes on a broader meaning in sport education. In addition to rivalry, competition includes the pursuit of competence and festivity (Siedentop, 1994). This broader conceptualization of competition allows for more diverse types of competitive events to be used.

Therefore, a combination of competition activities could be selected from the psychomotor, cognitive, and affective domains throughout a season. For example, a formal competition may require student teams to determine appropriate lower or upper body lifts for certain muscle groups. In another competition, students may be required to perform the previously identified lifts with proper form while adhering to adequate weight room safety and etiquette protocols. In another competition students are timed during cardiovascular activities and earn points for their team if they meet their individual pre-established cardiovascular goals.

These examples represent only a few ideas, and it is critical to understand that competitions should be based on the achievement of personal training goals and individual improvement, knowledge of strength and conditioning concepts, and appropriate responsible behavior in fitness and physical activity settings (Faigenbaum, 1996). For safety and developmental concerns, competitions should not be based on the maximal amount of weight that a student can lift, head to head lifting competitions, or on comparisons of one student to another (Kraemer & Fleck, 1993; NSCA, 1996). Strength and conditioning teams are awarded points based on their performance for each competition and these points are accumulated over the in-season and post-season phases to help determine the overall strength and conditioning season champions. A formal schedule provides students the chance to goal set, plan ahead, and monitor their performance for upcoming matches. A formalized schedule creates a heightened sense of awareness and excitement as students are informed and motivated participants.

Culminating Event

Like most sport activities, the strength and conditioning season is completed through a final competition, which serves as a capstone experience for the season. A culminating event allows participants, role players, and spectators the opportunity to apply the skills and knowledge

developed during the season in an authentic venue. Examples of culminating events include the Superbowl for football, the World Cup for soccer, and the World Series for baseball.

An appropriate title for a strength and conditioning culminating event may be called the "World Fitness Challenge." During the fitness challenge, teams representing various countries compete in a timed obstacle course to earn points for their respective teams. The obstacle course could be comprised of various strength and conditioning tasks that challenge all students physically, mentally, and socially. Each member of a team should be responsible for completing the task(s), which correspond highly with the skills and knowledge developed during the season. Once the obstacle course has been explained, teams could have the opportunity to practice the course, determine what team members will perform which tasks, and to set individual and team goals. During the culminating event each team represents their particular country and accumulates points for their team based on a variety of factors from the psychomotor, cognitive, and affective domains. A sound team scoring system rewards not only the quickest time, but also the ability of teams to practice, make important decisions, goal set, and work toward a common goal. For example, the team may earn 3 points for completing the following tasks in 15 minutes: practicing the course, determining who will compete in which tasks, and setting individual goals as well as an overall team goal. The team may earn 3 points for achieving their overall team goal during the competition and have the chance to earn additional points based on their overall place finish. Additionally, individuals may earn 2 points for their team if they meet their individual goal(s) during the fitness challenge, regardless of how the team finished overall in the challenge. Lastly, teams may earn 1 point per individual per team for instances of appropriate fair play behaviors such as: cheering, encouragement, positive feedback, etc. In short, the world fitness challenge calls for students to demonstrate physical, mental,

and social prowess in order to be crowned champions.

Record Keeping

Typically strength and conditioning development is decontextualized and knowledge and application of fitness training concepts never reaches its full potential when taught using the multi-activity approach. Rarely are students provided with formal feedback of their performance. Systematic record keeping aids students to identify current levels of performance and provides information for goal setting throughout the season. The collection of records provides individuals, teams, and teachers with a vast amount of important information. What could be more authentic than keeping track of one's running times, sets, repetitions, and weight for specific lifts, indicators of appropriate technique, training logs, resting heart rates, etc.? Throughout the season students are taught how to use record keeping instruments. Once students can use the assessments with relatively high rates of accuracy, then students can fulfill the role of fitness data manager. The fitness data manager has the responsibility of collecting data and providing it to the teammates, coaches, trainers, the teacher, or other appropriate personnel. Such authentic assessment provides students and the teacher with more objective measures of student performance than the less formal, high inference techniques typically used in the multi-activity approach.

Festivity

Throughout a sport education season, a feature that must be accounted for is festivity. Teachers who account for festivity are infusing the culture of a particular activity into their instructional context. During the pre-season and in-season, students learn and practice the rites and rituals of an activity. For example, students learn and practice the following strength and conditioning rites and rituals: shaking hands with opponents and officials before and after matches, wearing appropriate attire (or team colors) during formal com-

petitions, and demonstrating appropriate fitness facility safety and etiquette protocols during practices and matches (i.e., using collars, having a spotter, using correct form, racking weights, wiping down machines after use, etc.).

The post-season includes not only the previously learned rites and rituals, but a celebratory ending as well. A celebratory ending authenticates the conclusion of the season for students and allows them to revel in an exciting atmosphere. The following examples represent ways in which teachers can create a festive atmosphere during the post-season phase of a strength and conditioning season: a student-decorated gymnasium, field, or fitness area, team warm-up music, performances by the school band, commentators broadcast over closed-loop television, pictures posted to the physical education web site, introductions of performers over a loud speaker, attendance by other classes during competitions, and an awards banquet. The festive nature of such events fosters the idea that being physically active is exciting. Celebrating physical activity in an emotionally safe, developmentally appropriate manner provides students the opportunity to develop skills, knowledge, and values required to engage in physical activity for a lifetime. Table 2 summarizes additional examples of lifetime leisure activities taught utilizing the sport education model.

Summary

The purpose of this article is to describe a double faceted approach to rethinking middle school physical education, one that involves changes to the content and instructional methods. This double faceted approach has the potential to enhance the number of individuals exhibiting a physically active lifestyle during the adolescent years and throughout adulthood. The research is clear that the onset of physical inactivity appears during adolescence and throughout adulthood people are becoming increasingly sedentary. This is a legitimate public health concern and physical education can play a role in altering this unfortun-

ate problem. Accordingly, a noble and primary goal of physical education is NASPE content standard three: A physically educated person participates regularly in physical activity. If our profession is to achieve this goal however, it is important that we rethink not only what we teach during the middle school years, but how we teach during this time as well. By providing middle school students with opportunities to learn lifetime leisure activities that are both reasonable and developmentally appropriate and teaching these activities well using appropriate instructional models such as sport education, we are promoting the development of physically active lifestyles that persist over a lifetime.

REFERENCES

- Alexander, K., Taggart, A., & Luckman, J. (1998). Pilgrims progress: The sport education crusade down under. *Journal of Physical Education, Recreation, & Dance*, 69(4), 21-23.
- American Alliance for Health, Physical Education, Recreation, and Dance. (2005 2nd ed.). *Physical education for lifelong fitness: The physical best teacher's guide*. Champaign, IL: Human Kinetics.
- American Heart Association. (1996). Statement on exercise: Benefits and recommendations for physical activity programs for all Americans. *Circulation*, 94, 857-862.
- Bulger, S.M., Mohr, D.J., Carson, L.M., & Wiegand, R.L. (2001). Infusing health-related physical fitness in physical education teacher education. *Quest*, 53, 403-417.
- Centers for Disease Control and Prevention. (1997). Guidelines for school and community programs to promote lifelong physical activity among young people. *Morbidity and Mortality Weekly Reports*, 46, 1-36.
- Collier, C. (1998). Sport education and preservice education. *Journal of Physical Education, Recreation, & Dance*, 69(5), 44-45.
- Corbin, C.B. & Pangrazi, R.P. (1998). *Physical activity for children: A statement of guidelines*. Reston, VA: National Association for Sport and Physical Education.
- Darst, P.W. (2001). Fitness routines for directing students toward a physically active lifestyle. *Journal of Physical Education, Recreation, & Dance*, 72(82), 27-29,33-34.
- Ennis, C. D. (1996). Students' experiences in sport-based physical education: [More than] apologies are necessary. *Quest*, 48, 453-456.
- Ernst, M.P., Pangrazi, R.P., & Corbin, C.B. (1998). Physical education: Making a transition toward activity. *Journal of Physical Education, Recreation, & Dance*, 69(9), 29-32.
- Faigenbaum, A. (1996). Youth resistance training: A position paper and review of literature. *Strength and Conditioning*, 18(16), 62
- Hastie, P. (1998) Applied benefits of the sport education model. *Journal of Physical Education, Recreation, & Dance*, 69(4), 24-26.
- Hastie, P. & Carlson, T.B. (1998). Sport education: A cross cultural comparison. *Journal of Comparative Physical Education and Sport*, 20 3 6-43.
- Kraemer, W.J., & Fleck, S. J. (1993). *Strength training for young athletes*. Champaign, IL: Human Kinetics.
- Locke, L. (1992). Changing secondary school physical education. *Quest*, 44 361-372.
- Malina, R.M. (1996). Tracking of physical activity and fitness across the lifespan. *Research Quarterly for Exercise and Sport*, 67, 48-57.
- McKenzie, T.L. (1999). School health-related physical activity programs: What do the data say? *Journal of Physical Education, Recreation, & Dance*, 70(1), 16-19.
- Mohr, D.J., Townsend, J.S., & Bulger, S.M. (2001). A pedagogical approach to sport education season planning. *Journal of Physical Education, Recreation, & Dance*, 72(9), 37-46.
- Mohr, D.J., Townsend, J.S., & Bulger, S.M. (2002), Maintaining the PASE: A day in the

- life of sport education. *Journal of Physical Education, Recreation, & Dance*, 73(1), 36-44.
- National Association for Sport and Physical Education. (2004 2nd ed.). *Moving into the future: National physical education standards*. Reston, VA: Author.
- National Strength and Conditioning Association. (1996). *Position paper and literature review of youth resistance training*. Colorado Springs, CO.
- Pennington, T.R., & Krouscas, J.A. (1999). Connecting secondary physical education with the lives of students. *Journal of Physical Education, Recreation, & Dance*, 70(1), 34-39.
- Rowland, T.W. (1999). Adolescence: A 'risk factor' for physical inactivity. In C. Corbin & R. P.
- Pangrazi (Eds.), *The President's Council on Physical Fitness and Sports Research Digest*, 3(6), 1-8.
- Sallis, J.F., & Patrick, K. (1994). Physical activity guidelines for adolescents. Consensus statement. *Pediatric Exercise Science*, 6, 302-314.
- Siedentop, D. (1994). *Quality PE through positive sport experiences: Sport education*. Champaign, IL: Human Kinetics.
- Siedentop, D. (1998). What is sport education and how does it work. *Journal of Physical Education, Recreation, & Dance*, 69(4), 18-20.
- Siedentop, D., Mand, C., & Taggart, A. (1986). *Physical education: Teaching and curriculum strategies for grades 5-12*. Mountain View, CA: Mayfield Publishing.
- Tannehill, D., & Zakrajsek, D. (1993). Students' attitudes towards physical education: A multi-cultural study. *Journal of Teaching in Physical Education*, 13, 78-84.
- United States Department of Health and Human Services (1996). *Physical activity and health: A report of the surgeon general*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- United States Public Health Services (2000). *Healthy People 2010*. Washington, DC: Author.
- Wright, M.T., Patterson, D.L., & Cardinal, B.J. (2000). Increasing children's physical activity. *Journal of Physical Education, Recreation, & Dance*, 71(1), 26-29.

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Table 1.

Definitions and examples of the six key features of sport education.

Key Feature	Definition	Examples
Seasons	Commonly referred to as units. The change in terminology reflects the shift from a short duration multi-activity format to a longer, more comprehensive experience that allows time for development of the total sports [activity] person.	<ul style="list-style-type: none"> • 18-25 days/unit, ~ 6 units/year • Skill & tactical practice, application, & assessment • Modified game play
Affiliation	Group membership among players that is established early, and maintained and developed over the course of a season. The connection among members serves to establish a festive and emotionally safe environment for meaningful participation.	<ul style="list-style-type: none"> • Team name • Logo • Mascot • Home nickname • Specialty plays • Cheer • ID cards • Representing a country, region state, etc.
Formal Competition	A schedule of competition that takes place during the in-season and post-season phases. Formalized competitions can take the form of league play and various tournaments.	<ul style="list-style-type: none"> • Tennis—doubles & singles matches • Swimming—meets • Badminton—ladder or helter skelter tournaments
Culminating Event	A final event that brings the season to a festive and authentic close. This event is what teams are ultimately working toward during the season. The event should include all teams in some capacity. This event can be within or between classes in a given school.	<ul style="list-style-type: none"> • Grade level meet (e.g. track) • Championship & consolation finals • Awards Banquet
Record Keeping	Authentic assessment data that reflects the performance of a particular student or team. Students can keep records throughout the season to provide individuals/teams with information for goal setting and improvement.	<ul style="list-style-type: none"> • Golf—putting percentage • Angling—casting accuracy • Walk/Jog/Run—pacing ability
Festivity	The rites, rituals, and jovial atmosphere that goes hand-in-hand with a season and a culminating event. For example, football's season and Superbowl festivities almost transcend the actual game being played.	<ul style="list-style-type: none"> • Student-decorated gymnasium • Team warm/up entrance music • Performances by school's band • PE website with team pictures • Commentators via loud speaker

Table 2.

Examples of lifetime leisure activities taught using sport education.

Cycling	Camping / Backpacking
Season	
<ul style="list-style-type: none"> • 18-25 lesson 	<ul style="list-style-type: none"> • 18-25 lesson
Affiliation	
<ul style="list-style-type: none"> • Team jerseys • Team sponsors (math department) • <i>Roles</i>: captain, bike technician, road manager 	<ul style="list-style-type: none"> • Base camp nickname • Tribe logo • <i>Roles</i>: pack manager, scout, first aid trainer
Formal Competition	
<ul style="list-style-type: none"> • Team challenges (time trials) • Individual competitions (timed sprints) • Points accumulation 	<ul style="list-style-type: none"> • Tribe challenges (mock fire construction) • Cartography competitions (map making/reading) • Team competitions
Culminating Event	
<ul style="list-style-type: none"> • Tour De France (multiple day event) 	<ul style="list-style-type: none"> • Bonfire battle (combination of orienteering, camp construction, & trail hiking).
Record Keeping	
<ul style="list-style-type: none"> • Time trials • Cycle maintenance log • Obstacle negotiation accuracy 	<ul style="list-style-type: none"> • Tent pitching (speed) • Orienteering (accuracy and speed) • Pre and post obstacle course challenge
Festivity	
<ul style="list-style-type: none"> • Yellow jersey presentation (overall champions) • Stage champions • Student-sports page summarizing each stage 	<ul style="list-style-type: none"> • Backyard barbeque • Wilderness journal (student newsletter) • Patch ceremony (awarding of merits)