

Instruction Matters: How Varied Forms of Instruction and Assessment Affect Students

Participation in Lifetime Physical Activity

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### **Abstract**

Through the years Physical Education has become more than students merely experiencing physical activity in school. The field now centralizes around the theme of having students understand content to recreate those experiences in their lives independent of school. The California State Standards challenge students in three distinct venues, the psychomotor, cognitive, and affective learning domains, with the primary objective being student adoption of lifelong physical activity. The motivation behind this curriculum project is to analyze the findings of compiled research describing a relationship between students' in class experiences and their desire to pursue similar physical skills outside of class. This is a curriculum project that is designed to look into related literature to see what teaching practices are linked to having a lasting impact on student activity levels, and to create a curricular example for instructors to recreate in their classes. Research shows that lifelong participation in physical activity is connected to students receiving single unit instruction catered to all three learning domains. To support this connection, it is necessary to look into what instructional practices cultivate a commitment to lifetime physical activity; many academics argue that student awareness of occupational and extracurricular activities begin in their secondary education experience. Educators should understand what research suggests are the most beneficial ways to deliver content and what independent physical activity options students continue after being introduced in the physical education class setting.

### **Introduction**

Student activity levels and the relationship to the content taught in the physical education class have a positive correlation. Currently in class student instruction is more varied than just the daily tasks of getting moving. Topics such as sports history, rules, and the reason why we move is heading to the forefront in class. As a physical education teacher, my passion is tied to content in moving and using teaching to generate a memorable experience for my students. Through this project, my objective is to arm my students with the knowledge, understanding, and aptitude to be active in their lives.

As educators implementing and teaching the "New Physical Education" (Salis, 2013) with a literacy first mentality, our primary objective is still unchanged in the promotion of lifelong physical fitness. An essential part of the new physical education movement is the integration of the California State Framework and the National Physical Education standards, which are necessary components of a quality educational experience. The standards for Physical Education are not only to be displayed but also understood and demonstrated through a content-based curriculum. National Physical Education Standard 3 recommends that students can utilize the skills and knowledge acquired in their physical education class to participate in a regular physical activity independent of the physical education setting (Alexandr et al, 2016; Corbin, 2002; Green, 2004; Schwamberger & Sinelnikov, 2015). The research surrounding this recommendation support educational practices that should be taking place in physical education: engaging students in the content while allowing them to develop specific skills and knowledge necessary to improve their physical fitness.

Although the youth population is the most active portion of our society, there is an upswing of children adopting sedentary lifestyles (CDC, 2018). With class sizes growing in Physical Education it is becoming more of a challenge to reach all students and inspire them to become active for a lifetime (NASPE, 2006). Due to the diverse population in the physical education class instructors need to develop and deliver unit lessons that have scaffolds and are differentiated to meet students in all three learning domains.

### **Purpose Statement**

The purpose of this project is to examine the effect diverse forms of teaching have on student's retention of content and their aptitude and desire to recreate these activities outside of class. This project explores what types of instruction create permanent links with students. It will provide educators with the optimal way to build these connections with their diverse students. The project examines the benefit of differentiating instruction for populations of students with diverse needs, as it will aim to show a link with their continued interest in pursuing a healthy lifestyle. This project will clarify aspects of engagement, delivery, and assessment resulting in students having a better understanding and utilization of class content independent of the school setting.

### **Research Question**

When instruction is varied to teach content in the psychomotor, cognitive and affective learning domains, does this increase student aptitude for participation in lifelong physical activity, and how does this form of teaching

affect student engagement and student learning in the class? How does a teacher better deliver content to a diverse student population in 2018?

### **Theoretical Rationale**

To assess that learning is taking place as an outcome of varied instructional practices it is essential that instructors are using progress monitoring assessments rather than just summative (Fuchs, 1993). Teachers can perform progress monitoring assessment through exit slips, closure questions, and class survey to gauge understanding to prepare following lessons. As knowledge is acquired students become active participants in the learning process, which allows students to not only take the lead in their knowledge development but also allows them the ability to use this acquired knowledge to lead an active lifestyle after their physical education experience (Corbin, 2002). The use of summative assessments in line with the state and national framework allows students to see their personal growth and achievement they are making in the curriculum. Physical education is moving towards a standards-based grading system rather than the traditional method of instructor observation (Melograno, 2007). It is essential for instructors to note that when students are held accountable and acquire the necessary skills, knowledge, and attitudes to be active throughout life, their overall enjoyment and choice to be physically active increases as a result of instructional practices (Mercier & Iacovelli, 2014). If teachers are willing to understand what research shows as linked techniques and curricular development strategies then the number of students in their class who are willing to continue an active lifestyle can increase. Students become enabled with the aptitude to take responsibility for their education when educators vary assessments and instruction (Bilgin, 2017).

Differentiation of instruction and assessment allows students to achieve daily learning targets and overarching unit objectives. Physical education class assessments are a necessary tool when instructors are using a standards-based approach. For student understanding learner observation is the most reliable tool. Students can learn best through observed behaviors later adopting these as daily life choices. If their teacher is displaying behaviors in line with what they want students to emulate students personal adoption of a similar lifestyle is more likely; self-efficiency plays a significant role in student's disposition to become engaged in the classroom (McKenzie, 2000). Teachers must convey what behaviors they are trying to develop in their students, and with substantial class sizes, the differentiation of instruction will allow teachers to reach more students. Differentiation can occur when lessons supply content to the audio, visual, kinesthetic and tactile learner. Instructors will need to use these forms of teaching, developing knowledge in the psychomotor, cognitive and affective domains to establish and understand individual student motivation for lifelong activity.

### **Assumptions**

The author believes that differentiated instruction and assessment leads to better student understanding of content allowing students to recreate these physical education experiences as lifelong participants of physical activity. With growing class sizes the difficulty to know what units to focus on, and what teaching strategies to utilize increases. this project will aid instructors as it explains what practices they should focus on and how they should provide content to their



students. When it comes to assessment and instruction, holding students accountable for the content associated with the state framework is the most critical aspect. Assessments should be varied and assess what students know and should be able to do as a result of instruction. The author also believes that this research is necessary as a significant number of physical education teachers still choose to adopt diminishing practices, such as a roll the ball out mentality (Spencer, 1998). The support in literature and practice will show educators that the effort of focusing on content is worth the time when the outcome is their students living a healthy active lifestyle in the future.

### **Summary**

This project looks into what instructional practices lead to the adoption of lifelong physical activity and uses these findings to create a curricular example. Based on a review of literature a curriculum project was created and utilized by the author as part of the project focusing on academic research. This will provide educators who read the project with instructional strategies they should use in their teaching. The suggestions presented in this introduction suggest there is a need for physical educators to have a clear outline of what practices are beneficial to student understanding and content retention.

## **Review of Literature**

### **Introduction**

Research for this project was gathered from academic resources such as ERIC, Google Scholar, and Cal State Fullerton Library. Research is organized into the following categories: Cognitive literacy, Physical literacy, Relevance of curriculum,

and Summary of findings. This literature review focuses on the research related to teachers' delivery of content through different learning domains, the cognitive, psychomotor and affective; student's understanding of material causing them to seek similar experiences outside of class. Through analysis of collected data instructors will be able to see how content delivery evokes an understanding of curriculum, which provides students with the necessary tools to recreate skills independent of the class. The California state standards were created to identify what characteristics were significant in secondary education to promote continuing health-related fitness outside of school. Lifetime activities are those that students may readily apply throughout their life and commonly need only one or two participants (Fairclough et al, 2002). Some of the characteristics emphasized in current research promote lifetime physical activities, which have the potential to enhance individual health beginning in their secondary education and continuing throughout their adult years. If educators can have students become attracted to lifetime fitness activities early on, then they are more likely to maintain physically active lifestyles into maturity (Fairclough et al, 2002). When students have a knowledge basis and an understanding of physical activity and locomotion they are more likely to continue to develop their physical wellbeing (Kohl, 2013). As students continue to build knowledge post-secondary education, they can transfer their learning experience from in-class knowledge, skills, and feelings and use these to lead an active life beyond school (Haerens et al, 2010). As students mature they can build upon their foundational level skills, allowing them to become physically competent in their daily lives (Whitehead, 2007). Choices made by educators on the focus of their

programs as well as the emphasis they have on developing students can allow for students to lead healthy independent lifestyles as they mature.

### **Cognitive Literacy (Reading, Writing and Knowledge Assessments)**

Literacy can be described as “the ability to read and write, literacy is also a basic skill or knowledge of a subject” (Cambridge University Press, 2007). Literacy in the form of writing in the Physical Education class not only holds value in student's ability to obtain knowledge but also provides them a material record to reflect on the progress of knowledge, or a change in outlook allowing students to develop the necessary mentality to be lifelong participants in physical activity. Studies have shown a link between content delivery utilized in physical education class increasing student understanding and this leading to pursuance of independent physical activity (Aghyppo, Tkachov, & Orlenko, 2010). A quality physical education curriculum is one that not only focuses on an understanding of curriculum, but it educates and assesses the knowledge that students are acquiring as an outcome of instruction. High-quality physical education does not focus on only one domain of learning but captures all of them by teaching students the knowledge (Cognitive), skills (Psychomotor), and confidence (affective) to be physically active for their lifetime (CDC, 2015).

In the Physical Education class, this cognitive literacy mentality holds value in student's ability to display an understanding of a progression of foundational level locomotor, non-locomotor, manipulative skills, and related information in the realm of Kinesiology that they can later reflect on, allowing them to establish a personal relation to health-related knowledge. Learning in the cognitive domain is enhanced when the

student can compare, contrast, analyze, and evaluate different vocabulary terms, skills, and aspects of the activity (Behrman, 2004). This will improve understanding, allowing students to develop skills that they can later use in their individual lives (Mitchell & Hutchinson, 2003). Such cognitive development practices that increase students' understanding of the curriculum can be in the form of fitness diaries, activity reflection, health news summaries, and Kinesiology research document critiques (Behrman, 2004). The benefits here are measured in student understanding, with a deeper understanding of content while allowing students the ability to recreate class experiences on their own time.

Current research promotes cognitive learning in the physical education curriculum and this practice of focusing on cognitive literacy in class has a positive influence on student content retention, which leads to a better understanding of health and wellness (Behrman, 2004). Furthermore, a current trend that explores the necessity for focusing on cognitive literacy is our ability to develop student's cross-curricular skills (Behrman, 2004). In this pursuit, it is essential that students are receiving and applying academic skills in all classes. The assumption being that by providing students with appropriate content knowledge about the role continued physical activity has on their overall health and wellbeing will cause them to alter their behavior and promote the adoption of lifetime physical activity (Green, 2004). The benefits of incorporating writing into classes that are not traditionally seen as 'language arts classes' can be observed in many studies (Behrman, 2004). The importance of this is that by incorporating cognitive literacy and understanding into their class, educators can increase the learning and quality of their programs, and the student's current and future

activity levels.

Studies attest to the benefits of developing a knowledge basis of the physical education curriculum, as well as the necessity of measurable learning objectives and summative assessments to measure if these are being met (Kutty, 2008). Programs should adopt department standards that all units require cognitive evaluation to show an understanding and development of unit knowledge as a tool to increase instructor and student accountability. Studies note an increase in student active involvement, not only in quantity but also in the quality of participation as a direct result of implementing summative assessments, allowing students to display what they know (Mercier & Iacovelli, 2014). The use of summative evaluations allows students, parents, and onlookers to see how grades are established, based more off of student achievement of standards, rather than the pure observational skills of the instructor. Programs such as these note that when students are held accountable and acquire the necessary skills, knowledge, and attitudes to be active throughout life, their overall enjoyment and choice to be physically active increases as a result of instructional practices (Mercier & Iacovelli, 2014).

### **Physical Literacy**

Recently physical education programs have changed, explicitly moving away from merely teaching sports, games, and activities to prepare students to become physically literate. Programs are now concentrating on teaching the skills necessary to participate in lifetime physical activities (Stevens-Smith, 2016). Physical literacy, as utilized by instructors when they create an authentic learning experience, allows

students to build off of prior knowledge; authentic learning can be observed during real life situations, such as gameplay. This is defined as student motivation, confidence, physical ability, knowledge and understanding that will enable them to note the significance of physical activity in their life and take individual responsibility for engagement and continuation in physical activities (Whitehead, 2007). Additionally, the student is observant in 'reading' all characteristics related to the physical environment, perceiving what movements are necessary or possible and then responding correctly to these stimuli, with intellect and creativity (Whitehead, 2007).

One aspect of physical literacy is the focus on greater motor skill development, incorporating educator promotion of skill learning (Corbin, 2016). When it comes to assessing or observing physical literacy teachers should use reciprocal teaching as to utilize and not inhibit students skill development who are already proficient in the focus skillset (ASCD, 1997). To develop student's ability to teach skills, which displays an authentic understanding, reciprocal teaching should be utilized when students are peer evaluators to critique or correct skill execution. Students should focus on established critical elements of specific skill sets and use these to provide feedback to peers (Chepko & Doan, 2015). For student engagement in skill exploration and development students are more challenged if they are participating with peers who have approximately the same level of skill. If these students are working with higher-skilled peers, this will increase the speed and complexity of their skill execution, while students who are still in the developmental stage of performing the skill will need to slow the rate of performance to focus on developing the established critical elements for skill mastery. When it comes to physical literacy skill grouping will ensure that

students are engaged and challenged appropriately, this will give them a more successful experience, which will promote their continuation of physical activity outside of class (Chepko & Doan, 2015).

As educators we strive for student learning as an outcome of instruction; however, this notion seems to become skewed when outsiders look at the current state of many physical education classes and the lack of standards in academic learning. It is possible that this is because physical education continues to be marginalized and in the public view is not perceived to hold major significance as a subject in the realm of academic, cultural, and sociological education (Crawford, 2013). Our job as teachers is to educate the whole student and develop lifelong skills that can be utilized by them in the future; in the physical education profession the groundwork is being done so that students can lead a healthy and active lifestyle. The course and formation of physical education are more significant than just physical activity, and as educators choose to adopt diminishing educational practices, this has the potential to harm the profession (Dyson, 2014). Physical literacy can unite all of the learning domains in a quality physical education program; the activity and education delivered by educators are significant and can have an impact on student quality of life, if educators want students to use these foundational level skills as part of an active lifestyle (Stevens-Smith, 2016). Development among adolescents is increased when students are taught why they are moving and the purpose each skill holds to their subsequent learning experience.

**Relevance of Curriculum**

It can be seen that how content is delivered can affect if the student understands the relevance of the activity to their life outside of school. What units of study educators focus on can also influence if a student is prepared to pursue the activity in their everyday lives (Mohr, Townsend & Pritchard, 2006). In the secondary educational system, it is noted that individual and dual racket sports are ones that show significance in lifetime continuation even though this is a focus of seventh-grade curriculum according to the California State Framework these activities are still omitted from many programs (Fairclough et al, 2002). A mixture of cognitive and psychomotor learning should be taking place in all programs, for instance in class instructors can assign a student to write a personal response based on exercises focusing on the same body part, in an effort to engage students in the cognitive, affective, and psychomotor learning domains all in one assignment (Behrman, 2004). The programs that educators develop can either promote or hinder a child's desire to continue physical activity when a class does not require it. The promotion of learning and activity is the focus of Integrated Lessons: the use of movement activities to enhance academic learning takes the academic focus of the subject and combines it with locomotor skills to allow for a better understanding (Stevens-Smith, 2016). Educators can utilize this form of instruction not only to increase student understanding of new concepts, but build off of previously learned locomotor, non-locomotor, and manipulative skills to create a lifetime connection and reiterate the essential nature of foundational level skills.

The environment that we create for students needs to be one where



participation in physical activity is by choice, due to the confidence, and desire students receive as a result of learning. When incorporating varying forms of literacy in instruction it is sometimes necessary to sacrifice some physical activity instead engaging students with questions and allow authentic opportunities for exploration of skill and content. Instead of fun being the only outcome of instruction, good teaching can promote student participation by creating an environment where students choose to be engaged (Lee, 2004). For quality physical education to occur there needs to be a shift in the mindset of educators from creating environments that are simply fun to ones that are mentally and physically challenging, aligning with the state and national framework for physical education. This is necessary and may seem counter-intuitive by pushing the student beyond their comfort zones, which may hinder their momentary enjoyment of physical activity it would concurrently provide students with a learning experience beyond play; learning experiences such as these are foundational to lifetime physical activity (Ferkel et al, 2017).

### **Summary of Findings**

Through analysis of current literature, it can be seen that a focused physical education curriculum that encompasses differentiated forms of literacy creates an increase in the quality of the program and is linked to student pursuance of lifetime physical activity. Instructors in the class must focus on student understanding of the curriculum to see retention and continuation of physical activity throughout the lifetime. The ideal purpose of school is for students to develop a knowledge basis as a result of instruction and be able to use this as motivation regarding the choices they

will make as adults (Glatthorn et al, 2016). When it comes to physical and cognitive literacy, all ability and knowledge begins in a cognitive state and then is transferred and assessed as student aptitude through one of these venues, individualizing learning to each student's specific learning needs. The use of cognitive and psychomotor skill assessment works in tandem to measure student's ability to pursue activity individual of instruction as they progress in achieving national physical education standards (Corbin, 2016). The program that educators should strive for should include and assesses all abilities of the student to determine that learning has taken place, and knowledge has been acquired. No matter what form of education is assessed teachers should be able to evaluate that some learning has taken place as an outcome of instruction. This may be through a psychomotor or cognitive assessment, utilizing both forms of analyzed literacy, physical, and cognitive.

When looking into resources such as state content standards, it can be seen that when it comes to knowledge in each grade level students should be building on prior knowledge each subsequent year and utilizing previous learning experiences to understand the new content. As physical education programs move away from declining practices with a "roll out the ball" mentality, state and national standards provide programs with accountability and viability of quality education (Stevens-Smith, 2016). In this example, physical literacy is being utilized to show students the connection between distinct units and concepts. In the psychomotor domain of learning students are assessed on understanding and execution of skill, in Standard 1 they are asked to "demonstrate the motor skills and movement patterns needed to perform a variety of physical activities" (CA Dept. of Ed, 2005). The state standards

also necessitate growth of student's knowledge in the cognitive domain in Standard 2 students are asked to "demonstrate knowledge of movement concepts, principles, and strategies that apply to the learning and performance of physical activities" (CA Dept. of Ed, 2005). Throughout this analysis of academic research it is apparent that students are at a disservice when cognitive and physical literacy are underutilized; for the physical education teacher to engage students in a quality learning experience both forms of literacy are necessary for learning and assessment.

The responsibility of teachers is simple, to teach, but as educators continue to ignore the whole student approach the future choices that students make regarding lifetime physical activity will continue to decline. As teachers interested in promoting physical and cognitive literacy it is crucial to remain aware that "fun is a byproduct of learning, not a purpose for learning" (Fredericks, 2010, p. 156). This review is a comprehensive analysis of gathered literature to aid instructors in what aspects of their class have the potential to promote a continuation of lifetime physical activity and what elements of quality physical education they should incorporate into their programs.

## **Proposed Curriculum**

### **Introduction / Design**

This curriculum was designed to apply the findings and test the validity of claims made in the related literature. The hypothesized outcome of instruction focusing on the knowledge associated with activity has a reciprocal effect on physically active actions. This curriculum will be a specific badminton unit; this

was chosen with the focus of lifetime continuation as Fairclough identifies that many programs exclude racket activities with lifetime ramifications, in favor of predominance of team sports. The five key components of quality instruction are a clear purpose, clear learning targets, sound assessment design, effective communication of results, and student involvement in the assessment process (Chappuis, Chappuis & Stiggins 2009). The use of various assessment can inform instruction allowing the teacher to observe if students are meeting learning objectives or if re-teaching is necessary. For authentic learning to take place, students need to take an active role in their education. Lessons should be designed in a manner so that students can use assessment to meet personal goals as well as unit learning targets. One of the most critical aspects is establishing expectations and a routine for instruction. The purpose of this curriculum project is to be utilized by instructors to create and develop habits that can increase student continuation of lifetime physical activity.

The practice of assessing for learning is an essential component to student success; this is because it allows the student to become competent in their education. By differentiation of instruction the teacher can reach more students with different learning abilities. By using aspects of the review literature, the author will create a specific unit outline, and provide rationales to the necessity of each components place in a proposed curriculum.

**Frontloading Content Rationale**

Frontloading is an instructional strategy that adds to student understanding during unit introduction and daily lessons. This strategy maximizes teaching and learning opportunities for students and will better their authentic understanding of content and unit learning objectives. This allows students to apply strategy to the learning experience allowing them to take charge of their knowledge development and promotes high expectations and accountability. This gives all students the ability to access the curriculum and encourages opportunities for special populations to develop at the same rate in an inclusive learning environment.

**Badminton Example PowerPoint**

*California Physical Education Standard: 2.1* Identify and describe key elements in the mature performance of overhand, sidearm, and underhand striking.

*National Physical Education Standard: 2* The physically literate individual applies knowledge of concepts, principles, strategies and tactics related to movement and performance.

*Relevance from Literature:* “Several students commented about how PowerPoint slides added to their learning: ‘you were able to get a visual and see what is expected for you to understand’; “the way I learned the best in combination with you lecturing’; ‘able to go over the notes and follow along in class’; ‘all of the information was available at all times’; and ‘it helped to have a visual with the lecture.’ Student perceptions of their learning were aided by the use of a variety of instructional videos: ‘because it’s a visual display of theory being presented’; ‘helps tie our reading with actual examples (visual learning is best for me); and ‘we got an in depth view of what is being taught’” (Lumpkin, 2015, p. 362)

“The present study demonstrates that PowerPoint presentations, as an audiovisual aid, is not only effective for A (audio) and V (visual) learners but also equally effective for R (read – write) and K (kinesthetic) learners and supports mixed sex classrooms. As instructors, we need to assess and understand the manner of reaching all students by understanding ways to present information in multiple modes using PowerPoint presentations as an effective educational tool” (Ankad, p.371, 2015)

# Physical Education Badminton Unit



Mr. Linda's Physical Education Class

## Sport History

- The sport of Badminton was invented in India.
- British army officers learned the game around 1870. In 1873 the duke of Beaufort introduced the sport at his country estate, Badminton, from which the game derives its name.
- In 1887 the Bath Badminton Club was formed; it was replaced in 1893 by the Badminton Association of England, which codified the rules that still govern competitive play.
- Canada is one of nine founding members of the International Badminton Federation in 1934. Badminton is included in the 1972 Munich Olympics as a demonstration sport. Jamie Paulson of Calgary wins gold medal in men's singles at 1970 Commonwealth Games in Edinburgh, Scotland. In 1992, six Canadians contest badminton as a full medal sport at Barcelona Olympics

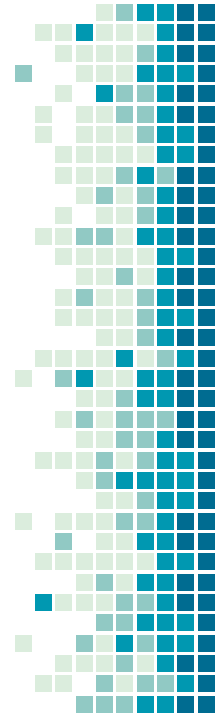


## Equipment

- **A Racket**
- **A Birdie**
- **Official Net Height:** The net 5 ft. 1 inch high at the edges and 5 ft. high in the center.
- **Official Court Dimensions:** The overall dimensions of a badminton court is 20 feet by 44 feet.



3



## Basic Skills: The Forehand Serve

**G: Grip:** Continental grip, creates a 'V' with thumb and index finger.

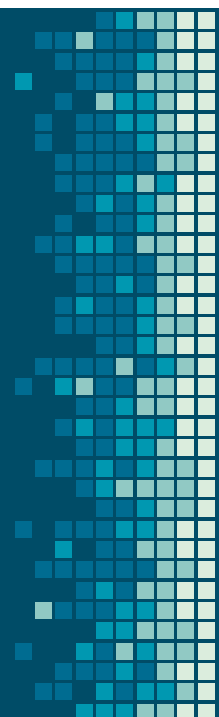
**S: Stance:** Staggered stance, non-dominant foot is forward. Birdie is held by net in a serve position (next to racket face)

**S: Step:** Stepping with opposition into the serve, transfer of weight from back foot to front foot.

**S: Strike:** Contacting racket face to birdie, transferring weight from body through implement.

**F: Follow-through:** Following-through to the intended target.

4





# Basic Skills: The Deep Clear

A clear is a stroke which sends the birdie high and deep onto the opponents back court

- **Step into it**
- **Back scratch** (The racket is in your hand and reaching down similar to a back scratcher)
- **Extend and contact above your head**
- **Snap and follow through.**

5

# Basic Skills: The Smash

Similar to a spike in volleyball, a smash is an aggressively hard hit, with a fast downward path.  
The ultimate attack stroke.

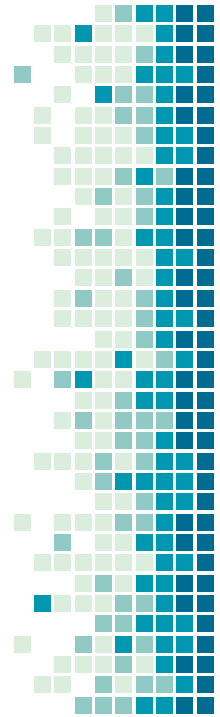
- **Back scratch** (The racket is in your hand and reaching down similar to a back scratcher)
- **Extend High**
- **Snap wrist down**
- **Follow Through**

6

## Badminton For Beginners



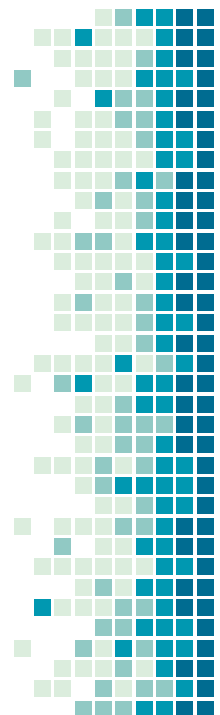
7 <https://www.youtube.com/watch?v=CUoOemSE7YM>



## Viktor Axelsen Badminton Matrix Workout | Hitting the Wall



8 <https://www.youtube.com/watch?v=lamLZIFc8wU>



**Badminton Unit Note Template**

*California Physical Education Standard: 2.1* Identify and describe key elements in the mature performance of overhand, sidearm, and underhand striking.

*National Physical Education Standard: 2* The physically literate individual applies knowledge of concepts, principles, strategies and tactics related to movement and performance.

*Relevance from Literature:* “reported students believed having PowerPoint slides helped them focus their attention and maintain interest, since they thought listening alone was more boring than watching and listening. Raver and Maydosz (2010) reported about 73% of students who were given instructor-provided notes found the notes to be the “most important strategy used by their instructor to enhance their learning (p. 195)” (Lumpkin, 2015, p. 357).

Name:

Period:

Date:

## Badminton Unit Notes

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1. What Country was badminton created in?

---

2. What year was Badminton first included in the Olympics?

---

3. What is the official net height in the center?

---

4. What are the dimensions of a Badminton court?

---

Please state the critical elements for the given skill below.

5. The Forehand Serve.

**G**

**S**

**S**

**S**

**F**

6. The Deep Clear

•

•

•

•

Name:

Period:

Date:

7. The Smash

- 
- 
- 
- 

Please state one important point from the "Badminton Tips : Badminton for Beginners" Video

---

---

Below please state three ways that Viktor Axelsen trains to compete in Olympic Badminton.

- 1.
- 2.
- 3.

**Badminton Types of Progress Monitoring Assessments****Exit Tickets**

*State Standard:* 2.3 Use principles of motor learning to establish, monitor, and meet goals for motor skill development.

*Relevance from Literature*

“Specific, corrective feedback should be combined with continuous assessment. All types of assessment should be used to enhance learning and to track student progress. These include informal formative assessments such as checks for understanding, and exit slips,” “For skill competency to be achieved, students must be provided with specific corrective feedback coupled with ongoing assessment. Both are essential in the development of physical literacy.” (Chepko & Doan, P. 13, 2015).

“Over the last 20 years in educational research, documentation about the relationship between assessment and learning has proliferated, particularly documentation related to how classroom assessments for formative purposes carry considerable potential to enhance student learning and improve teaching” (Leirhaug, p. 298, 2016).

# BADMINTON EXIT TICKETS

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## Progress Monitoring Assessment

STATE THE FIVE CRITICAL ELEMENTS ASSOCIATED WITH THE FOREHAND SERVE.


IF YOUR PARTNER WERE ABSENT FROM CLASS TODAY HOW WOULD YOU EXPLAIN WHAT THEY MISSED FROM TODAY'S LESSON?

WHAT IS ONE QUESTION YOU STILL HAVE ABOUT TODAY'S LESSON?

WHAT SKILL OR RULE HAS BEEN THE MOST DIFFICULT/CONFUSING IN THIS UNIT?

ONE THING I LEARNED
ONE THING I FOUND INTERESTING
ONE QUESTION I STILL HAVE

DESCRIBE ALL OF THE EQUIPMENT NECESSARY TO PLAY BADMINTON.

**Badminton Types of Summative Assessments****Peer Evaluation**

*State Standard: 2.2 Analyze movement patterns and correct errors.*

*National Physical Education Standard 2: The physically literate individual applies knowledge of concepts, principles, strategies and tactics related to movement and performance.*

*Relevance from Literature*

“Knowledge of performance is feedback that is specific to the movement pattern or technique, which is a type of augmented feedback provided by a peer or the teacher. Peers, with significant guidance, can use various types of performance assessments to provide knowledge of performance feedback on the quality of movement to peers” “In the absence of adequate feedback, efficient learning is impossible and improvement is only minimal even for highly motivated subjects” (Chepko & Doan, p. 13, 2015)



Name of Assessor:

Period:

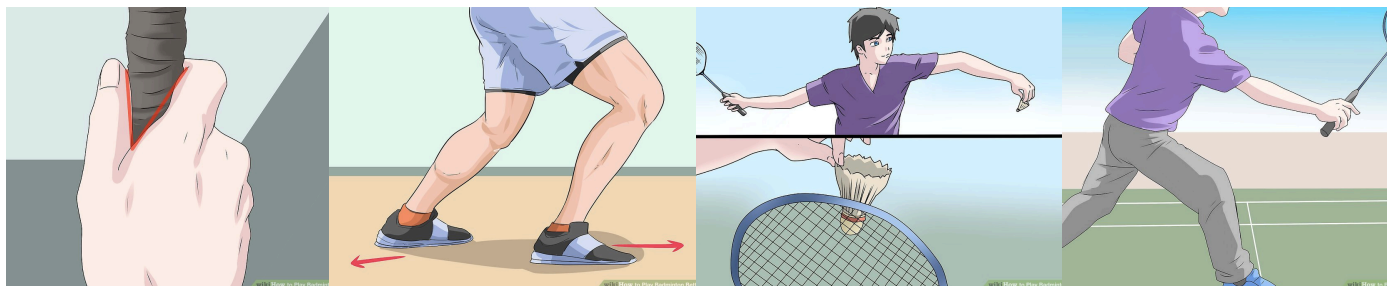
Date:

**Assessing a Forehand Serve: (15 Points)**

**Directions:** In a group of 2, students will rotate through two different roles, the server and the assessor. The assessor will evaluate the server on the given skill of the forehand serve and write what characteristics need to be modified to successfully complete the skillset. The assessment will need to be detailed in content and biomechanical analysis, **just writing perfect, or good in the box will result in no credit.** The student is not being graded on their ability to perform the skill, but rather **the assessor is graded on their ability to correct the skill.**

Note\* the server will need to serve 5 times per attempt, the assessor will focus on a different element during each serve. Ex: During the first serve the assessor will focus on grip, during the second serve the assessor will watch for

Name of Server:	1 <sup>st</sup> Attempt (What needs to be corrected or what was correct with their skill performance?)	Corrections that you told your partner to make	2 <sup>nd</sup> Attempt (Did they make the corrections, what still needs to be worked on?)
<b>Critical Elements Checklist for Forehand Serve</b>			
<b>G: Grip:</b> Continental grip, creates a ‘V’ with thumb and index finger.			
<b>S: Stance:</b> Staggered stance, non-dominant foot is forward. Birdy is held by net in a serve position (next to racket face)			
<b>S: Step:</b> Stepping with opposition into the serve, transfer of weight from back foot to front foot.			
<b>S: Strike:</b> Contacting racket face to birdy, transferring weight from body through implement.			
<b>F: Follow-through:</b> Following-through to the intended target.			



**Self-Assessment**

*State Standard: 2.2* Analyze movement patterns and correct errors.

*National Physical Education Standard 2:* The physically literate individual applies knowledge of concepts, principles, strategies and tactics related to movement and performance.

*Relevance from Literature*

“Technology can also be an effective means of providing knowledge of performance feedback. Students can complete self-evaluations of their skill competency by using smartphone and iPad applications, which are readily available in many schools. These technologies allow for the filming of students’ performance followed by self-evaluation (using a rubric) based on the visual evidence. These self-evaluations could include such assignments as creating a movement portfolio or using one of the numerous mobile apps to complete a video analysis. Students can then use the video analysis to develop a self-improvement plan” (Chepko & Doan, p. 13, 2015).

Name:

Period:

Date:

**Self-Assessment of the Deep clear**

**Directions:** In groups of 3 - 4, students will rotate through three different roles, the skill hitter, the catcher and the video recorder. The hitter will be recorded performing the deep clear using the *technique* app and once everyone has hit each member will evaluate and compare their performance to a professional badminton player. Students will use the chart below to assess their skill execution in each of the four mature performance critical elements and then state what next steps need to be taken in their skill development. The assessment will need to be detailed in content and biomechanical analysis; **One-word answers will result in no credit.**

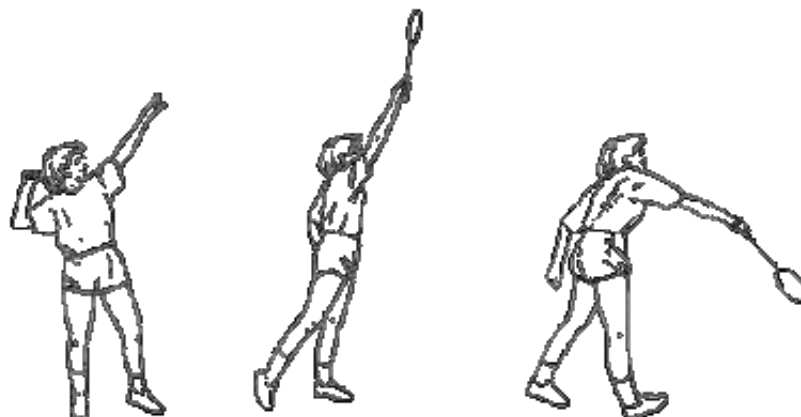
**Critical Elements of the Deep clear**

(A clear is a stroke, which sends the birdie high and deep onto the opponent's backs court)

Step into it.	<b>Back scratch</b> (The racket is in your hand and reaching down similar to a back scratcher)	Extend and contact above your head.	Snap and follow through.
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**Self-Assessment**

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**Attitudes of Lifetime Fitness Pre/Post Unit Survey**

Student Google form Survey

1

## Attitudes and Ability for Participation in Lifetime Physical Activity

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This survey intends to understand the attitudes and ability students perceive they have when deciding to participate, or not participate in physical activity. Below, please identify where you are on the scale for each question, this survey will remain anonymous and does not require your name. The aim of this is to understand what role physical activity plays in your life.

### Attitude Questionnaire

Please answer all questions

It's important to me to participate in exercise regularly.

Disagree    0    1            2            3            4    Strongly Agree

I have an interest in pursuing physical activities outside of class.

Disagree    0    1            2            3            4    Strongly Agree

I participate in physical activity because others say I should.

Disagree    0    1            2            3            4    Strongly Agree

I enjoy participating in exercise frequently.

Disagree    0    1            2            3            4    Strongly Agree

I participate in physical activity because I understand the benefits.

Disagree    0    1            2            3            4    Strongly Agree

I do not understand the benefits of participation in physical activity.

Disagree    0    1            2            3            4    Strongly Agree

Student Google form Survey

2

### Ability Questionnaire

Please answer all questions

I can be successful in physical education activities.

Disagree 0 1 2 3 4 Strongly Agree

I can be successful in physical activities outside of class.

Disagree 0 1 2 3 4 Strongly Agree

I feel confident in my ability to participate in physical activity regularly.

Disagree 0 1 2 3 4 Strongly Agree

I feel capable of executing all skills required for successful participation in badminton.

Disagree 0 1 2 3 4 Strongly Agree

I feel capable explaining all skills required for successful participation in badminton.

Disagree 0 1 2 3 4 Strongly Agree

Enjoyment of units in Physical Education class makes me want to continue similar activities in the future.

Disagree 0 1 2 3 4 Strongly Agree

My attitude to the questions above is a result of my understanding of how to participate in physical activity.

Disagree 0 1 2 3 4 Strongly Agree

**Summary**

Overall the curriculum holds true to the goals and evidence from the literature. There is a consensus among physical education teachers that lifetime activity is our primary objective, but this does not mean that all teachers know how to reach this agreed upon outcome. The author found that the use of varying instruction for their class led to less confusion when it came to student understanding of daily objectives, or stagnation with instruction; this leads to student improving critical thinking skills, less disruptive behavior, and an increase in student engagement. Much of the research used was specific to the physical education curriculum, but some research was general to teaching to improve overall understanding of content that was applied to this study. All participants in the survey came from one school and were all 7th-grade physical education students.

Discussion/Analysis of Data

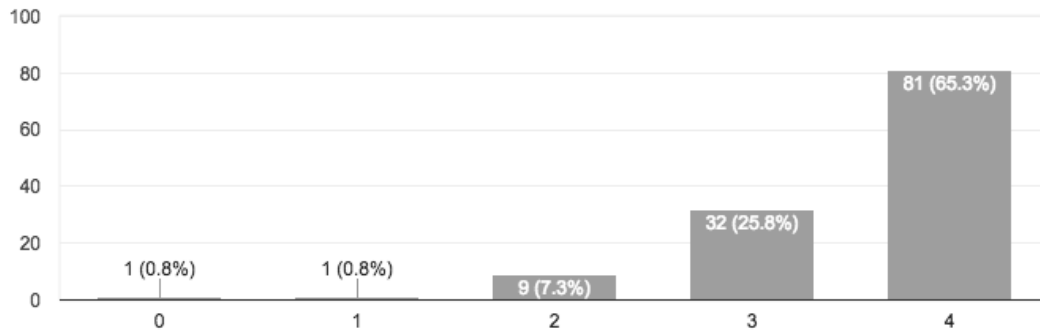
Results of Pre Survey Data

Pre Google Survey

Attitudes Questionnaire

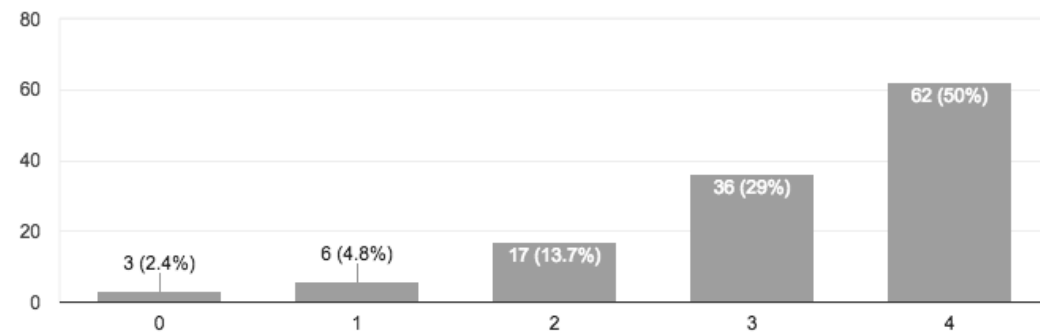
It's important to me to participate in exercise regularly.

124 responses



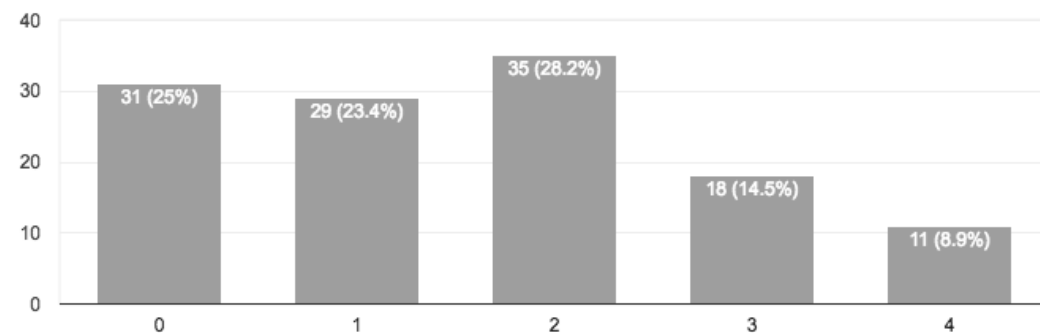
I have an interest in pursuing physical activities outside of class.

124 responses



I participate in physical activity because others say I should.

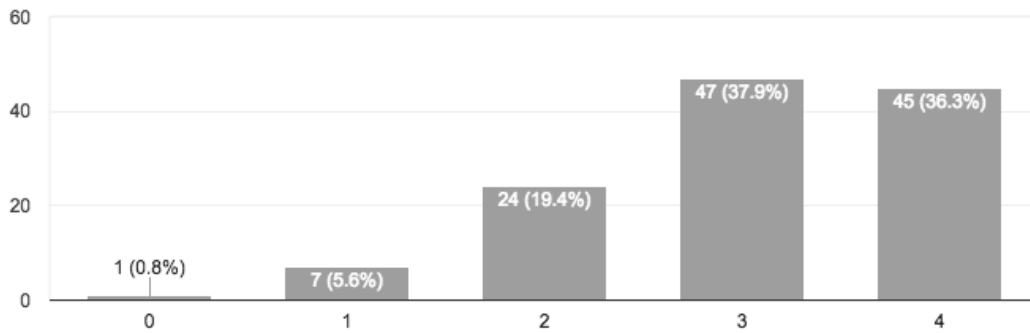
124 responses



Pre Google Survey

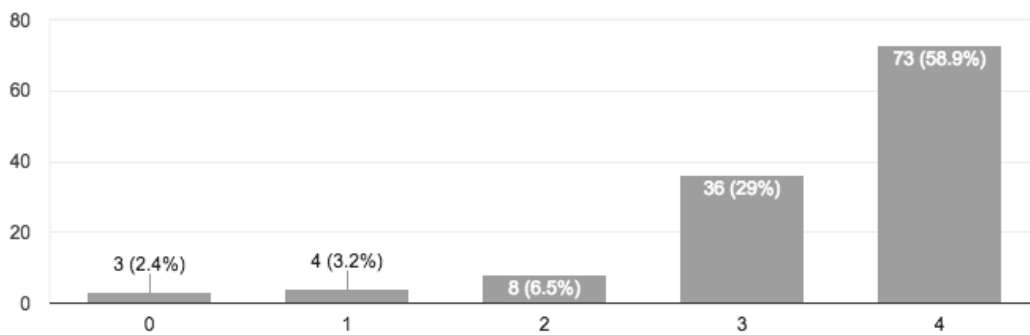
**I enjoy participating in exercise frequently.**

124 responses



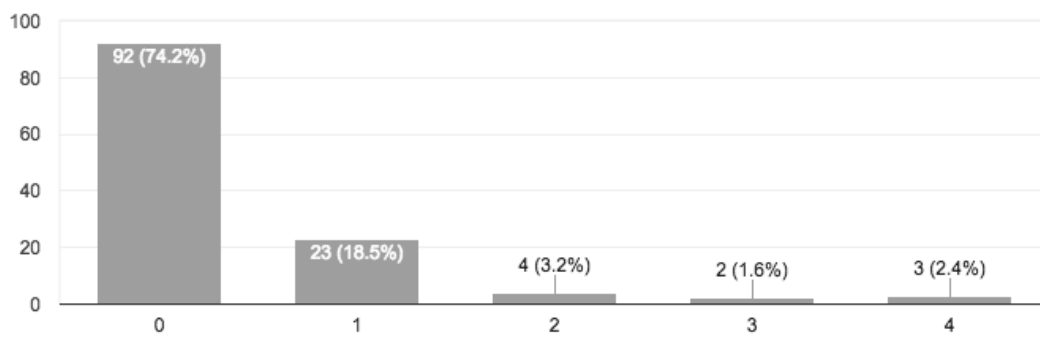
**I participate in physical activity because I understand the benefits.**

124 responses



**I do not understand the benefits of participation in physical activity.**

124 responses



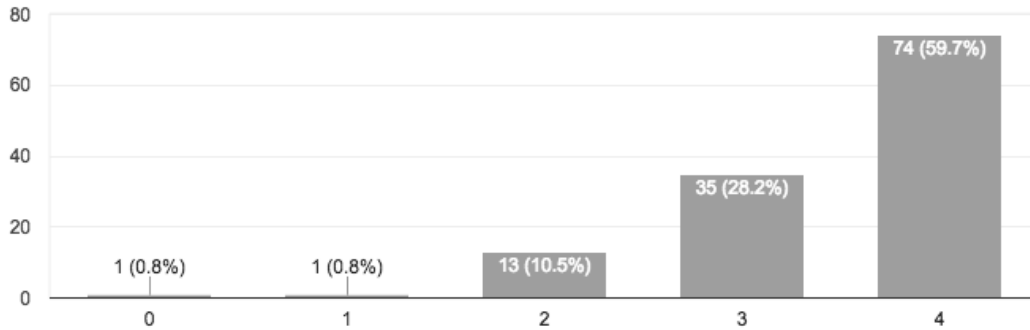


Pre Google Survey

**Ability Questionnaire**

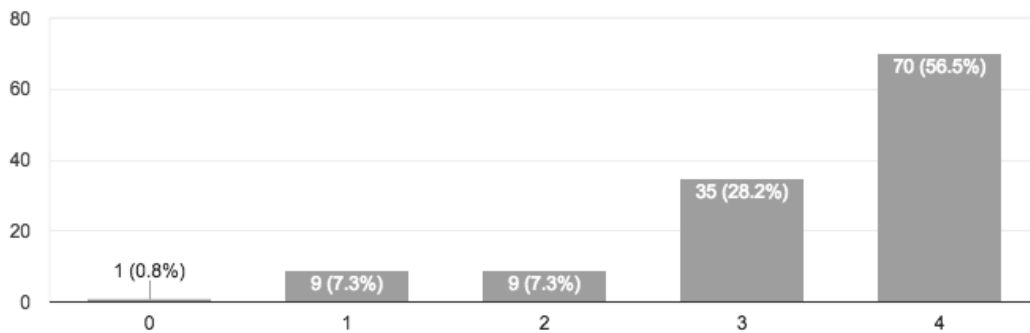
**I can be successful in physical education activities.**

124 responses



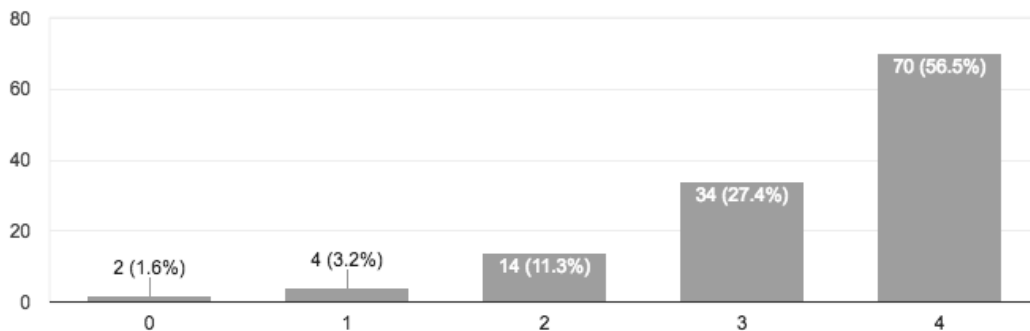
**I can be successful in physical activities outside of class.**

124 responses



**I feel confident in my ability to participate in physical activity regularly.**

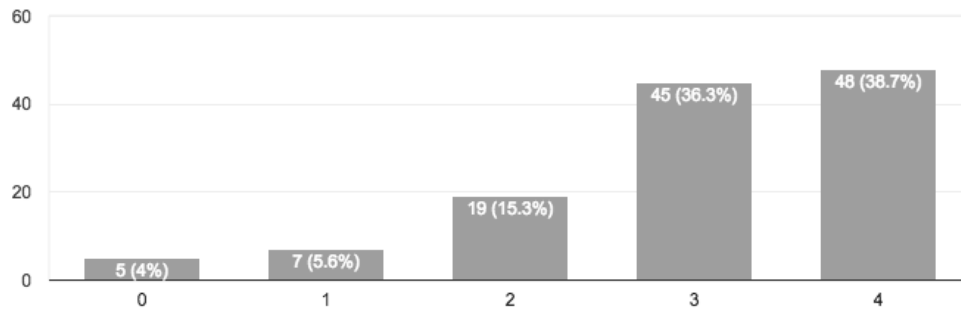
124 responses



Pre Google Survey

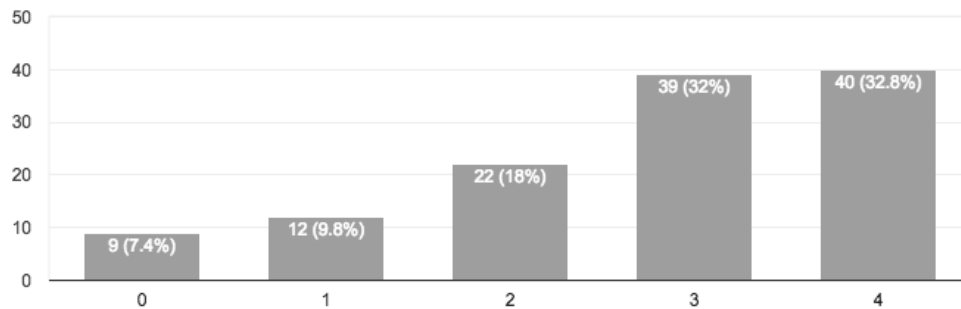
**I feel capable of executing all skills required for successful participation in badminton.**

124 responses



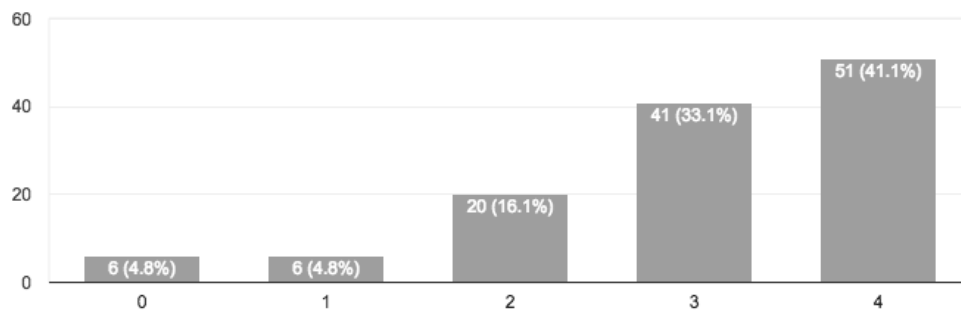
**I feel capable explaining all skills required for successful participation in badminton.**

122 responses



**Enjoyment of units in Physical Education class makes me want to continue similar activities in the future.**

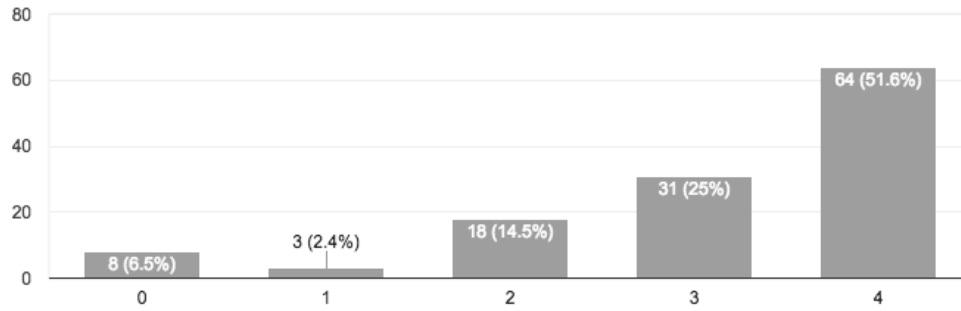
124 responses



Pre Google Survey

**My attitude to the questions above is a result of my understanding of how to participate in physical activity.**

124 responses



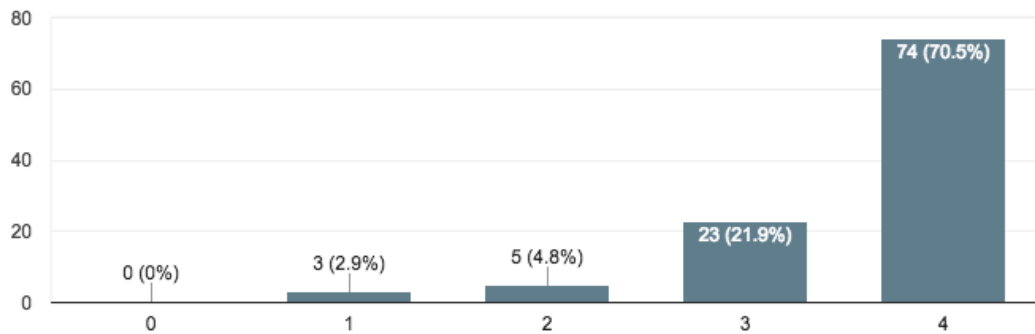
**Results of Post Survey Data**

Post Google Survey

**Attitudes Questionnaire**

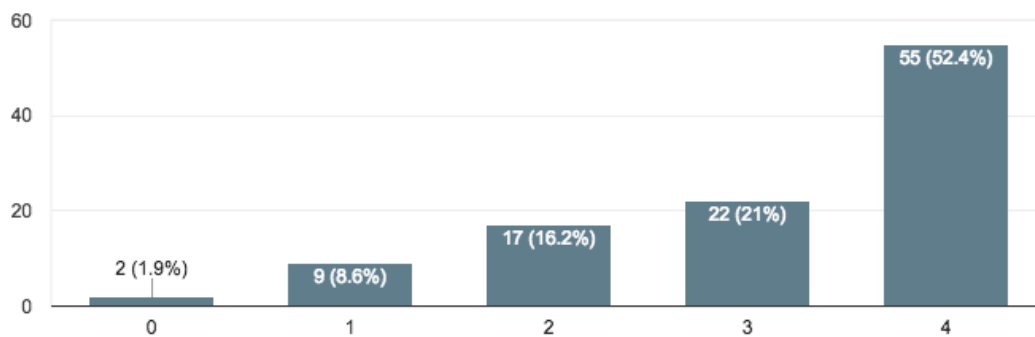
**It's important to me to participate in exercise regularly.**

105 responses



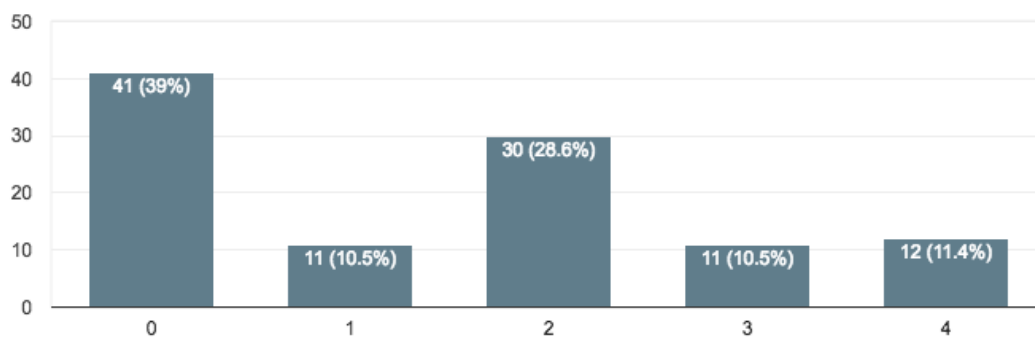
**I have an interest in pursuing physical activities outside of class.**

105 responses



**I participate in physical activity because others say I should.**

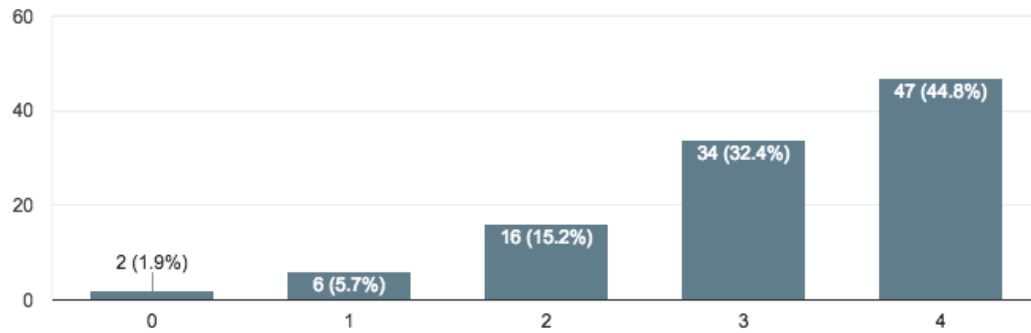
105 responses



Post Google Survey

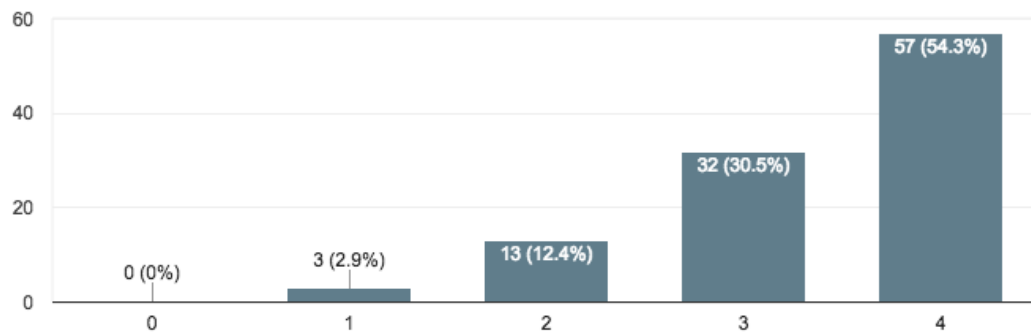
**I enjoy participating in exercise frequently.**

105 responses



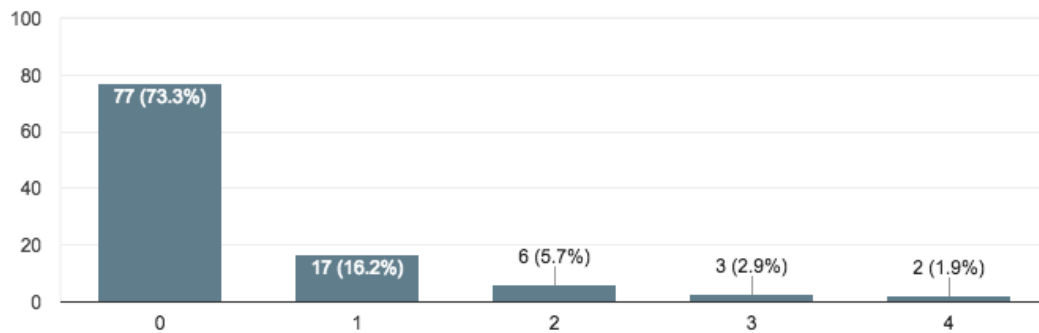
**I participate in physical activity because I understand the benefits.**

105 responses



**I do not understand the benefits of participation in physical activity.**

105 responses

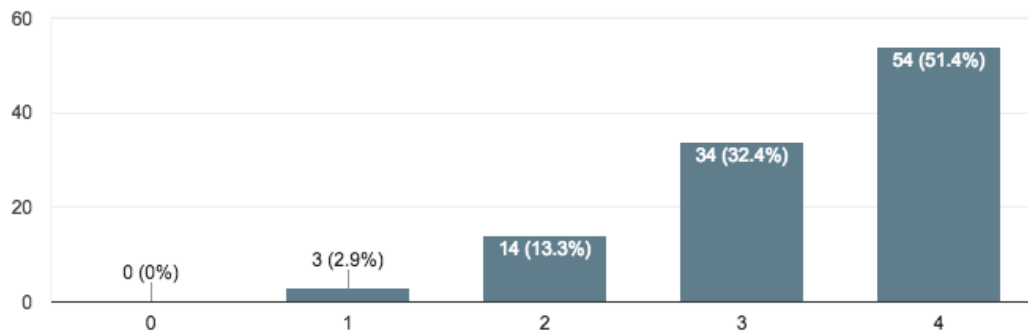


Post Google Survey

Ability Questionnaire

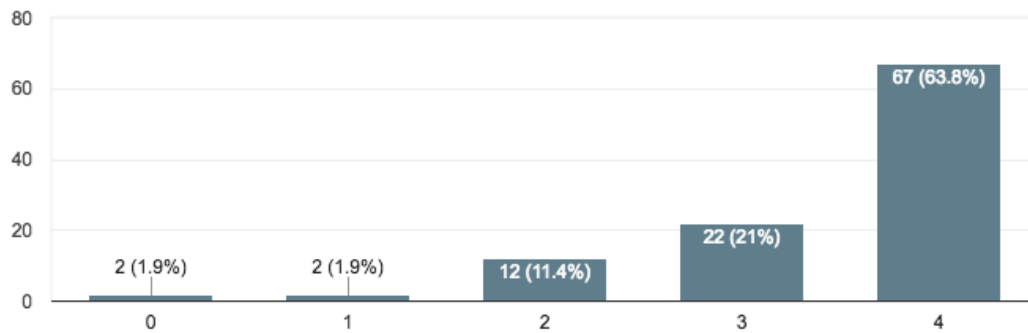
I can be successful in physical education activities.

105 responses



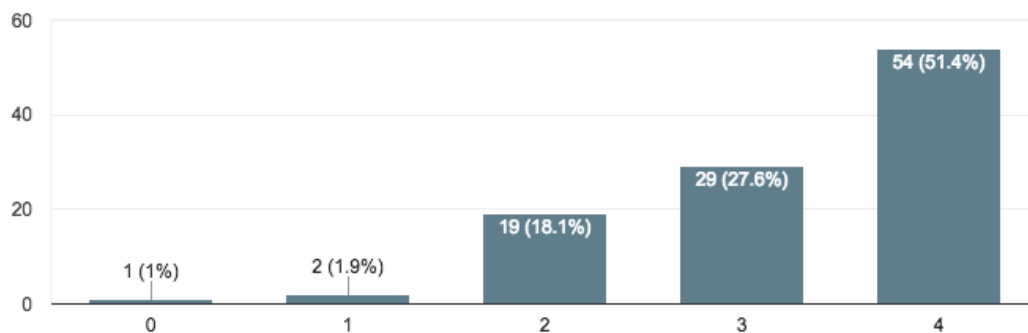
I can be successful in physical activities outside of class.

105 responses



I feel confident in my ability to participate in physical activity regularly.

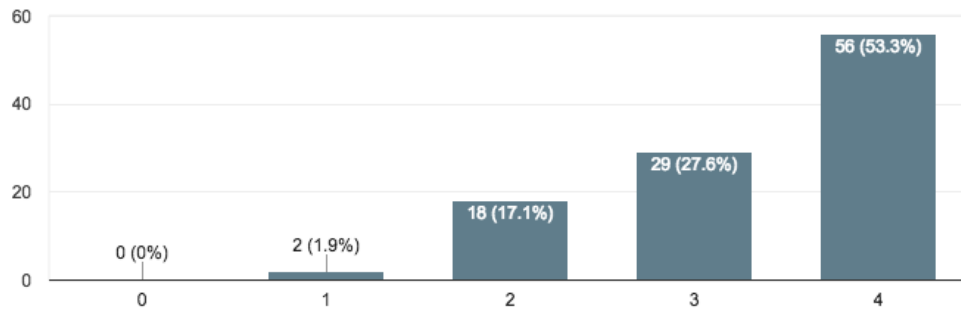
105 responses



Post Google Survey

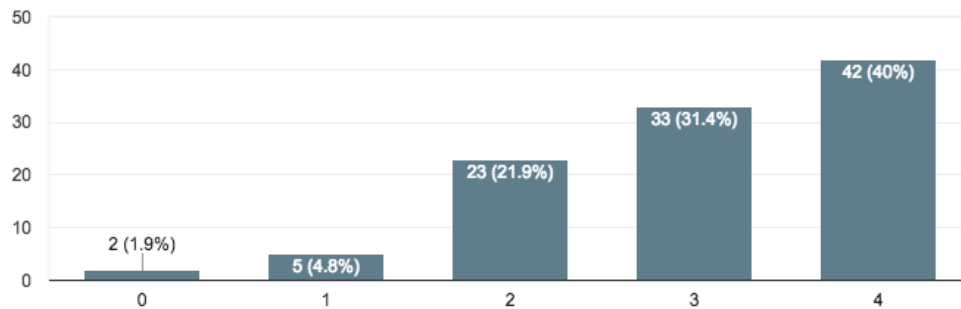
**I feel capable of executing all skills required for successful participation in badminton.**

105 responses



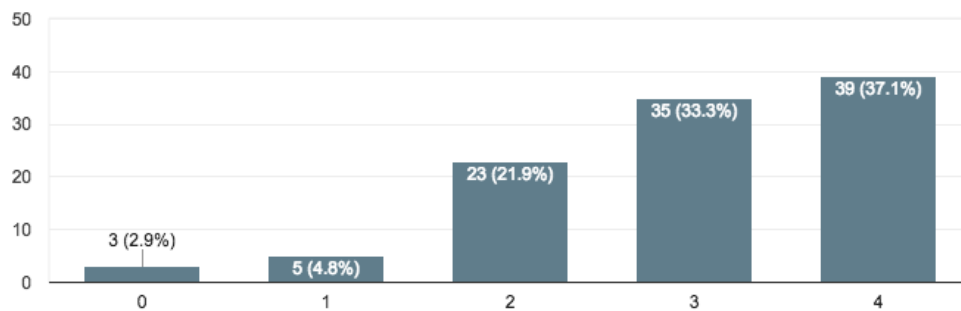
**I feel capable explaining all skills required for successful participation in badminton.**

105 responses



**Enjoyment of units in Physical Education class makes me want to continue similar activities in the future.**

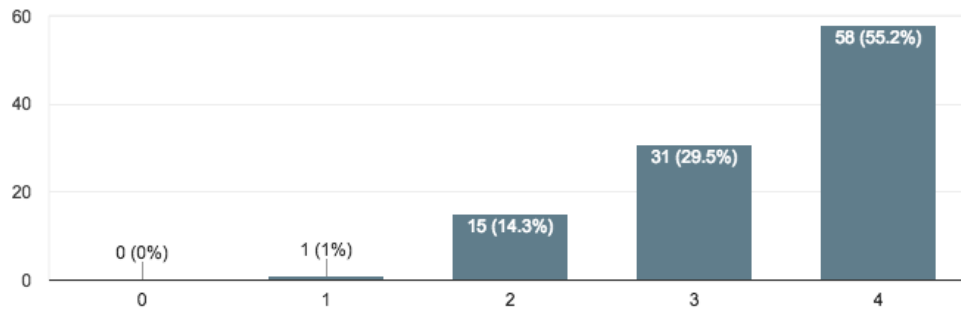
105 responses



Post Google Survey

**My attitude to the questions above is a result of my understanding of how to participate in physical activity.**

105 responses





### **Summary of Major Findings**

Instruction interlaced with various scaffolding techniques such as PowerPoint presentations, note templates, and varied assessments such as performance based assessment attribute to student's ability to recreate physical experiences outside of school as a direct result of quality instruction in the physical education class. When focusing on achievement of the State and National framework, student ability to continue a physically active lifestyle becomes a byproduct of instructional exercises focusing on outcome and performance. As a result of teachers varying instructional strategies they can reach more students, thus resulting in a population with the tools, and attitudes to be more physically vigorous. Instructors are knowledgeable in their subject matter, but delivery is the focus of this project, giving teachers the aptitude to meet the diverse learning needs of their student population. The assumption that assessments should somehow match their real-world tasks is valid and a current topic of interest for the authentic evaluation in every subject-matter area. Test should provide an accurate depiction of the student's skills, and knowledge for a real-world application (Frey, p. 201). Throughout this project, and verified by the pre and post attitude and perceived ability data there is significant evidence that this research is an expansion of individual practices giving each instructor a better way to meet an established goal of the curriculum, lifelong fitness.

### **Comparison of Findings to the Literature**

Much of the literature helped to create the formation of the final curriculum. The literature drew a line between instructional practices utilized and student willingness/ability to continue an active lifestyle. When observing the dataset this

perception from the research is accurate, the overall percentage of students increased in their attitudes and perceived ability in the focus unit's psychomotor and cognitive content; as well as their desire to continue a healthy active lifestyle independent of school when comparing the pre and post survey data. Most of the research had similar findings, but only when using one or two of the instructional strategies (Behrman, 2004; Bilgin, 2017; Green, 2004)

### **Overall Significance of the Study**

This project shows the challenges of physical educators in 2018, in discovering what instructional and assessment practices will better aid their students in living healthier lives in the future. There is currently a paradigm shift in physical education moving toward this standards-based design. This study grants educators with the tools and data to deliver quality instruction, differentiate instruction and assessment while better serving their diverse student populations. This project is to enable teachers to be more efficient in their instruction and adapt lessons for their student's benefit.

**Reference Page**

- Alexandr, A., Sergij, T., & Olena, O. (2016). Role of physical education on the formation of a healthy lifestyle outside of school hours. *Journal of Physical Education and Sport*, 16(2), 335.
- Ankad, R B, et al. "PowerPoint Presentation in Learning Physiology by Undergraduates with Different Learning Styles." *Advances in Physiology Education*, U.S. National Library of Medicine, Dec. 2015, [www.ncbi.nlm.nih.gov/pubmed/26628661](http://www.ncbi.nlm.nih.gov/pubmed/26628661).
- Ascd. "Why Reciprocal Teaching?" *Manipulated Kids: Teens Tell How Ads Influence Them - Educational Leadership*, 1997, [www.ascd.org/publications/educational-leadership/mar97/vol54/num06/Why-Reciprocal-Teaching.aspx](http://www.ascd.org/publications/educational-leadership/mar97/vol54/num06/Why-Reciprocal-Teaching.aspx).
- Assessment, C. (2013). *What is literacy? An investigation into definitions of English as a subject and the relationship between English, literacy and 'being literate'*. A Research Report Commissioned by Cambridge Assessment.
- Behrman, E. H. (2004). Writing in the physical education class. *Journal of Physical Education, Recreation & Dance*, 75(8), 22-26.
- Bilgin, Nevruz, and Oğuzhan Dalkıran. "Examining Attitudes of Students Regarding the Sports Education Model and Direct Teaching Model." *Journal of Education and Training Studies* 5.12 (2017): 79-84.
- California Department of Education. (2005). Physical education model content standards for California ... Retrieved July 4, 2017, from <http://www.cde.ca.gov/be/st/ss/documents/pestandards.pdf>
- Cambridge Academic Content Dictionary*. Cambridge University Press, 2007.
- CDC. "High Quality Physical Education." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 24 June 2015, [www.cdc.gov/healthyschools/pecat/highquality.htm](http://www.cdc.gov/healthyschools/pecat/highquality.htm).
- CDC. "Healthy Schools." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 29 Jan. 2018, [www.cdc.gov/healthyschools/obesity/facts.htm](http://www.cdc.gov/healthyschools/obesity/facts.htm).
- Chappuis, S. Chappuis, J. & Stiggins, R. (2009). The quest for quality. *Educational Leadership*, 67(3), 14. Retrieved from <http://www.ebscohost.com>

- Chepko, S., & Doan, R. (2015). Teaching for skill mastery. *Journal of Physical Education, Recreation & Dance*, 86(7), 9-13.
- Corbin, C. B. (2016). Implications of physical literacy for research and practice: A commentary. *Research Quarterly for Exercise and Sport*, 87(1), 14-27. doi:10.1080/02701367.2016.1124722
- Corbin, C. B. (2002). Physical activity for everyone: What every physical educator should know about promoting lifelong physical activity. *Journal of teaching in physical education*, 21(2), 128-144.
- Crawford, S. (2013). Has the perception of physical education changed in the last 15 years? *Journal of Physical Education, Recreation & Dance*, 84(8), 59-59. doi:10.1080/07303084.2013.827557
- Dyson, B. (2014). Quality physical education: A commentary on effective physical education Teaching. *Research Quarterly for Exercise and Sport*, 85(2), 144-152. doi:10.1080/02701367.2014.904155
- Fairclough, S., Stratton, G., & Baldwin, G. (2002). The contribution of secondary school physical education to lifetime physical activity. *European Physical Education Review*, 8(1), 69-84. doi:10.1177/1356336x020081005
- Ferkel, R. C., Razon, S., Judge, L. W., & True, L. (2017). Beyond" fun": The real need in physical education. *Physical Educator*, 74(2), 255.
- Fredericks, A. D. (2010). *The teacher's handbook: Strategies for success*. Rowman & Littlefield Education.  
[url:https://books.google.com/books?id=10RqquryDUIC&pg](https://books.google.com/books?id=10RqquryDUIC&pg)
- Frey, Bruce B. *Modern classroom assessment*. Sage Publications, 2013.
- Fuchs, L. S., Fuchs, D., Hamlett, C. L., Walz, L., & Germann, G. (1993). Formative evaluation of academic progress: How much growth can we expect?. *School Psychology Review*, 22, 27-27.
- Glatthorn, A. A., Boschee, F., Whitehead, B. M., & Boschee, B. F. (2016). *Curriculum leadership: Strategies for development and implementation* (4th ed.). Thousand Oaks, CA: Sage Publications
- Green, K. (2004). Physical education, lifelong participation and 'the couch potato society' 1. *Physical Education & Sport Pedagogy*, 9(1), 73-86. doi:10.1080/1740898042000208133

- Haerens, L., Kirk, D., Cardon, G., Bourdeaudhuij, I. D., & Vansteenkiste, M. (2010). Motivational profiles for secondary school physical education and its relationship to the adoption of a physically active lifestyle among university students. *European Physical Education Review*, 16(2), 117-139. doi:10.1177/1356336x10381304
- Kohl, Harold W., and Heather D. Cook. *Educating the Student Body: Taking Physical Activity and Physical Education to School*. National Academies Press, 2013.
- Kutty, K. Suresh. *Handbook of Physical Education*. Sports Publication, 2008.
- Lee, A. M. (2004). Promoting lifelong physical activity through quality physical education. *Journal of Physical Education, Recreation & Dance*, 75(5), 21-24.
- Leirhaug, Petter E. "Exploring the Relationship between Student Grades and Assessment for Learning in Norwegian Physical Education." *European Physical Education Review*, vol. 22, no. 3, 2015, pp. 298–314., doi:10.1177/1356336x15606473.
- Lumpkin, Angela, et al. "Focusing Teaching on Students: Examining Student Perceptions of Learning Strategies." *Quest*, vol. 67, no. 4, Feb. 2015, pp. 352–366., doi:10.1080/00336297.2015.1082143.
- McKenzie, Thomas L., et al. "Student activity levels, lesson context, and teacher behavior during middle school physical education." *Research Quarterly for Exercise and Sport* 71.3 (2000): 249-259.
- Melograno, Vincent J. "Grading and report cards for standards-based physical education." *Journal of Physical Education, Recreation & Dance* 78.6 (2007): 45-53.
- Mercier, K., & Iacovelli, T. (2014). Summative assessments: How we improved our high school physical education program. *Journal of Physical Education, Recreation & Dance*, 85(2), 14-18. doi:10.1080/07303084.2014.866794
- Mitchell, D., & Hutchinson, C. J. (2003). Using graphic organizers to develop the cognitive domain in physical education. *Journal of Physical Education, Recreation & Dance*, 74(9), 42-47. doi:10.1080/07303084.2003.10608519
- Mohr, D. J., Townsend, J. S., & Pritchard, T. (2006). Rethinking middle school physical education: Combining lifetime leisure activities and sport education to encourage physical activity. *Physical educator*, 63(1), 18
- NASPE. *Teaching Large Class Sizes in Physical Education*  
[www.shapeamerica.org/publications/resources/teachingtools/qualitytype/upload/Teaching-Large-Class-Sizes-in-PE-2006.pdf](http://www.shapeamerica.org/publications/resources/teachingtools/qualitytype/upload/Teaching-Large-Class-Sizes-in-PE-2006.pdf).

- Sallis, M. (n.d.). The "New PE" – Is it hogwash? Retrieved December 09, 2017, from <http://www.sparkpe.org/blog/the-%E2%80%9Cnew-pe%E2%80%9D-%E2%80%93-is-it-hogwash/>
- Stevens-Smith, D. A. (2016). Physical literacy: Getting kids active for life. *Strategies*, 29(5), 3-9. doi:10.1080/08924562.2016.1205536
- Schwamberger, B., & Sinelnikov, O. (2015). Connecting physical education to out-of-school physical activity through sport education. *Journal of Physical Education, Recreation & Dance*, 86(9), 39-44. doi:10.1080/07303084.2015.1085344
- Smith, J., Scronce, K., Jungling, D., Lamb, B., Winkler, G., & Bean, H. (2010). What role should physical education play in the outside-of-school physical activity environment?. *Journal of Physical Education, Recreation & Dance*, 81(4), 9. doi:10.1080/07303084.2010.10598456
- Spencer, Albert. "Physical Educator: Role Model or Roll the Ball Out?" *Journal of Physical Education, Recreation & Dance*, vol. 69, no. 6, 1998, pp. 58–63., doi:10.1080/07303084.1998.10605577.
- Whitehead, M. (2007). Physical literacy: Philosophical considerations in relation to developing a sense of self, universality and propositional knowledge. *Sport, Ethics and Philosophy*, 1(3), 281-298. doi:10.1080/17511320701676916