

The Virginia Journal



Virginia Association for
Health, Physical Education,
Recreation, and Dance

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VAHPERD Members,

It is my pleasure to serve as the editor of The Virginia Journal (TVJ) and Communicator. Enclosed you will find the Fall 2010 issue. I hope to continue the successful publications of TVJ and Communicator.

However, the success of TVJ and the Communicator only go as far as the members and our submissions. I ask that you continue to submit the quality work you have in the past. Let the state, region and nation know the outstanding work we are doing in VAHPERD. So this is my continued call for manuscripts for the Spring 2011 issue of TVJ and news information for the Communicator. The TVJ and Communicator depend on the submissions from our exceptional professionals working in the field.

So please continue to e-mail me your manuscripts and news by January 15, 2011 as a Word attachment for the two publications. Please follow the manuscript guidelines posted in each issue of TVJ. My contact information is below.

Sincerely,

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About VAHPERD

Mission Statement

VAHPERD is a professional association of educators that advocate quality programs in health, physical education, recreation, dance and sport. The association seeks to facilitate the professional growth and educational practices and legislation that will impact the profession.

VAHPERD Values

- Excellence in teaching, research and educational practices in HPERD and related professions
- Positive efforts to promote our disciplines
- Professional integrity and high ethical standards
- Effective communication within and between members and related professionals
- An active and healthy lifestyle
- Embracing the role of special and diverse populations

VAHPERD Priorities

Member Services
Communication
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President's Message

Vicki Miller

I hope you are having a great start to the school year! I was very fortunate to represent VAHPERD at the Fairfax County Teachers "Back to School" Inservice and share exciting opportunities and challenges to be a VAHPERD member. There were many OHPEP presentations offered during the back to school week(s) and many VAHPERD members participated. Special THANKS to all participants!



The VAHPERD Board and I have been working very hard on this year's Convention. The VAHPERD Convention is November 12-14, 2010, and it is shaping up to be one of the best I have seen. There are 3 pre convention workshops, over 125 sessions, a 5K run, an Amazing Race, Kaleidoscope, President's "Advocacy" Social, and many great exhibits to attend. The location is once again at the Founder's Inn in Virginia Beach and if you did not attend last year, this is a wonderful location that offers lots of space inside and outside for our sessions. Please mark your calendar! It is going to be a great convention!

My theme is "The Future of VAHPERD is in Your Hands" and many sessions have been planned around the future of VAHPERD and the future of our profession. Many of our invited speakers will be talking about the importance of advocacy and how we can make a difference in the future. Some of our invited guests include:

- Curt Hinson – Play Fit Education, Inc
- Dr. Robert Pangrazi – Arizona St. University & GOPHER
- Artie Kamiya – PE Advocate and Great Publishing
- John Bennett – Past AAHPERD President & UNCW
- Tom Byrd – Anthem President (retired) & Fit4Kids
- Bill Sells – Sporting Goods Manufacturing Association (SGMA)
- John Booty – NFL and SGMA
- Fran Bishop – MECKids
- Kristin Brittle – Action for Healthy Kids
- Alison Spencer and RADIO DISNEY!
- Stephanie Smith – Safe Routes to School
- ING – Mark Luckingbill and "running mini grants" recipients
- Awesome presentations by VAHPERD teachers and professors

VAHPERD's 1st General Session will begin on Friday at 12 noon. John Bennett will be our keynote speaker. VAHPERD will recognize and congratulate our "HONOR" award winners, "PIO-NEER" award winners, "Supervisor of the Year" and President's Award winners. On Friday night we will have the President's Social to offer members an opportunity to "CELEBRATE" through networking and socializing. The social will provide opportunities to learn about VAHPERD's advocacy strategies for quality Physical

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President-Elect's Message

Cetan A. Tameris

It is Fall and another school year has begun here in Fairfax County. Teachers are busy planning lessons for the year, and students are eager to learn new concepts and skills in our classes. The President of the United States has declared that September be declared National Childhood Obesity Awareness Month due to the childhood obesity crisis of one in three children being overweight or obese. We of course know that this is something that should be addressed everyday of the year if we are going to make a difference in this epidemic. How do we do that though? The simple answer is not so simple. We need to advocate as a professional that what we do is important in the lives of children, and we need to keep informed on the most up to date knowledge in our fields of expertise.



Advocacy is something that we need to keep in our thoughts everyday as we deliver our lessons. It starts by delivering quality programming. When students have no objective to reach during a lesson or unit of study, they may fail to see the importance in what we are teaching. When students don't see the "worth" in our lessons, then neither will their parents. When parents don't see the value in our occupations, then the public follows suit. We need to make sure that what we teach is dynamic, accurate, and meeting the needs of our ever increasing student populations. Being a member of VAHPERD is a way of doing just that. Many of you have been receiving my bi-monthly messages and thoughts on our profession. Only by advocating for our professions can we hope to make them stronger in the eyes of legislators and the public. Quality programming justifies what we do and what students are learning.

What else can you as educators do to advocate for your profession? It's simple. GET INVOLVED. Join VAHPERD and possibly AAHPERD. Encourage others to do the same. Make presentation at the state, district, or national level. Attend conferences/workshops at the state, district, or national level. Share your knowledge with others in your profession. Contact legislators at the local, state, or national level about maintaining or increasing the amount of health and physical education students receive. Invite those same people to observe quality programming in your district. Take the first steps of involvement and help our professions to move to a higher level in the education of students.

What else can you do? Part of advocating is being knowledgeable about your profession. Attending the state conference this November in Virginia Beach and next year in Reston are good ways of keeping up to date in your profession. I renew my challenge to all members of getting 1 person who has never been a member to join VAHPERD and attend the state conference. Pass this journal on to someone who has not read it before to gain knowledge from the articles within. "We are only as strong as our weakest links. " Attending state/district/national conferences allows our professionals to gain the knowledge that puts us on the "cutting edge"

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Executive Director's Message

Henry Castelvechchi



I hope you are having a great start to the school year! VAHPERD President, Vicki Miller, and the board have been working very hard on this year's Convention. This year's Convention is November 12-14 and it is shaping up to be one of the best I have seen. There are 3 pre-convention workshops, over 125 sessions, a 5K run, cupstacking competition, an Amazing

Race, Kaleidoscope, and many great exhibits to attend. The location is once again at the Founder's Inn in Virginia Beach and if you did not attend last year, this is a wonderful location that offers lots of space inside and outside for our sessions.

Vicki's theme is "The Future of VAHPERD is in Your Hands" and many sessions have been planned around the future of VAHPERD and the future of our profession. Many of our invited speakers will be talking about the importance of advocacy and how we can make a difference in the future. Some of the invited speakers for this year's convention include: John Bennett, AAHPERD Past President; Southern District Past President, Jacque Harbison; Kim Clancy, Fairfax Co. Public Schools; Fran Bishop, MECKids; John Booty, Former NFL; Bill Sells, Sporting Goods Manufacturing Association (SGMA); Tom Byrd, Retired Anthem President & FIT4KIDS; Artie Kamiya, Author and Great Activities Publishing; Dr. Robert Pangrazi, Arizona St. University & Author; Curt Hinson, Play Fit Education, Inc and Pam Powers, NASPE Teacher of the Year.

Make sure to join us on Friday night for the President Social. This year's social will provide an opportunity to network and learn how you can help VAHPERD with our advocacy strategies to promote quality physical education and our fight against childhood obesity. There will be several guest speakers that will motivate you to get involved.

This is going to be a convention that you won't want to miss. Great session, great friends, great prizes, and a great time to be had by all. I look forward to seeing you at Virginia Beach.

Henry



Past President's Message

Dave Sallee



My time in VAHPERD Leadership is ending. It has been eight great years. I have grown as a leader and as a person in many important ways. One of the most important things I have learned is that we have to recognize the efforts people make to support VAHPERD and in turn our own personal growth. I have watched far too many people finish their VAHPERD leadership without letting them know how much

they mean to me and how much they meant to the success of our organization. We all have to remember that it is the people who make an organization great. It is also our experiences with people that shape and mold who we are as leaders and as human beings.

First and foremost I want to thank all of the people who come to VAHPERD events. I recognize the faces that come to every convention. I don't always know your name, but I look for your face. You sit in the same area during General Sessions or gather together to share your friendship. When I see you I feel relieved. I know we have not alienated our base of support. Your presence makes me proud to be a part of VAHPERD. I know you are doing what you can to support your profession. It makes me know that I am doing my part as well.

I recognize the well dressed young people from Virginia State. They are hard to miss. They are always reaching out a hand to help and being a friend to all in leadership positions. I recognize the green jackets from Norfolk State. I have been seeing those jackets since I came to the organization. It is always a comfort to see the students attending the convention. I recognize the students I have the pleasure of working with at Radford University and those that my colleagues work with at JMU. The young faces are always there experiencing the convention for the first time or coming back to support us many times over. They come from many different schools but their passion and energy is the same. We are lucky to have so many great academic mentors and so many great young professionals. Our profession is sound as long as they are supporting us.

I recognize friends and mentors. I see many people that have been involved in VAHPERD leadership and I miss the ones I don't see. I always get a warm smile and an encouraging word from many friends. Judy Johnson always cheers me up and helps me stay focused. Charlotte Kelso always calms me down and helps me relax and have fun. Fran Meyer makes me feel like I can conquer the world. I just look to her example of leadership, poise, and dignity. Leon Bey shows me what it really means to be a mentor to young people. I am in awe of your example. Jeri Lloyd lets me know that there are people who work hard regardless of the situation and will never give up. Bev Zeakes lets me know that people can be highly effective leaders and still be your friend. Kerry Redican helps me know that there are people in my life that have no agenda. They only want to help others succeed.

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Styles of Teaching: Style B - The Practice Style

William C. Thomson, Ed.D., Longwood University

There are many approaches to teaching skills and strategies in Physical Education, and our literature is rich with descriptions of these varied methodologies. One writer in particular, Muska Mosston, notably contributed to Physical Education's body of literature with his detailed descriptions of the characteristics of various teaching methods. In categorizing these "Styles of Teaching" the strengths and weaknesses of each method of teaching a physical education lesson were analyzed. Mosston's analyses showed that for any style a teacher might choose, certain aspects or possibilities of the teaching-learning situation were facilitated while other aspects were diminished. In other words, there are always strengths and weaknesses inherent in any teaching strategy (Mosston, 1992; Mosston & Ashworth, 2002).

This is the second article in a series which offers insight into each of the Teaching Styles (Thomson, 2009). The first article in this series provided background information regarding the Spectrum of Teaching Styles, and a description of how the first style - Style A, or the Command Style - is used. This article recaps the Teaching Spectrum background, then will discuss the next of the Teaching Styles along the continuum - Style B, the Practice Style. Practical examples and suggestions regarding how Style B may be used in its' main form and how it is typically combined with the Style A are also included.

Some background on the Styles of Teaching Spectrum

Joined by colleague Sara Ashworth, Mosston's conception of teaching styles evolved over time (Mosston & Ashworth, 2002). These styles are divided into two main categories. On the one hand are those styles categorized as "Reproduction" styles. The name comes from the idea that in each of the teaching situations in this category, the students try to copy (reproduce) a movement demonstrated by the teacher or a skilled demonstrator, and they are judged to be more successful the closer their actions come to the actions which were demonstrated. Variations occur in the way in which students practice the movement task and the way in which they will receive performance feedback about their movements. The five styles in this category are: the Command Style (Style A), Practice (B), Reciprocal (C), Self-Check (D), and the Inclusion

(E) Style (Mosston & Ashworth, 1994).

The second main category of teaching styles is comprised by what are termed the "Production" styles. The primary characteristic here is that students are asked to perform creatively or to solve a movement problem without prior demonstration. They are asked to figure out a solution with teacher guidance, but not with a direct teacher demonstrated "solution". For example, teams of students in a basketball unit may be asked to create some number of offensive plays to run against a man-to-man defense. The teacher has chosen not to have them copy a prescribed formula, but rather to have them think creatively (and hopefully take more ownership) to figure out how best to attack this particular kind of defense. Table #1 displays each style name along with one distinguishing characteristic of the style.

A brief review of Style A - the Command Style

In command Style teaching, all decisions regarding how skills are to be practiced are made by the teacher. The teacher signals (i.e., gives "commands") to direct the pacing of the practice. For example, a teacher may have students practice passing a soccer ball with a partner, and students are arranged in two lines about 15 feet apart and facing their partner in the opposite line. S/he says to students on one side, "Remember to set your plant foot beside the ball, and contact the ball with the instep of your kicking foot. Ready? Pass". All students then pass the ball across to their partner. The teacher then repeats the cues to the second line, and signals them to pass the ball back. This is indicative of Style A, as students only move or engage in a skill repetition on the command to do so. Style A offers perhaps the most straightforward way of introducing new motor skills to a class. In doing so it allows students to establish correct movement patterns at a learning pace designed to insure that no student is overly rushed for information processing time (Thomson, 2009). However, this methodical pacing can leave some students straining to move at a faster rate. How then can a teacher structure the leaning situation so all students practice at a pace more appropriate to their individual abilities? For the answer, the discussion moves to the next Style along the continuum, Style B, the Practice Style.

Style	Style Name	Characteristic
A	COMMAND	Students only move on signal
B	PRACTICE	Self-paced student practice
C	RECIPROCAL	Feedback from a peer observer
D	SELF-CHECK	Feedback to self
E	INCLUSION	Multiple levels of task difficulty
F	GUIDED DISCOVERY	Learning directed by questions
G	CONVERENT PRODUCTION	Students coverage on one correct answer
H	DIVERGENT PRODUCTION	Multiple correct solutions to problem
I	GOING BEYOND	Students conceive problem and solution

Table 1

Style B - the Practice Style

As in all of the Reproduction Styles, a Style B episode begins with the teacher explaining and demonstrating the skill to be learned and practiced. As in Style A, all students perform the same practice tasks, and the goal is to copy or reproduce the movement as close as possible to the demonstrated model. However, unlike the Command Style, in Practice Style the students will practice at their own, self-selected pace (Mosston & Ashworth, 1994). After explanations and demonstrations of the task (and the drill or activity in which the task is to be practiced) the teacher gives one signal (e.g., "Begin") to all students to begin practicing. Two scenarios depict this style:

Scenario one: tennis forehand volleys

Imagine the lesson objective is for the students to learn how to hit the tennis forehand volley. The teacher gathers the students to explain and demonstrate how to execute this skill. S/He stands near the net and has a student, who is on the opposite side of the net, toss a few balls to her/his forehand side. S/he describes correct technique as s/he steps forward to hit the volley, and repeats the demonstration and important skill cues several times. This teacher then describes how students are to go about practicing the skill. Perhaps each student pairs with another, and they are asked to take turns as both a feeder and hitter: the feeder (F) tosses balls to their partner (P) who hits some number of volleys, just as in the demonstration, and they each take turns in each role. During the student practice time, the teacher (T) circulates through and around the court area, offering corrective feedback and encouragement to all students. Figure 1 portrays a likely arrangement of students as described in this scenario.

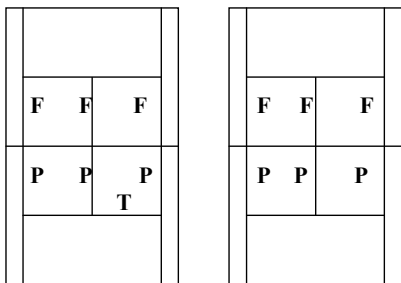


Figure 1

In a given amount of time different students will perform fewer or more practice trials, depending on their abilities. Since the teacher is not leading the group practice and signaling for individual practice trials, s/he is free to circulate to provide feedback to individual students.

Scenario two: exercise circuit with students at multiple fitness stations

Imagine the teacher has placed numerous pieces of equipment around the gymnasium which students will use for various fitness training activities. The activities are arranged as stations the students will rotate through. In one place is a jump rope, in another is a step bench, in another some medicine balls, in another some dumbbells, and so forth. The teacher explains and demonstrates each exercise to be performed at each station, and the rotation order is described. The students are then told to go to a station and get ready to begin the circuit. On the signal "Begin" the students start their exercises. As in the tennis example, the teacher now spends

her/his time circulating throughout the area reminding students of correct technique as well as offering encouragement.

The Practice Style of teaching in Physical Education is probably the most used of all the teaching approaches. Physical Educators will readily identify with the idea of demonstrating a skill and then contriving practice opportunities for students to learn that skill. It is what PE teachers have been doing since PE began! Mosston's descriptions remind us of what we gain, and what we potentially forfeit, when we employ this approach to a lesson or lesson segment.

Strengths of the Practice Style

In Style A - the Command Style - the number of repetitions is limited as the teacher seeks to ingrain correct technique in a skill new to the students. Moreover, the necessity of giving commands and group direction limits the number of skill repetitions and also precludes much, if any, individual feedback to students. In comparison to the noted weaknesses inherent in the Command Style, Style B's self-paced practice is more accommodating to students with different ability levels in the given task. Those at a higher skill level will perhaps do more repetitions (as in the tennis drill scenario) while those who need to work at a slower, more methodical pace can do that as well. Students are neither hampered or restrained (bored) by too slow a pace, nor overwhelmed and frustrated by too fast a pace.

Further, Style B provides opportunity for the teacher to give individual feedback. All students, regardless of ability level, need to receive performance feedback in order to progress in their motor skills and their strategic use of their skills. Not only is feedback, in its' various forms, important for correcting mistakes and supporting appropriate movement, it can also serve as a motivating factor to promote student persistence in striving to learn the task (Magill, 2001). The Practice Style frees the teacher to move about and give attention to individual needs. In doing so, the teacher enjoys much more personal interaction with students than in the Command Style.

Weaknesses of the Practice Style

Interestingly, feedback can also be mentioned among the weaknesses of this Style. Although Style B allows a teacher the freedom to circulate among the students and give feedback, actually giving the feedback can be a problem if the class size is large. Take this example from a golf lesson. Students are arranged along a hitting line as they practice chipping the ball. A typical formation of a golf class hitting drill is shown in Figure 2 below, where (T) indicates the teacher and (X) indicates the students:



Figure 2

It may take the teacher (T) 5 to 10 minutes to get from one end of the line of students to the other. It might even take as much as 20 or 30 minutes! Each student will have good and bad habits, flaws and/or idiosyncrasies to be observed and either strengthened or

corrected. Now, a fundamental principle of motor skill learning (see, e.g., Magill, 1998 for a review of Schema and other motor learning theories) is the more times a skill is practiced the better it is learned. If students practice numerous trials without corrective feedback, and if they are practicing the skill with incorrect technique, that technique becomes the predominant habit of the learner. How often do Physical Educators, as well as athletic coaches, have to try to change the habitual skill patterns of students/athletes who have moderate success with their well-learned but poor technique? As the reader is no doubt aware, learning a skill is hard, but getting learners to change from poor to proper technique can seem even harder.

Styles A and B used in combination: a volleyball example

Imagine a lesson in which the objective is for students to practice and improve in the skill of passing a volleyball using the forearm pass. The teacher instructs the class in correct technique with a description and demonstration of hand and arm position, body alignment, body movement, and correct point of contact. S/he then arranges students into two lines of partners facing each other (as in the soccer example given earlier) in order to begin skill practice. All the balls begin in one line on same side. Figure 3 displays this formation; again, (T) indicates the teacher and (X) indicates students, with (X_o) indicating a student with a ball.

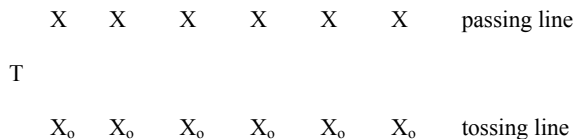


Figure 3

To begin the drill, the teacher may say to the students with the volleyballs, “Tossers, you should use a two-hand, underhand toss to your partner. Try to get the ball to a point below their waist - about mid-thigh or knee level. Passers, show me a good ready position; everyone place one foot slightly forward and bend your knees; that’s it, arms straight and out in front. Remember to contact the ball in the middle of your forearm - don’t hit it on your wrist! Tossers, I just want you to catch the ball when your partner passes it back to you. OK, ready? Toss!”. The tossing line tosses the ball; the passing line passes it back. The teacher repeats the sequence several more times, giving group reminders of correct technique. At some point the line roles are reversed, so all students get passing practice. As the reader will discern, this controlled, methodical approach characterizes the Command Style. Students move or attempt a skill only on a signal from the teacher.

Now, after a few minutes and some number of trials by each student, the teacher then says, “OK everyone, now I want the tossers to toss and the passers to pass just as we’ve been doing, but I want you to go at your own pace. Tossers make sure to give a playable toss; passers work on making an accurate pass using proper contact. After a minute, I’ll ask you to switch roles. I’ll come around a help you. Ready? Begin”.

The activity begins, and the teacher starts to circulate among the students. Being freed of directing each skill repetition, s/he is now able to provide performance feedback to the students: “That’s it, Carlos, good contact point; I like the way you’re bend-

ing your knees and reaching forward, Darius. Amanda, make sure to keep those tosses down around your partners’ knees - yes, that one was better, make them all like that”. Of course, these are just samples of verbal interaction. The good teacher will certainly go into more detail as needed, will stop and remind students of correct technique, will re-demonstrate the skill as is appropriate, and generally “work the room” going up and down the formation in an attempt to help all students improve their skill and get the most out of this particular drill situation.

Summary and suggestions

Describing these teaching Styles should bring attention to the merits and limitations of each one. Style A - Command Style - is useful for introducing a new task and helping students lay a “skill foundation” in learning that task. The pace is slower than in other teaching situations, in hopes of (1) reinforcing the movement cues (cognitive learning) and in (2) allowing the students to become familiar with the movements parameters germane to the task (psychomotor learning). However, that pacing may be viewed as too pedestrian for more advanced students who, able and wanting to move at a faster pace, could become impatient. Further, while group feedback reminders may be given, the teacher should not spend time giving individual feedback to students, as this would further slow and limit the number of practice repetitions the rest of the class would received. For these reasons, the Command Style is not recommended for a prolonged amount of time. Command segments generally should last one to three minutes at most.

Addressing Style A weaknesses (fewer skill repetitions, lack of feedback) are the strengths of the Practice (B) Style. In the Practice Style, students are given a task to practice having first seen it demonstrated and having the important skill cues noted. They are then allowed to begin practicing the task setting their own pace of repetition. This can allow for multiple skill repetitions in a relatively short amount of time, a very good thing from a motor learning perspective. This self-paced practice is more accommodating to different ability levels. Moreover, this Style frees the teacher to circulate and interact with the class, offering important individual feedback.

If, indeed, more skill repetition equates with greater motor learning, the Practice Style offers students the chance to get those numerous reps, as it certainly fosters a greater number of skill repetitions than the Command Style. This style is therefore suggested for use almost any time a new skill is to be introduced to the students. As noted, Style B is the “classic” PE teaching methodology. A happy by-product of this is that, given more activity by students at their self-selected pace, more caloric expenditure should occur!

However, it can be difficult to offer timely feedback to all students in a large class. In some cases there can be a significant lag time between the beginning of student practice and their receiving of this feedback (as noted in the golf example). Students can easily get into the habit of merely performing numerous repetitions without taking time to analyze the components of their movements.

Review of the various Styles of Teaching as characterized by Mosston reminds us as teachers what we gain and lose with each teaching decision we make. Every approach we may choose has some kind of positive aspect, yet it also contains something nega-

tive as well. In the Practice Style, we can foster multiple skill repetitions in a relatively short time, but may not be able to provide important feedback to all our students in a (relatively) immediate sense. How can a teacher structure the learning environment to insure all students get individual feedback in a timely fashion? The next Style along the continuum, Style C or the Reciprocal Style, addresses that very issue. Thus, the next article in this series will discuss the advantages of Style C as well as its' weaknesses.

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President's Message *continued from page 2*

Education, PEP Grants, and solutions for Childhood Obesity. Our guest speakers will motivate you to advocate for our profession on the local, state and national level. MECKids and VAHPERD will sponsor the social. All VAHPERD members are invited! Artie Kamiya will be our keynote speaker for the 2nd General Session. VAHPERD will recognize and congratulate our "Teachers of the Year", "Jump/Hoops for Heart" winners, "College/University HPE Students of the Year", and other awards. Please come and show your support for the leaders in our profession! Thank you!

Gopher is once again sponsoring our closing session. This "Gopher Grand Finale" to the convention will outdo our previous years' closing session by including 3 times as many prizes and 3 times as many winners, by adding a new twist on an old game! Make sure you hang around to win some great prizes! Special "THANKS" to Andy Tupy and GOPHER.

VAHPERD and Walk4Life have partnered to offer grants to VAHPERD members that use pedometers in their PE classes. Eric Carver and Ron Trainum (Digi Dude) will present information and pedometer activities at the convention. You can also check our VAHPERD.org website for more information about the grant—including application, lesson plan and video.

As you can see, there are a lot of exciting sessions at the VAHPERD convention and all year. Please come and join us at the Founder's Inn in VA Beach on November 12-14, 2010.

Sincerely, Vicki

President Elect Message *continued from page 2*

of education. This is what makes our lessons dynamic, new, and exciting for students.

November is just around the corner. I hope that all of you and more will join me on the journey as I become the next President of VAHPERD. I really feel that with all of the attention from the President, the First Lady, and the media on the importance of physical education and physical activity for children that these are "The Best of Times" for our professions. That will indeed be my theme for the conference in Reston in November 2011. I invite all of you ready to journey with me to be presenters or attendees in Reston. Lets make Reston the biggest conference ever in the history of VAHPERD.

Cetan A. Tameris

Past President Message *continued from page 2*

Steve Ames lets me know that support and friendship don't have time clocks. It has been more than 10 years since I was his student. He is still supporting me and helping me learn. I don't get to see Bev Johnson, but she is always with me. I just listen to my heart. I know she is offering an encouraging word.

All of these people and many more are part of my VAHPERD experience. I am forever changed by your spirit of giving. Thanks for eight great years.

My best, Dave

Strategies for Including English Language Learners in Physical Education

Takahiro Sato, Kent State University & Valerie Burge-Hall, Hampton University

Introduction

There are approximately 4.5 million English language learners (ELLs) enrolled in a K-12 public school in the United States of America (USA) (U.S. Census Bureau, 2000). Many of these students are from poor families and have parents who are less fluent in English (Fix & Capps, 2005). Concerns in teaching ELLs in mainstream classes are: lack of time for meeting the unique needs of ELLs (Youngs, 1999); teachers' workloads such as preparing two different versions of academic materials for ELLs and local students (Crosland, & Doumbia, 2003); lack of training to work with ELLs (Verplaetse, 1998); inequities in educational opportunities for all students (Platt, Harper, & Mendoza, 2003; Reeves, 2004); reluctance to work with ELLs (Platt et al., 2003); teachers' misconception of the second language acquisition process (Olsen, 1997; Reeves, 2004; Walqui, 2000); and positive and negative perceptions about the race and ethnicity of ELLs (Harklau, 2000; Vollmer, 2000).

Physical education teachers need to overcome students' achievement gaps by spending extra time preparing course materials, finding cultural relevant pedagogy for ELLs (Ladson – Billings, 1994), create a safe learning environment, and increase social interactions between ELLs and local students through modifying physical education curriculum and accommodating the language and socio emotional needs of ELLs (Glakas, 1993). The purpose of this paper is to describe three different strategies for including ELLs academically and socially in physical education classes.

Integrating Students' Native Languages in Physical Education

Verbal interactive activities help to promote collaboration and understanding of meaning between teachers, local students, and ELLs (Egbert & Simich-Dudgeon, 2001). When ELLs do not demonstrate their communication skills in English, teachers and local students should learn and use students' native languages (e.g., greeting with their native languages or learning the number in the native languages). Sato's study (2010) found that physical education teachers felt the number of social interactions was increased after they began to greet in students' native languages. Generally speaking, there are many teachers who believe ELLs should not use their native languages at their schools (Brittan, 2005). Physical education teachers must be aware in order to gain English proficiency, ELLs must improve their native language proficiency simultaneously.

Verbal interaction may not be effective enough for ELLs in physical education. Physical education teachers should ask local students to create visual aids such as posters or flashcards of activities in their native languages in physical education (Glakas, 1993). They do not need to write complete sentences in their native languages, but specific key words ELLs need to know should be listed on the visual aids. Physical education teachers must be aware that vocabulary such as "football", for example, has multiple cultural meanings. When ELLs acquire English proficiency, it is a culmination of their age, personality, environment, and native

language proficiency (Larsen-Freeman & Long, 1991).

Our research team developed a teaching strategy of social inclusion of ELLs in physical education class by using student's native languages. There are a few key components of how a teacher can organize a physical education class.

1. Physical education teachers select the activities ELLs are familiar with. They need to search cultural activities ELLs like to participate.
ELLs may not be familiar with American football or basketball. Physical education teachers can give assignments to research sports and physical activities of the world. The class can investigate the different cultures and backgrounds of ELLs and increase social interactions (Glakas, 1994).
2. Physical education teachers need to teach the important and essential skills in order to implement activities. Basketball requires, for example, dribble, pass, shoot, and so on. Physical education teachers could create the poster written in their native language for ELLs. They may need to collaborate with ELL teachers for creating the poster.
3. Physical education teachers can require all students, including ELLs, to use several words of the students' native languages (e.g., yes, no, pass, dribble, shoot, and thank you in Spanish or other languages) when they play some games. They can ask ELLs to pronounce those words appropriately. Local students will experience what it feels like when they use different languages in physical education.
4. When the physical education class is over, all students can say "thank you" in students' native languages and shake hands with all teammates. Social interactions are important for developing multiethnic and linguistic diverse relationships in physical education.

Peer Tutoring in Physical Education

Peer tutoring is a strategy that ELLs get practice on academic tasks, continue opportunities for verbal interaction, and gain the reward for correcting academic responses (Arreaga-Mayer & Greenwood, 1986). ELLs struggle with reading, writing, and speaking English as the second language. Physical education teachers need to select three or four local students who have positive attitudes toward helping ELLs as peer tutors. There are a few strategies peers may use to enhance the learning experiences of ELLs in physical education.

1. Glakas (1993) discusses that gestures may be used to explain the key components of activities such as run, jump, throw, catch, or more. Peers need to demonstrate and teach techniques using the simple words in English. They also must keep asking simple questions that require yes or no answers to make sure ELLs fully understand the concepts.
2. During the interviews with secondary public school physical education teachers, the researchers were asked about peer

tutoring strategies. The teachers mentioned that when they taught some rules or routines of games (e.g., soccer, baseball, basketball, or football), their ELLs struggled to take notes. The teachers asked peers of ELLs to put a carbon sheet under his or her notes. At the end of the class, the copied carbon sheet is passed to ELLs. Therefore, ELLs can compare notes with the peer's notes.

3. Physical education teachers should ask ELL teachers to offer tutoring training sessions for all physical education teachers and local students. There are three key points teachers and students need to know about the peer tutoring for ELLs. First, peers should not ask ELLs immediately (Yarmus, 1991). ELLs need extra time for adjusting to the environment. Secondly, peers need to use basic vocabulary to avoid using figurative language, but use many synonyms (Glakas, 1993). Physical education teachers should also encourage peers to study basic vocabulary in the native languages. Thirdly, when peers do not understand what ELLs said, they need to paraphrase and ensure that peers and ELLs understand each other (Bensinger-Lacy, 1991).
4. A principal needs to facilitate improved relationships between ELLs, local students, and teachers (Hawley, Banks, Padilla, Pope-Davis, & Schofield, 1995). Schofield (2004) discusses the principal should encourage teachers to implement cooperative learning and peer tutoring techniques by offering training workshops or develop multiethnic and linguistic diversity committees for identifying and solving problems (e.g., communication barriers, religious conflicts, gender roles, and learning and social patterns). The principal's behavior is considered as a modeling function. The principals may be able to reward the positive practices and behaviors for all teachers.

Culturally Responsive Pedagogy in Physical Education

Culturally responsive teachers not only teach about people who manifest differences, but are also responsive to the cultural identity of learners (Huber, Hieger, & Parscal, 1992). Physical education teachers must design curriculum and programs that are responsive to the educational needs of learners from diverse cultural backgrounds (Spark, 1994). Spark (1994) suggested that physical education teachers should build a culturally responsive instructional approach in physical education.

1. *Build trust.* Physical education teachers must let ELLs know they desire all students successfully complete physical education. Physical education teachers can remember the names of ELLs and pronounce them correctly. This shows the teachers want to develop positive social and academic relationships with students (Spark, 1994). Sometimes, physical education teachers know students' names, but struggle with correct pronunciation. In this case, ask them their nicknames and what they were called in their native countries.
2. *Overcoming anxiety.* ELLs may suffer high levels of anxiety when they feel that language learning is difficult. Physical education teachers need to aim at improving students' self perceptions of proficiency (Chen, 2004). MacIntyre and Gardner (1991) recommended that essay writing (e.g., self

perception about physical education) helps to reduce anxiety over foreign language skills. Physical education teachers should modify test formats such as using weekly mini-quizzes instead of midterm and final tests or develop alternative test methods (e.g., providing two choices instead of four choices of multiple tests in physical education).

3. *Build different methodological approaches.* Physical education teachers need to learn students' various learning styles (Sparks, 1994). For example, the Japanese culture emphasizes visual styles, some other cultures use auditory styles. Physical education teachers should be able to manipulate various instructional methods such as using video clips, poster displays, demonstration, peer tutoring, and skill execution.
4. *Educational model implementation:* Personal and Social Responsibility Model (Hellison, 2003) may contribute to increase students' social interactions among ELLs, local students, and teachers in physical education. Hellison's model (2003) is a humanistic approach which empowers students' responsible decision making about behavior and involvement in physical education as well as their personal lives beyond the urban schools. Ussher and Gibbes (2002) also recommend using the Sport Education Model (Siedentop, Hastie, & van der Mars, 2004) which helps ELLs and local students to gain knowledge, skills, and social interaction. This model stresses that ELLs explore ideas in, through, and about sport and challenge through peer support, peer encouragement and trust relationships (Siedentop et al., 2004).
5. *Observation:* Physical education teachers should observe ELLs carefully and monitor their expressions of comprehension and confusion (Samway, Davies, & Taylor, 2008). They ask and invite other physical education and ELL teachers for help with this process. Physical education teachers should be aware that ELLs may be confused when physical education instructions are not related to students' past learning experiences. For example, a humid summer day is not the best time to talk about snow for ELLs from tropical regions. However when the weather changes in winter, it is appropriate to introduce winter clothing such as boots, jackets, and gloves (Samway et al., 2008).
6. *Preparation:* Good preparation is a key to success for teaching ELLs in physical education. Local students may have negative attitudes or perceptions toward interacting with ELLs. Schools need to develop the guidelines (e.g., code of conduct) against teasing and bullying. All school administrators, teachers, and students understand that all races, cultures, and religions and other diverse beliefs and values are welcome (Samway et al., 2008).

Conclusions

In conclusion, this article encourages physical education teachers, city schools, school administrators, and ELL teachers to solve political, cultural, and social issues and establish the best practices in teaching ELLs. Physical education teacher education (PETE) programs in higher education also must prepare pre-service physical education teachers through the learning experiences of teaching linguistically diverse students in physical education.

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Developing an "Exergaming" Facility: Top 10 Considerations and Lessons Learned

Sandy Wilson, Ed.D., Gibson F. Darden, Ed.D., Tim Meyler, M.A.Ed., Coastal Carolina University

We all likely recognize the recent interest in active gaming technology as a tool to increase physical activity and fitness in individuals. The growing movement of assisting children in becoming physically active and increasing fitness levels through use of technology based interactive game activities is well documented in both popular and scientific literature (Anders, 2008; Hansen & Sanders, 2008; Lieberman, 2006; Yang, 2010). Indeed, active gaming is becoming more visible by its use in K-12 schools, recreation centers and public and private fitness clubs. As a result, many folks have or are considering using gaming technology in their physical education, physical activity or fitness programs.

In 2008, we (Coastal, Carolina University) began developing an exergaming laboratory to enhance our Physical Education Teacher Education (PETE) program. What has resulted is an 800 sq. ft. teaching and research facility to better train future professionals, engage K-12 students and other community members, and promote the study of active gaming technologies in physical education, physical activity, and fitness settings. Currently the facility can accommodate 13 active students with tentative plans to double the size and usage of the facility. The facility was modeled after a few similar labs such as the ones at The University of South Florida and SUNY Cortland.

Through some adventurous trial and error (planned and unplanned), we have learned several lessons about developing exergame opportunities, and the facility is in some ways still a work in progress. In this article, we share our experience in the conception, creation, and utilization of an exergaming facility to serve the university, K-12 public schools, and community. We provide the reader with key considerations and variables that impact the decisions and development of a successful exergaming facility. It is hoped our lessons learned will help potential developers reflect on the role of this tool in their curricula and/or programs.

Lesson 1: Understand what "Active Gaming" and "Exergaming" really means.

We first had to know and understand the terms, the products, and what sort of technologies we were going to work with. **Active gaming** is most simply defined as the joining of eGames (electronic or video) with physical activity, and is an umbrella term consisting of two forms of eGames: **Exergaming** and **Interactive Fitness**. Exergaming are games that involve a screen and/or video game play, and is associated with participants becoming "human joysticks" as they must move their bodies instead of just their thumbs in order to play the games. Interactive fitness activities are active games that do not involve a screen, yet still involve physical activity and eGame play (Hansen, 2010). Exergames include games such as dance games (e.g. DDR), virtual game bikes (e.g. Cateye Gamebikes), virtual sport games (e.g. Nintendo Wii & Xavix), and Balance board simulators (e.g. XrBoard). Interactive fitness activities might include martial arts simulators (e.g. 3Kick & Makoto), Light Space, Sport Wall, or Hops Sports systems. Exergaming methods generally fall into one of five categories of

control, rhythm, machines, workout, and sensory (TEN, 2010). We learned that one game form or method is not inherently superior, and we chose to provide a sampling of types that best met our facility objectives.

Lesson 2: Seek to understand the "Gaming Culture"

Yes, technology has become a fascination to children in the 21st Century. Once we admitted our culture has changed and televisions, computers, iPods and video games have taken over the lives of many youth, we viewed it as our responsibility not to fight it, but to use it to help achieve our goals. We began to see it as not a reason for increased obesity levels but as a tool to increase fitness levels in video playing youth. We sought to at least partially understand the "gamer generation" (Beck, 2004) and how it has changed our environments and workplaces. Do we fully understand our gamer generation? Likely we don't. As teachers, we might say students these days have a very short attention span, but these same students will play video games for hours. Do we know that 83% of American children between the ages of eight and 18 have one or more video game consoles (e.g. Xbox, Playstation, Wii) and that the video gaming industry recently bypassed box office sales with over 12.6 billion in sales? Do we know that in 2008, 26% of Americans over the age of 50 played video games, an increase from 9% in 1999 and that the average gamer is 30 years old and has been playing for 13 years (Hansen & Sanders, 2008)? Finally, we probably do know that gaming participation continues to rise drastically while fitness and physical activity levels have declined. Recognizing this and other cultural shifts, we realized our educational responsibility to align our profession and programs with our society and culture, and meet our students "where they are".

Lesson 3: Consider the Research

There are mounds of anecdotal evidence in support of active gaming, but scientific research on exergaming has only recently emerged. Current research centers around the debate of whether or not exergames provide the recommended daily rates of physical activity, reduce obesity rates, or improve the overall health of children. Thus far, the overall scientific consensus is that exergaming is a viable physical activity option for many children (Chamberlin & Gallagher, 2008; Papasterriou, 2009). Of course, like any form of exercise it may depend on mode and type of activity. With sport games like Wii, the general consensus is that there is physiological benefit, though the general energy and caloric expenditure is slightly lower than participating in the actual sport (Anders, 2008; Wittman, 2010). For some fitness games such as the popular Dance Dance Revolution (DDR), research data indicates some DDR modes are comparable to many other aerobic activities and results in significant weight loss if used regularly (Epstein, et al., 2007; Lieberman, 2006; Tan, et al., 2002). Research reporting positive psychological benefits such as self-esteem, absenteeism, adherence, confidence, and motivation is also encouraging

(Chamberlin & Gallagher, 2008).

Most compelling was our discovery that exergame research has increased dramatically in recent years, with all indications it will continue to do so. And the exergaming industry is specifically designing future games and technology to promote physical activity (Hansen, 2010). As a result, physical activity leaders will increasingly be able to manipulate this form of exercise to maximize health benefits just as we manipulate more traditional forms of exercise. Armed with knowledge of active gaming, a perspective of the gaming culture, and a picture of the emerging research, there remained a missing piece in our process - a philosophical alignment with active gaming.

Lesson 4: Philosophically reflect on active gaming in physical education.

To be sure, not all physical activity professionals support active gaming in programs and curricula. The premise of concern by some physical educators is that active gaming is not central to the mission of physical education. The mission is not to entertain kids or simply keep them physically active during our classes, and we shouldn't always have to invent new ways to entice physically active behavior. The mission instead is to promote and sustain long term healthy habits as a positive contribution to overall life. And it's not what students do when they are in class that is important but rather what they do when they aren't in class (Jeffries, 2007). More specific limitations of active gaming cited by physical education professionals includes the notion that children become dependent on extrinsic rewards (technology) and lose the desire to play for reasons other than the joy of moving; the idea that actual skill development is compromised, failing to create active adults with sport skill competencies to support participation in real sport or leisure activities; the loss of an appreciation for outdoor activity and adventure; and the contention that many affective outcomes are missing in active gaming, including human interactions such as learning how to play nice, respect, cooperate, and compete with other people (AAHPERD, 2009; Jeffries, 2007).

On the other hand, exergaming supporters argue that it turns otherwise sedentary kids (couch potato video gamers) on to physical activity and increases their health and fitness (Hansen & Sanders, 2008). Exergames are viewed as a tool to increase motivation levels by aligning with current interests of children and harnessing the fun factor that comes from exciting challenges (that match participant levels). Arguments are made that exergames align with the notion that videogames are very intrinsically motivating, offering children the "5C's" of control, challenge, curiosity, creativity, and constant feedback (Hinson, 2001). This of course is preferred over the usual extrinsic motivators. As participants increase health and fitness, and this benefit reaches more children more often than does traditional exercise (which many children view as a chore). The report that many students do not like to exercise, but do enjoy playing exergames is common from teachers who use exergaming in their programs (Lawler, 2007). And as traditional exercise has largely been ineffective in curbing the negative obesity and fitness trends of our youth, exergaming is a tool that deserves a place in curricula and programs (Hansen, 2010).

As a faculty, we wrestled with both sides of the argument. In the end, we recognized that both sides were right to an extent, and

that traditional and technological approaches to physical activity have both limitations and strengths. We concluded, as have others, that exergaming should not replace traditional physical activity but play a complementary role that assists programs in meeting their objectives and state and national standards for fitness, dance, and skill competence. Like any other tool in the curriculum, developmentally appropriate practices are essential – maximizing participation, developing meaningful learning experiences, monitoring appropriate physical activity minutes, and cognitively learning about fitness and sport-related components are all essential elements of exergaming. In this way, exergaming has merit in quality physical education/activity programs. In addition, we became convinced that active gaming was not a fad, but was here to stay as a viable form of physical activity. The healthy philosophical debate helped us to conceptualize the proper place and purpose of our facility. Once we were comfortable with the preliminary considerations, we shifted our attention to the practical realities of an exergaming facility.

Lesson 5: Consider the cost and funding

Of course cost is a primary concern with any exergaming technology. Given our limited budget and space, our plan of action was to develop the facility in phases that would progressively allow us to introduce, implement and evaluate exergaming as form of physical activity. For phase I, funds came from a \$2,000 institutional enhancement grant. We purchased a portable, Xavix console system that allowed us to experiment with the technology by taking it to the students in existing classes and infuse exergaming without a dedicated facility. The following equipment was purchased in phase I:

3 Xavix Eyehand games	70.00 each
3 Xavix J-Mat Exercise game	90.00 each
3 Xavix Fitness Boxing game	60.00 each
3 Xavix Music and Circuit	70.00 each
6 Xavix Console Ports	80.00 each
Shipping / Tax	80.00
Total Phase I Cost	2,000

Phase II was initiated with the department earning a university technology grant to increase student learning and academic engagement. We were allotted \$43,000 and an underutilized racquetball court to develop a dedicated, functional exergaming facility. The cost breakdown for phase II was:

IZone (Includes 4 LCD screens, 2 xrboards	24,000
2 Cateye recumbent bicycles, 4 DDR pads	
and 4 PS2 consoles with games	
Treadwall	7,500
Four HDTV's	4,500
Shipping/Tax/Installation	4,500
Racquetball Court Conversion	2,500
Total Cost Phase II	\$43,000

Phase III awaits new institutional facilities and is tentatively planned to capture a second racquetball court for a total of 1600

square feet of permanent space. The exergaming industry recommends approximately 1500 square feet (Hansen & Sanders, 2008). Additional games in phase III will allow for a 25 station exergaming room with a total cost of \$75,000. Our phase-like approach suggests we have learned that a “planful patience” is necessary for funding an exergaming facility.

Lesson 6: Study the space and logistical issues

Certainly we were fortunate to capture a dedicated space for exergaming stations. It is recommended that a minimum 400 lockable square feet be available as in a dedicated facility. This would accommodate a kiosk system (Izone) and would allow small groups (4-8 students) to rotate as stations. Outside walls can easily be used to hang large video screens and create gaming stations to fit program objectives. In addition to square footage, a second consideration is that of noise. An exergame space makes noise both inside and outside the facility. Housing the facility near academic spaces or next to classrooms is problematic. Noise inside the facility can also be a problem at peak usage times. We encourage acoustical design - and have plans to add sound absorbing panels in our facility. Other lessons learned in facility design include the strategic location of electrical outlets, the right amount of lighting (we disconnected some lighting), the placement of electrical cords, and the type of flooring.

The location of the facility needs to be strategic. Several questions need to be answered. Who will be using the facility? What time of day will it be used? Can it be accessible during physical education classes and easily transitioned with other physical activities? Will it be accessed after hours and outside of school time? Is it used for academic classes, recreational programming, community participation, and/or research? Our answers to these questions centrally located our facility in a recreational complex next to other activity spaces (gymnasium, strength training and group fitness rooms) but in close proximity (same building) to academic spaces (labs, offices, classrooms). Interestingly, from what we have learned about facility dynamics, renovated equipment storage rooms may make an excellent exergaming facility in a public school setting.

Finally, a dedicated technology facility requires appropriate supervision and maintenance. We were able to allow a faculty member to serve part-time as facility director, and in conjunction with campus recreation, hire qualified students to help manage the facility. It certainly helps that facility employees are trained in the exergames and can do minor repair or troubleshooting, and conducting training sessions are essential. The importance of maintenance is certainly a common lesson in educational technology.

Lesson 7: Infuse into the physical education curriculum

In schools today, there are numerous examples of implementing innovative technology to enhance learning and K-12 classroom objectives. However, physical education largely has not kept up with using technology to meet program goals (with obvious exceptions). A primary objective of our facility is to model, practice, and explore this infusion of technology for future physical education teachers. Our physical education teacher candidates often find it challenging to incorporate technology for their K-12 physical education students to use. The use of active gaming technologies

is one way teacher candidates can meet local, state, and national technology standards and “demonstrate knowledge of current technology by planning and implementing learning experiences that require students to appropriately use technology to meet lesson objectives.” (NASPE, 2009, pg. 6).

As a place to explore pedagogical strategies for exergaming, one way to infuse this form of physical activity into physical education uses the “field trip” approach (Poole, 2008) in which students travel from their school to visit the facility. Below are some examples of things we have tried:

- Teacher candidates peer teach interactive gaming lessons in methods classes
- Teacher candidates act as instructors to groups of visiting K-12 students
- Teacher interns bring their classes to the facility and infuse exergaming as part of larger unit plan
- Teacher candidates create lessons with “alternative” groups visiting the facility (e.g. home schoolers, adapted physical activity groups, camps/special programs)

The second approach to infusion is Poole’s (2008) “book mobile” approach. This takes equipment to the K-12 schools, which avoids transportation issues. On a limited basis, we have been able to loan our more portable equipment (smaller consoles) to the schools, for example to a local high school special education teacher for lessons, and to an elementary teacher for field day.

While we recognize the real-world financial and transportation issues associated with both of the infusion approaches into K-12 schools, we remain committed to better preparing our teacher candidates and anticipate that active gaming will only increase in educational, public and private settings. To this end, we plan to continue to explore ways to infuse exergaming into physical education.

Lesson 8: Connect with the community and other physical activity (non-PE) programs

Active gaming extends beyond school-based physical education. Many fitness centers and recreation departments are purchasing exergaming equipment to entice new members or retain disinterested exercisers. There is also significant growth in active gaming for the aging populations and individuals with disability (Columna, et al., 2009; Croisant, 2010). One of our objectives was to connect the lab to related programs and individuals in recreation, exercise science, health, and fitness education. Below are examples of community things we have tried:

- General education health and wellness classes schedule visits to the facility during the physical activity and fitness sections
- Exercise science faculty collaborate to conduct studies on the effectiveness of exergaming for fitness benefits for students and elderly populations.
- Athletic trainers use the facility for specific rehabilitation of injured athletes
- Campus recreation programs open hours for all students to access the facility
- Integrate the early morning exercise groups (e.g. aging

- population)
- Open faculty/staff exercise lunch hours in the facility

You can see from the list that the facility is increasingly becoming more interdisciplinary, multi-purpose, and community-based. This of course helps justify its space and expense. Though our facility has yet to reach its full potential, it does help us conceptualize and advocate for phase three funding. While it is easy to compartmentalize exergaming for physical education purposes, we learned the value of broadening our scope, and we encourage potential developers to pursue and market the community outreach aspects of the facility.

Lesson 9: Stay current

As with any technology, we are challenged to keep up with the changes and updates. Fortunately there is an increasing amount of resources to help. Most professional conferences now include sessions on the subject (Smail & Balinsky, 2010; Yang, 2010) and a variety of online resources are available. Perhaps the best “one-stop” for current information is the **TEN** (The Exergame Network, www.exergamenetwork.org) organization, which is a non-profit and non-affiliated advocacy group that maintains current information for interested developers. TEN is comprised of health and fitness practitioners, exergame developers, researchers and clinicians, and individuals devoted to promoting an active and healthy lifestyle by combining video game technologies and exercise. Several blogs (e.g. <http://exergamelab.blogspot.com/>) now assist individuals with making the best choices and keeping exergaming fun and effective. As technologies, research, and pedagogical information improves and increases, it will become easier to stay current. For example, a recent article suggested ways to address student ratios in exergaming stations to increase activity time comparable with traditional forms of exercise (<http://exergamenetwork.blogspot.com/2010/06/ratio-of-students-per-exergame-in-pe.html>).

Lesson 10: Have fun

Above all, we have learned that exergaming succeeds because it makes exercise fun and involving. The exercise seems less difficult and second to the enjoyment of playing. If you are developing exergame facilities or activities, remember to enjoy the process. We hope the lessons we have learned can help you. Let the games begin!

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Radford University Karate College

A Measure of Reaction Times for a Diverse Group of Fifth Grade Boys and Girls

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Introduction

How quickly can you react? This is a question many novice and researchers alike have been interested in for years. Many researchers have attempted to establish significant differences in an effort to identify specific reasons or cause/effect for why one may outperform another (e.g. Gill, D.L. 1978b; Marten, R., Burwitz, L. & Newell, K.M. 1972; Mehrabian, A., 1968). This, in turn, has led to a better understanding and to improved human performance in regards to human reaction times. Key terms used in this study included the following: 1.) Reaction time is the time from onset of a stimulus until the organism responds; 2.) Simple reaction time is the time from the initiation of a suddenly presented stimulus to the beginning of the response; 3.) and Choice reaction time is the reaction time for a task in which a performer has to make one of two or more choices (Magil, 2003).

According to Deary & Der (2005) reaction time variables have been used frequently in studies of human cognitive aging, and research in the information processing paradigm of psychometrics intelligence. Much of that research is said to have been based on biased population samples. However, in 2005 Deary & Der used a large representative sample of West Scotland population. The researchers measured participants at ages 16, 36 and 56 years on simple and choice reaction times. Participants were retested eight years later, at which time they also were measured with the Paced Auditory Serial Addition Test. The simple and choice reaction time means, and their variability's, their stability across 8 years, and their correlations with the Paced Auditory Serial Addition Test were all reported. Simple and choice reaction times became slower and more variable with age. Women from ages 36 to 63 showed more variability in choice reaction time than men, an effect which remained the same after controlling for mean reaction time. Reaction time differences largely accounted for age differences; but not gender differences in Paced Auditory Serial Addition Test scores.

Task switch performance is having the ability to move rapidly between two or more reaction time tasks that are performed on the same set of stimuli (i. e. color discrimination and shape discriminations). Task rule retrieval is a more complex function requiring multiple or mixed process and having the ability to override a previous rule to make the appropriate selection (Meiran, 1996). Crone, Bunge, van der Molen, Ridderinkhof, (2006) tested the hypothesis that developmental changes in task switch performance were associated with changes in facilitating or interfering effect of the previously retrieved stimulus-response association. Three age groups 7-8 year olds, 10-12 year olds, and 20-25 year olds) performed a two-choice reaction time task in which spatially compatible or incompatible responses were required.

The reaction time costs or the length of time between responses associated with switching between tasks were larger when responses were repeated than when responses were alternated. Young children showed a greater cost than adults when switch-



ing between tasks with repeating responses. This age difference between adults and children decreased when the interval between the previous and the upcoming stimulus increased. Task switching costs were larger when switching to the compatible task than to the incompatible task, but this effect did not differ between age groups. Crone, Bunge, findings suggested young children build up stronger transient associations between task sets and response sets, which interfere with their ability to switch to currently intended actions. A similar pattern had been previously observed for older adults (Crone, Ridderinkhof & Van der, Ridderinkhof, Worm, Somsen, van der Molen, (2004), suggesting a common contributor to task switching deficits across the life span.

Deary & Der (2005) reported that from teens to middle age, reaction time slows and becomes more variable. In 2006, Silverman published a historical meta-analysis with over 73-year data. The study investigated whether women had started to close the gap of performance in different motor tasks, with one being visual reaction time. Silverman (2006) concluded that the male advantage in visual reaction time is decreasing, possibly because females are participating more in "fast action" sports and also driving more. In fact, if the rate of decline in the gap continues at the current pace, the gap will cease to exist in the United States in 50-55 years. Silverman (2006) suggested that there are many factors affecting gender differences in motor performance. One difference is the psychology of self-confidence and the increased sense of competitiveness among young women and girls as a result of having increased involvement in sport. This now means that young women and girls can also see themselves on a whole as more physically competent in all sport(s) and motor tasks

Methodology

The purpose of this study was to look for significant differences in the mean scores between 5th grade boys and girls in simple reaction time, one and two choice reaction times. The children also

participated during two difference time frames, one in the morning and one in the afternoon. So—in addition, we also looked to see whether there were any significance between morning and afternoon scores. The participants for the study were twenty fifth grade children, half female and half male who were 11 to 12 years of age. These participants were from a list of student groups whose parents gave written consent for their children to participate. All fifth grade students were given written consent forms to take home; but only 10 boys and 10 girls were randomly selected to participate in the study. The public school in question is a primary grade program that teaches 35 minute sessions of physical education instruction per week to children during the school year.

The Lafayette Multi-Choice Reaction Timer was the instrumentation used to collect data from the 20 participants. The instrument is designed for use with an external timer to measure both simple and choice reaction times. Complete with four (4) stimuli lamps, a Sonalert for auditory stimulation, and five response keys, this unit measured two times. This unit provided contact closure concurrent with stimulus onset and contact release simultaneous with the correct response for an accurate measure of reaction times. The test-retest reliability score for the Lafayette Multi-Choice Reaction Timer was established at choice reaction time (CRT) = .88 and simple reaction time (SRT) = .85.

The participant(s) were seated before the choice reaction time apparatus with their index finger of the right hand and left hand placed on the keys of the extreme right and left side of the console. The researcher stated “ready”, and presented variables for a period of 3-4 seconds prior to the presentation of the visual stimulus. The participant(s) had three sets of reaction time keys to depress. 1.) For the “no choice”, or simple reaction time trials, the participants

were told which hand and finger to use on the eight (8) consecutive trials, 2 trials on each key. 2.) For the “one choice” reaction time condition, four (4) trials were administered. The participant(s) did not know whether to respond with the right or left index finger until responding to the corresponding stimulus was illuminated. 3.) For the “two choice” condition, four trials were administered in which the participant’s index fingers and middle fingers of each hand were placed on the 4 keys of the console. The participant(s) did not know whether to respond with the right or left hand or with the index finger or middle finger until the stimulus was illuminated.

Results

A two-sample unequal variance t-test was used to analyze gender and other differences in relation to the three dependent variables – zero choice, one-choice, and two-choice reaction times. The level of confidence was set at $p > .05$. Table 1 showed the mean scores were very consistent. The students in general were faster in the no choice reaction time scores and were slower in the one and two choice reaction time scores.

The 5th grade girl’s reaction times were very similar when comparing morning scores versus their afternoon scores. On the other hand, boys showed a significant difference in reaction times in all three choice tests in the afternoon (Table 2). There was a significant difference between boy’s morning zero choice reaction scores versus boy’s afternoon zero choice reaction scores ($p < .016$). The one-choice and two-choice tests were also significant when comparing the boy’s morning scores to the afternoon scores ($p < .002$ and $p < .025$ respectively). Considering the performance of boys versus girls on the two-decision test in the morning the girls show a significantly faster reaction time (6%). However, in the zero decision test in the afternoon boys were significantly faster than the girls (16%) ($p < .004$). The girls showed no significant

difference in reaction times between morning and afternoon.

Table 2 showed the t - scores and $p >$ values from paired sample analysis test(s). It showed a significant difference at the .05 level in the boys vs. girls afternoon zero choice reaction times (azrt test) ($t = 3.37$, $p < .004$). It also showed that when comparing the boy’s morning scores to their afternoon scores in all three tests there were significant differences ($t = 2.57$, $p < .016$; $t = 3.33$; $p < .003$, $t = 2.33$, $p < .025$ respectively).

Discussion

The purpose of this study was to investigate the choice reaction times of 5th grade boys and 5th grade girls, measuring and analyzing their morning scores on the three choice reaction time tests versus their scores in the afternoon. An intention of this action research was to add to the reaction time data across genders and compare scores that are administered at different times of the

Table 1
Choice Reaction Time Scores Statistics

Reaction Times	Gender	N	Means	Standard Deviation	Standard Error Mean
Morning zero Chance	Girls	10	.4660	.05296	.01675
	Boys	10	.4440	.05337	.01688
Afternoon zero choice	Girls	10	.4610	.05343	.01690
	Boys	10	.3890	.04149	.01312
Morning choice 1	Girls	10	.5680	.04590	.014551
	Boys	10	.6060	.05441	.01720
Afternoon choice 1	Girls	10	.5570	.06601	.02087
	Boys	10	.5130	.06961	.02733
Morning choice 2	Girls	10	.6420	.4662	.01474
	Boys	10	.6850	.07472	.2363
Afternoon choice 2	Girls	10	.6440	.08644	.02733
	Boys	10	.6150	.05855	.01851

day. Reaction time information is important to physical educator because it is a vital motor ability skill when playing dynamic sports.

Findings of this study revealed that there was a significant difference between the girls and the boys when comparing the azrt (afternoon zero-choice reaction time test) ($p < .004$). The boys outperformed the girls in the azrt by a large margin (16%). Boy's scores also were significant when comparing boy's morning scores to boy's afternoon scores where their reaction time improved on all three tests in the afternoon. Girl's scores showed no significant improvement when comparing morning and afternoon scores.

The Null Hypotheses was rejected based on the findings of a series of statistical tests. There was a significant difference between scores of choice reaction times between 5th grade boys and girls in the morning and the afternoon using an unequal variance t-test ($t = 3.37, p < .004$). The results of the data revealed that boys outperformed girls in the afternoon azrt (zero-choice reaction time test). The authors would like to suggest that traditionally boys have been involved in more "fast action" sports that require quick reaction times. They are also highly involved and interested in video games, which require fast reaction time much like the test that was administered in this study.

Finally, the boys seemed more motivated to do their very best on the reaction time tests even though their times were never revealed to them. The researchers explained to the participants that their reaction time scores would be used to study differences between girls and boys, at the time the test was given. Girls seemed to enjoy taking the test but were not as motivated as the boys. Girls did outperform the boys in the m2crt (morning two-choice reaction time test), but the (6%) difference was not significant at the .05 level. The literature indicated that girls could catch up and

exceed boy's reaction time when more decisions are introduced into the equation (Silverman, 2006).

Recommendations

Due to finding significant differences in the scores this researcher recommends that there be replication and further studies into the differences in the reaction times of children in the morning and in the afternoon. A future study could include a larger random sampling of a student population in the Durham Public Schools and/or schools across the country and or schools across the country. This study could compare genders, races, socioeconomic levels, and education levels of the children and parents. There could be compare and contrast of elementary, middle school and high school aged students.

Another study could look at children who are identified as attention deficit hyperactivity disorder (ADHD). The researcher could examine the test scores on their choice reaction times in the morning and in the afternoon. It would be interesting to look at those children who are medicated, the types of medication and dosages, and when the medications are administered. The researchers could then look for significant differences and draw some conclusions about the choice reaction time scores of children with ADHD and the resultant effects of medication on reaction times.

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Table 2

Statistical tests			
	N	t- score	p> value
Boys vs. Girls scores			
1. mzcert vs. mzcert	20	0.93	0.38
2. m1crt vs. m1crt	20	1.69	0.11
3. m2crt vs. m2crt	20	1.54	0.14
4. azrt vs. axrt	20	3.37	0.004*
5. a1crt vs. a1crt	20	1.45	0.17
6. a2crt vs. a2crt	20	0.88	0.39
Girls scores			
7. mzcert vs. azcert	10	0.21	0.71
8. m1crt vs. a1crt	10	0.43	0.67
9. m2crt vs. a2crt	10	0.06	0.94
Boys scores			
10. mzcert vs. azcert	10	2.53	0.002*
11. m1crt vs. a1crt	10	3.33	0.003*
12. m2crt vs. a2crt	10	2.33	0.002*
Significant at the .05 level*			

Morning zero choice reaction time = (mzcert)
 Morning choice reaction time 1 = (m1crt)
 Morning choice reaction time 2 = (m2crt)

Afternoon zero choice reaction time = (azrt)
 Afternoon choice reaction time 1 = (a1crt)
 Afternoon choice reaction time 2 = (a2crt)

Preparing Students to Do "Everything:" Cost Effective Interdisciplinary Programs Augment HPERD and Mass Communications Students' Internship and Career Option

Leon Wright Bey, Bridgett Robertson, Curtis Walker, Jonathan Young, Virginia State University

As a participant in the 2010 NASCAR Diversity Mentorship Program, Curtis Walker stood on the platform at Richmond International Raceway (RIR) to present an oversized check to two NASCAR drivers. His image was displayed on a huge screen before thousands of fans at the NASCAR Sprint Cup Series Crown Royal Heath Calhoun 400 event. An impressive experience, though by no means an aberration. Since his arrival on the Virginia State University (VSU) campus in 2007, Walker has been working diligently to achieve his professional development goals and in doing so has achieved notable success.

“Throughout my collegiate career, I have been blessed with many opportunities. As a freshman, I wasted no time in getting active. I joined the HPERD/Sport Management Majors Club (Club) and as a sophomore was voted President-Elect. Elected to serve on the Board of Directors (Board) for the Virginia Association of Health, Physical Education, Recreation, and Dance (VAHPERD) as its Student Representative, I was afforded statewide exposure. Internships with VSU Athletics, the Colonial Athletic Association, and the Central Intercollegiate Athletic Association (CIAA) in addition to my participation in the 2010 NASCAR Diversity Mentorship Program at Richmond International Raceway constituted opportunities to leverage others’ expertise and experience while meeting dozens of leading sport professionals,” he stated.

“I was very fortunate to have been afforded these experiences” said Walker.

Stories like Walker’s aren’t unusual at VSU, rather, they are becoming the norm. Much of this type of success can be attributed to interdisciplinary efforts that exist between departments such as HPERD and Mass Communications (MC) which have jointly developed an impressive rolodex of industry supporters and can count a long and distinguished list of leaders in sport management and media among their chief benefactors. More than just advocates, said leaders are providing invaluable resources including, but not limited to internships, consultation, guest speakers, financial contributions, and field-based experiences such as the aforementioned NASCAR program that also included Naleli Murry, a recent Mass Communications graduate (public relations emphasis), among its participants.

In recognition of the synergetic opportunities between sport, entertainment, and media, the two departments jointly presented the inaugural April 28-30, 2010 Communications, Sport, and Entertainment Symposium featuring nearly 30 prominent leaders in sport and mass communications. A robust program consisting of panel discussions and other activities was attended by approximately 200 VSU students.

Nichell Broner, a senior Mass Communications student was one of them.

“The reason I chose my major primarily had to do with the endless amount of opportunity it provides and Virginia State University has done nothing short of ensuring me that I was correct in my decision. Through these types of events, I have become more confident that I can make it anywhere, even in fields I may never have intended on entering or imagined possible,” she said.

Broner’s counterpart, Walker, describes the Symposium;

“We are fortunate that this event is held on our campus. Without proper exposure to individuals, conferences, etc, students will be at a disadvantage when the time comes to start a career.”

Listed below are the symposium participants:

Jeff Anderson, Operations Manager, Radio One
Troy Austin, Director of Athletics, Longwood University
Gabriel Benn, Hip Hop Artist
Boz Boshen, Senior Media Planner, The Martin Agency
James “Plunky” Branch, Entertainer
Christine Brennan, USA Today, Columnist/Commentator, Best Selling Author
Jolie Dalton, President, visAbility Marketing & Consulting Group LLC
Gwen Dandridge, Policy Advisor to the President
Peggy Davis, Athletic Director, Virginia State University
Todd Ervin, Senior Director of Brand Strategy and Market Insights, International Speedway Corporation
Linda Forem, Vice President and General Manager, Radio One
Mark Grant, TV Director, CBS Sports
Allan B. Harvie, Jr., President, ADANAC Sports Management, Ltd.
Derrick “Sugarbabe” Hopson, Remember the Titans, Original Titan
Charles Fields Jackson, President, Charles Fields, Inc.
Marcus Jadotte, Managing Director of Public Affairs, NASCAR
Kenneth Johnson, Founder, Johnson Inc.
Dr. Paulette W. Johnson, Associate Professor, VSU HPERD Department
Michelle Larkin, Marketing/Proposal Coordinator, Crewestone Technologies
Clovia Lawrence, Community Affairs Director, Radio One, Inc.
Craig Littlepage, Athletics Director, University of Virginia
Aime McClain, News Anchor/Reporter, WRIC News 8
Pat O’Conner, Vice President, Chief Executive Officer, Minor League Baseball
Anthony Oppermann, Director of Media, Richmond Flying Squirrels Baseball Club



Curtis Walker presents \$5,000 check to NASCAR driver, David Ragan during the Sprint Cup Series Race at Richmond International Raceway on May 1, 2010.

Todd Parnell, Vice President/COO, Richmond Flying Squirrels Baseball Club

Dr. Linda Person, Associate Professor, HPERD Department, and Women's Tennis and Volleyball Coach

Glen Proctor, Vice President of News, Richmond Times-Dispatch
Don Richards, General Manager, WWBT Channel 12 NBC Television

Tiffany Velez Ridley, Senior Media Planner, The Martin Agency
Stephanie Rochon, News Anchor/Reporter, WTVR News 6

Dr. Zoe Spencer, Teacher of Sociology in the Media Today
Darryl "Blue" Stanton, Remember The Titans, Original Titan

Charles Taylor, CEO, VP Publishing

Glen Terry, Assistant Director of Client Relations, NCAA Eligibility Center

Mikki Turner, Media Guru and Hip Hop Commentator

Court Wills, Sports Journalist, Progress Index

Corey Wynn, Director, Sponsorship Services-Nationwide Series, Roush Fenway Racing

In addition to providing close contact with diverse professionals, hosting such an interdisciplinary event on the VSU campus also offers cost containment benefits and other perks. One particular advantage regards access to internship and mentorship opportunities.

In a market environment with 10% unemployment, real world experience is arguably more important than at any time in recent memory for graduates who aspire to secure gainful employment. Yet at the same time, double digit unemployment parallels the present difficulty some students experience when pursuing internships. The aforementioned market circumstances coupled with the difficulty many students have in landing jobs immediately upon graduation, necessitate perhaps like never before in recent history networking and the value thereto. Networking with leading sport, entertainment, and media professionals is precisely what constitutes a principal objective for the Symposium.

"The people that I have met in sport did not come by luck. The relationships came from ongoing efforts to reach out," offered Walker.

Mike Foss, a Director of Operations for ESPN recently spoke of the value of internships and said that an intern that is on time, has good communication skills, is professional, and has the desire to learn and to adapt is 90% ahead of peers. Tod Caflisch, Vice President of Information Technology for the New Orleans Hornets stated that 'No matter where you are in your college career, just LOOK FOR WORK.' He explained that it could be an unpaid internship or just volunteering ; either way will increase marketability. Dan Purdy, Client Experience Specialist for the Cleveland Cavaliers Operating Company, advised that interns should 'Do things that others don't. Show how hungry you are,'" Walker noted.

Listed below are additional practical tips for internship and/or job seekers:

1. **Be proactive** by exploring mentorship and/or internship opportunities at least two semesters prior to the time that you expect to begin the internship experience. Participating in some type of internship, volunteerism or mentorship (e.g., aforementioned two-day internship program) at an earlier stage (e.g., freshman year) is advisable. Never pass up an opportunity to gain much needed practical experience whether or not academic credit is to be earned.
2. **Be willing to accept paid or unpaid assignments** so that you can gain the experience that you need to position yourself for future employment. Good interns who have a proven track record of success may have the advantage over their competitors with less documented experience.
3. Instead of buying unnecessary items, **invest your money in business cards and apparel** that would be appropriate for an internship interview. Stay away from investing in excessive outerwear that will likely be frowned upon during an interview. Always be neat and clean.
4. Before the internship, **develop a professional resume**, and invest in the development of an electronic portfolio. After the internship, if necessary, hire someone to develop a DVD that will showcase your talents that were produced during your internship. Select appropriate (professional) footage, graphics, and music. Update your written and/or electronic portfolio by including writing samples, projects, and other deliverables that were produced before and after the internship. Be prepared to utilize these resources to present your work to potential site employers.
5. **Stay apprised of internship opportunities** to secure an internship instead of strictly relying upon the internship coordinator to find one for you.
6. It is also a good idea to save your money so that you can afford to **travel to job fairs and professional conferences** around the region. Attending such activities will likely broaden your

network and expand your access to diverse internship and job opportunities.

7. When communicating in speech or in writing, **utilize good grammar** at all times. Be sure that all words are spelled correctly and that slang is not included in any forms of communication. Resumes, e-mails, and text messages that contain misspelled words or syntax errors should not be ignored. Always pay close attention to telephone and e-mail etiquette.
8. **Upon making new acquaintances**, extend an invitation to lunch or dinner regardless of where they may reside. An invite demonstrates your seriousness about a potential internship or job. Remember that people often do business with people they know, so it would be to your advantage to do all that you can to distinguish yourself from your competitors.
9. **Understand all pertinent requirements.** Check with your internship coordinator to be sure to address transportation, housing, financial aid, and other such concerns months before accepting an internship. If applicable, after securing an internship avoid time and other conflicts with your job by prioritizing your obligations. Barring any unusual circumstances, the internship should be viewed as a top priority.
10. **Prior to any interview**, study the history, culture, mission, and present status of the organization. The studious interviewee who can weave key aspects of a company into a discussion will likely make a good impression.
11. **Arrive ahead of time for all appointments** to give a good first impression. Account for potential traffic delays, the need to retrieve a parking pass, and finding your way if lost. Plan to arrive at your destination early and carry a "picture ID" in case you have to go through a security check prior to your meeting.
12. **Be very humble** and don't ever give the impression that you

are too good to do what you might perceive to be menial tasks. Never allow yourself to become bored when you do not have an assigned task. Use that time to create new ideas for the organization and ask for additional assignments.

13. **Arrive early, stay late, and be excited about your experience.** Be excited about the organization and find ways to help it prosper. Industrious interns who are energetic and develop new ideas will likely be granted a favorable letter of recommendation and/or a job offer from a site supervisor who may have been evaluating you from afar.
14. **Be a finisher.** No matter the task, do it well and complete it in a timely fashion. Put forth maximum effort and work as if you expect to be hired.
15. **Be prepared to engage in internships after graduation.** On occasion, the internship assignment may not end until well after you complete your degree. Most hiring is from within. In other instances, it may be to your advantage to seek additional internships after you earn your degree(s). Network with site supervisors during the internship and inquire about potential employment opportunities.

Asked what advice she would give to her peers, Broner says, "Through the variety of internships and symposia offered, I've been fortunate to be taught to broaden my mind. When someone asks me what can you do, **I simply respond, everything!**"

Special gratitude is extended to the following VSU administrators for their great support of the Symposium and other collaborative programs that are presented by the HPERD and Mass Communications Departments: Dr. Weldon Hill, Interim Vice President for Academic Affairs; Dr. Andrew Kanu, Interim Dean of the School of Liberal Arts and Education; Dr. Serena Reese, Chair, HPERD Department; and Dr. Ishmail Conway, Chair, Department of Mass Communications.



Photo by Allan Harvie

Virginia State University Symposium Participants Pose for Group Picture.

(Does not include all participants)

Exploring Physical Education Teacher Candidates' Aquatic Experiences and Reflections at a Historically Black University

Takahiro Sato, Kent State University; Samuel R. Hodge, The Ohio State University; Kache Speight, Valerie Burge-Hall & Joetta Jensen, Hampton University

Introduction

On April 1, 1868, Brigadier General Samuel Armstrong, Superintendent of the Freedmen's Bureau of the 9th District of Virginia, opened Hampton Normal and Agricultural Institute. Today, over 140 years after its inception, Hampton University stands proudly as a private co-educational HBCU in Hampton, Virginia. But there were no undergraduate physical education preparation programs designed for African Americans until 1924 when Howard and Hampton universities established such programs (Hodge & Wiggins, 2010, p.36). Hampton began preparing African American educators in the face of widespread racism in the United States (US), which forbid them admission into predominantly White colleges and universities (Hodge & Wiggins, 2010). Hampton continues it's committed to educating African American/Black citizens as a means to overcoming vestiges of racism and discrimination. To its mission, the university's physical education teacher education (PETE) program prepares teacher candidates to become highly qualified, effective and culturally responsive educators. It is our view that, in addition to popular sport activities (e.g., basketball); PETE teacher candidates should be prepared to design and implement aquatic programs for students in diverse urban and rural schools and communities.

Today, an estimated 60 percent of African American and 56 percent of Hispanic youth ages 6 to 16 years old do not know how to swim (Crary, 2008). These percentages are nearly twice the rate for White youth (Crary, 2008). Further, drowning rates among African American compared to White youth are at a three to one ratio (Centers of Disease Control and Prevention, 2008). Of concern also, a lack of aquatic facilities and educational programs in urban schools and communities limit opportunities for African Americans to acquire aquatic competencies (Crary, 2008).

Over the years, physical education scholars have called for self-reflective journaling as a means to enhance teacher preparation (Tsangaridou & O'Sullivan, 1994). Connolly (1994), and Hodge, Tannehill, and Kluge (2003) explored the use of self-reflection and journaling as part of students' practicum experiences in adapted physical education courses. These researchers found that journaling is a medium for PETE students to identify issues, address problems, and think critically about best practices (Hodge et al., 2003). Extending this area of research to explore the meaning teacher candidates ascribe to their aquatic experiences at historically Black colleges and universities (HBCUs) is warranted. To this need, the purpose of this study was to explore the meaning PETE teacher candidates ascribe to their aquatic experiences at a HBCU.

Method

Participants and research design

The participants were six PETE undergraduate students at Hampton University, who were enrolled in aquatic courses. The research paradigm was qualitative using descriptive methods of self-reflective journaling and interviews (Patton, 1990). This study

was approved by Hampton University Institutional Review Board. All six participants volunteered to participate in this study. The sampling design was convenience; in that, we sampled readily available PETE teacher candidates enrolled in basic and intermediate aquatic courses.

Research site

The program at the university requires all PETE teacher candidates to complete a minimal of two aquatic courses (a basic and intermediate course). Moreover, all undergraduate students at Hampton University are required to complete at least two physical activity courses as part of their curriculum requirements. Both the basic and intermediate swim courses are offered every semester with multiple sections including summer sessions and open to all students enrolled at the university. The aquatic program consists of three distinctive areas of focus: skill development, water safety instruction, and community engagement.

Data Collection

- Data collection involved the PETE teacher candidates submitting their self-reflective journals on a weekly basis to the course instructor. They all voluntarily responded to the weekly journal probes. Moreover, each participant was interviewed twice by the researchers. Within these data sources, the participants expressed their views about the aquatic lessons and challenges they faced. The participants were asked the following types of questions: How did you feel before, during, and after your first aquatic lesson?
- What were your attitudes, expectations, and/or concerns about the aquatic course?
- Have you encountered any struggles learning aquatic skills?
- What meaning do you give to this experience?

The weekly journal reflections and interview transcripts allow the researchers to capture the meaning the participants ascribed to their experiences within the aquatic courses.

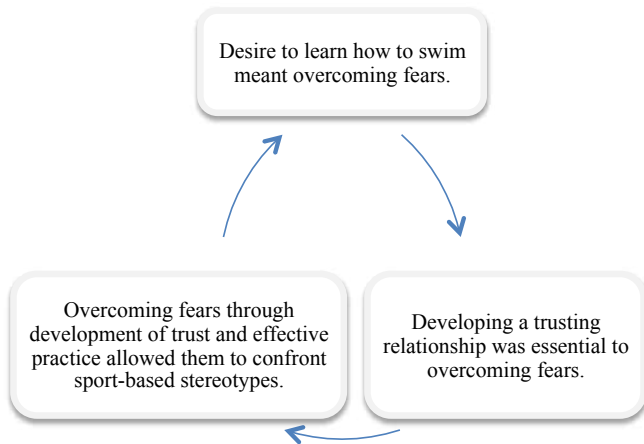
Data Analysis

The data were analyzed using thematic analysis (Giorgi, 1985). Thematic analysis allowed us to organize what was articulated by the participants in their journals and interviews. Giorgi's (1985) procedural guidelines calls for researchers to independently identify themes from the data through carefully and objectively reviewing, coding, comparing, contrasting, and categorizing themes from within the data sources. This meant reading and re-reading the journal entries and transcribed interviews to expose the meaning the participants ascribed to the aquatic experiences.

Results and Discussion

The thematic analysis resulted in the emergence of three inter-related, psychosocial themes, which were: *fear*, *trusting relationships*, and *overcoming* (Figure 1) and are discussed.

Figure 1. Meaning Ascribed to Aquatic Experiences Based on Psychosocial Factors



Fear

Each participant wanted to learn proper swimming techniques, but doing so meant overcoming internal fears. More specifically, four of the participants expressed a fear of the water. These four participants mentioned that they knew some friends who had drowned. Hicks (1988) identified fears associated with swimming to include a fear of deep water, fear about not being able to touch the bottom of the body of water (e.g., pool), and a fear about loss of control. Wallace (1971) asserted that anxiety inhibits learning for the novice swimmer; typical physical indicators were visible rigidity, avoidance, refusal to put the face in water, and clinging to the side of pool. Hicks (1988) asserted that “negative or frightening water related experiences occur most frequently during childhood” (p.15). In our study, three participants stated when they have children in the future, they would like to teach them swimming and water safety techniques. The teacher candidates believed the aquatic courses were the most challenging courses in their academic histories. Yet, they felt that it was necessary for them to overcome aqua phobia, which includes a fear of bodies of water and the potential of suffocating in water (Hicks, 1988).

Only two participants had received aquatic training before entering the PETE program. They had participated on high school swim teams. The other four participants did not know how to swim and were worried about not being able to complete the aquatics courses successfully. They reflected on how the aquatic course instructor had encouraged them to learn about personal flotation devices (PFD) such as a flotation belt, but that they were not allowed to use a PFD during the course. The course instructor explained that by using such devices they may not overcome their fears of swimming independently. The instructor used effective lesson techniques which allowed them to experience “worry free” swimming lessons (Wolf, 1991). Consequently, all six participants learned to trust the aquatic instructor and were well motivated to improve their performance during the course.

Trusting Relationships

The teacher candidates believed that establishing trusting relationships between the aquatic instructor and enrolled students was extremely important to them overcoming initial fears. Four participants felt that had they not established trust in the aquatic

instructor’s competency, they would have considered withdrawing from the course. Although they were not confident about passing the aquatic course at the start of the semester, the aquatic instructor was able to motivate, teach, and encourage them to perform successfully in the courses. They also valued the instructor’s positive attitude toward them and felt she had accommodated their personal histories and limited aquatic experiences, which helped in overcoming water-related fears, while succeeding at helping them become competent swimmers. The aquatic instructor sought to ensure a safe environment at all times. Moreover, there were trained lifeguards who monitored the students during their time in the pool area. The participants explained the aquatic instructor understood what she needed to do in order to teach them to swim. They soon developed trust in her as a highly competent instructor.

Overcoming

All six participants wrote that overcoming race-based sport stereotypes about African Americans is extremely important. They believed that African Americans needed to learn how to swim early on as youths through formal swim lessons. They stated that African Americans were stereotyped as having superior athletic ability for football and basketball. Hodge and colleagues insist that such race-sport stereotypes are pervasive in our society (Hodge, Burden, Robinson, & Bennett, 2008a; Hodge, Harrison, Burden, & Dixon, 2008b; Hodge, Kozub, Dixon, Moore III, & Kambon, 2008c). These authors have asserted that differences in sport participation patterns of Black and White Americans are attributable to socio-cultural and economical factors. They further assert the notion of African Americans possessing ‘natural’ athlete superiority is a myth, originally constructed from race-based stereotypes owing to racism prevalent in America’s society and reflected in the sports world. Race-based stereotyping is the process of accepting generalizations about groups of people based on their race markers (Harrison, Harrison, & Moore, 2002). Commonly, African Americans/Blacks are stereotyped as possessing *natural* physical skillfulness that gives them advantages to excel in sports that require high levels of athleticism such as basketball, boxing, football, and explosive-type track events (Hodge et al., 2008a). On the other hand, the low representation of African Americans in most all other sports is racialized with such misguided stereotypic beliefs as “Blacks can’t swim” (Hodge et al., 2008a). On this point, Hodge et al. (2008c) explained that:

Race-based stereotyping has its roots in the psychological underpinnings of racism, both of which are epidemic to American society and by extension its educational institutions, which influence the beliefs of teachers and students as well as coaches and student-athletes... Educational scholars assert that whenever teachers, coaches, and other school professionals accept and articulate, knowingly or unknowingly, prevailing theories of athletic superiority and intellectual inferiority of Black and Hispanic youth, they do psychological harm to these impressionable youth... (p. 112)

Congruent with this scholarly discourse, the participants in this current study mentioned golf, swimming, and tennis as less accessible in African American communities than in White communi-

ties. They were all pleased to see, albeit a few, African American athletes excel in these particular sports (e.g., Tiger Woods, a golfer, the Williams sisters, tennis players, and Cullen Jones, an Olympic swimmer) to help overcome race-based sport stereotypes. Of particular relevancy to this study, Cullen Jones, an African American male and world class swimmer from the US, qualified for and completed in the 2008 Olympic Games in Beijing, China. This news created much excitement at the time for many Americans. When Jones was officially selected as a member of the US Olympic Swim Team, the media focused on America's reaction to the news. Perhaps because swimming in the US is mostly a White dominated sport and some people mistakenly believe that African Americans are not "equipped" for swimming excellence. Importantly, Jones' swimming excellence gives pause to this misguided stereotypic notion.

Implications and Recommendations

For multiple reasons, PETE programs should offer aquatic courses including the basic instructional courses (i.e., beginners, intermediate, and advanced), water safety and life guard courses, aquatic education or methods courses, and adapted aquatic courses as curriculum requirements in the preparation of teachers. First, offering such an array of aquatic courses would benefit teacher candidates as they would become highly competent and knowledgeable swimmers. In addition to developing swimming competency, they would receive content knowledge and work at developing their pedagogical skills for teaching swimming activities and aquatic sports to school-age youths in urban schools and elsewhere.

Second, such an array of aquatic courses and even offering a minor in aquatics would allow teacher candidates to have careers in teaching and/or coaching aquatic sports (Fawcett, 2001). In constructing an aquatic program, the aquatic instructor should collaborate with the American Red Cross, YMCA, and the United States Lifesaving Association to develop a certification program (Fawcett, 2001). Recognized certification would make the teacher candidates even more marketable; thereby, increasing career opportunities.

Third, we believe that offering adapted aquatic courses would enhance the preparation of teacher candidates at HBCUs. Our position is that youngsters with and without disabilities and their parents should have access and opportunity to participate in aquatic programs within their local communities (American Red Cross, 1992). By preparing teacher candidates in aquatics, the 'pool' of competent and qualified aquatic instructors will increase in urban communities to better meet the needs of individuals with disabilities. Finally, PETE programs should require all teacher candidates to engage in practicum and emphasize self-reflective journaling within adapted aquatic courses as part of their programs of study.

Summary and Conclusions

In this descriptive-qualitative study, we explored the meaning of aquatic experiences for physical education teacher candidates at a HBCU. Participants were six teacher candidates enrolled in aquatic courses. Thematic analysis (Giorgi, 1985) exposed three recurrent themes that ascribe meaning to the experiences in aquatic courses for teacher candidates at a HBCU. Likened to Hodge et al. (2003), we found that self-reflective journaling provides a useful

mechanism for teacher candidates to identify issues (e.g., fear of the water), address problems (overcoming fears), and think critically about their experiences in aquatic courses at a HBCU.

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Teaching Fitness for a Lifetime

Shawn Holt, B.A., MEd, Keeli Comrie, B.S., Health & Physical Educ Teacher, N.B. Clements Junior High School, Prince George Co. Public Schools

Shawn Holt and Keeli Comrie, Health and Physical Education teachers at N.B. Clements Junior High School of Prince George County Public Schools in Prince George County, Virginia, developed a program with a vision of validating the purpose of fitness testing with students and parents in an effort to make fitness testing more meaningful for all. The program is called the Fit in the Zone ~ The Wellness Zone. The title for the program was inspired by Virginia's Department of Education's Wellness-Related Fitness Testing Program. Beginning with the 2007-2008 school year, the N.B. Clements Junior High School's Health and Physical Education Department implemented the newly created Fit in the Zone ~ The Wellness Zone. The Health and Physical Education teachers designed the program to motivate, encourage, and reward students as they strived to improve upon their individual fitness levels throughout the school year. This is the third consecutive year for the program and the mission has remained the same; to keep parents informed and to increase awareness of the importance in striving to maintain overall wellness as a lifelong endeavor. The school's principal and Prince George County's Superintendent support and approve the involvement of students in the FIT in the Zone program as well as the publication of their program at N. B. Clements Jr. High School.

The Importance of Fit in the Zone

Fit in the Zone places an emphasis on students striving to meet the Virginia Wellness Zone Criteria for each fitness test. Students are encouraged to be 'FIT in the Zone' on all 5 of the measurable areas of fitness as well as maintain a healthy Body Composition. In order to ensure that students continually strive to improve or maintain overall wellness, students are measured periodically throughout the school year. Those measurements are then disseminated into data that individual students and their parents can find beneficial in assessing personal fitness levels. The individualized, updated fitness data is sent home each nine weeks. The data is passed along by generated reports, called Fitnessgrams, to the students and their parents, which more effectively promotes, better educates and constantly reminds both of the importance in striving to improve or maintain overall health and fitness.

The Fitnessgram 8.3 Small Network Test Kit and the Fitnessgram 8.3 SQL Server CD program were purchased by the school to be used to provide comprehensive and detailed fitness information that is given to individual students and their parents each of the nine weeks throughout the school year. The Fitnessgram/Activitygram software allows teachers to enter students' data such as: age, weight, height, body composition and fitness test scores and then takes that information and generates an individualized report that summarizes the results of the data. The reports provide an assessment of the student's fitness levels. This includes comparing their previous data with the most recently recorded information as well as providing suggestions for improving or maintaining their current overall wellness.

How It Works

Students are measured each nine weeks, on the 5 fitness tests. Utilizing the Fitnessgram/Activitygram software, students' scores and information are recorded, each nine weeks, so reports can be generated. These reports are then sent home, so parents are notified of their child's current overall wellness throughout the school year. In order to help students improve upon their fitness scores, the Physical Education teachers begin each class with a 'fitness first' concept. This concept implements a variety of exercises focused on improving the students' fitness levels.

Recognition for Students

At the end of the year, all students are recognized by being awarded participation certificates and imprinted rubber wristband with the program's title. Those students whose scores met the wellness zone standards in all 5 major test items during the 4th nine weeks are considered 'Fit in the Zone' and are awarded T-shirts displaying the Fit in the Zone logo.

Promoting Fit in the Zone

The logo designed illustrates a person who is physically active. This logo was created using WordArt and ClipArt. A banner was then made, to hang in the gym, to serve as a visual reminder of the Wellness Zone emphasis. T-shirts were made depicting the logo on the front of the shirts, as well as a pucker print placed on the back of the shirts with the words, 'N.B. Clements Junior High-Physical Fitness Achiever'. In order to help promote the Fit in the Zone, the P.E. department created a '*Survival of the FITTest*' theme that began in the 2007-2008 school year which was to coincide with the Fit in the Zone program. The idea was to engage more students in taking an active role in and outside Physical Education, regarding their personal fitness levels.

Survival of the FITTest

N. B. Clements Junior High School consists of only 8th and 9th grade students. Therefore, each grade level competes against other classes, within their grade level, to determine which team is the FITTest by the last nine weeks. The 8th and 9th grade girls and boys teams that finish 1st, 2nd and 3rd in the *Survival of the FITTest* are awarded prizes.

Individual students, who meet the criteria for being FIT in the ZONE on all 5 tests, are recognized. In addition to those students, those who show improvement, on individual fitness tests, regardless of whether or not their fitness scores fell within the Wellness Zone are also recognized.

The Rules

Each class will have two teams, a girls team and a boys team. In the spirit of the theme, students can make up a team name for themselves.

Five fitness tests, one for each of the fitness testing components, are given each nine weeks. If a student scores within

BOYS AGES	AEROBIC CAPACITY (Pacer Laps & Mile Run)		CURL-UP Cadence	UPPER BODY STRENGTH & ENDURANCE (90' pushup, flexed arm hang, modified pullup)			FLEXIBILITY (Sit & Reach, Shoulder Stretch)		TRUNK LIFT (inches)
	13	41-83	10:00-7:30	21-40	12-25	12-17sec.	8-22	8ins.	Left & Right
14	41-83	9:30-7:00	24-45	14-30	15-20sec.	9-25	8ins.	Left & Right	9-12
15	51-94	9:00-7:00	24-47	16-35	15-20sec.	10-27	8ins.	Left & Right	9-12
16	61-94	8:30-7:00	24-47	18-35	15-20sec.	12-30	8ins.	Left & Right	9-12

GIRLS AGES	AEROBIC CAPACITY (Pacer Laps & Mile Run)		CURL-UP Cadence	UPPER BODY STRENGTH & ENDURANCE (90' pushup, flexed arm hang, modified pullup)			FLEXIBILITY (Sit & Reach, Shoulder Stretch)		TRUNK LIFT (inches)
	13	23-51	11:30-9:00	18-32	7-15	8-12sec.	4-13	10ins.	Left & Right
14	23-51	11:00-8:30	18-32	7-15	8-12sec.	4-13	10ins.	Left & Right	9-12
15	32-51	10:30-8:00	18-35	7-15	8-12sec.	4-13	10ins.	Left & Right	9-12
16	32-61	10:00-8:00	18-35	7-15	8-12sec.	4-13	10ins.	Left & Right	9-12

emphasis on the importance of continued participation in fitness activities in combination with practicing healthy habits to help one to live within the 'Wellness Zone'. During the past 2009-2010 school year, they had everyone striving to move in a healthier direction through the development of yet another Fitness program. This new program, The Clements' Health Challenge, corresponds with their already established Fit in the Zone – The Wellness Zone program.

In order to involve everyone in the lifelong quest for fitness, the Clements' Health Challenge was created for the school's staff. Students and parents were also invited to check out and participate in the challenges which are posted

the Wellness Zone, on a fitness test, they are given 1 point. So each student can earn as much as 5 points each nine weeks. A percentage will then be computed based on the number of students on a team and the number of points their team earned. The following chart displays the Wellness-Related Standards for the fitness tests.

The teams rankings are posted each nine weeks. A yearly average is computed based on all of the nine weeks' percentages in order to determine the Survival of the FITTest 1st, 2nd and 3rd place winners for both 8th and 9th grade girls and boys teams. The most improved teams are also recognized. The most improved score is determined by calculating the team who demonstrated the greatest increase from their 1st nine weeks percentages compared to their 4th nine weeks percentages.

The Success of FIT in the ZONE

Since it has been implemented, 3 years ago, the Survival of the FITTest in conjunction with the Fit in the Zone program has proven to be successful. Tables 1-4 display and reflect the percentages of the girls and boys in both grade levels passing up to 5 fitness tests, when comparing their fitness fall scores to their spring fitness scores, during the past three years.

One Step at a Time

The authors understand the importance of continually striving to improve the effectiveness of their Health and Physical Education curriculum in order to impress upon students and their parents the need for developing and maintaining healthy lifetime habits. The Health and Physical Education department works as a team to accomplish their mission with the support of their principal and superintendent. This department continually places a great

on the school's website. The new fitness program was designed to encourage and help motivate the staff at Clements' to 'Commit to Do Something Fit!' Each month a new Clements' Health Challenge newsletter was published containing 3 new monthly challenges: an aerobic/anaerobic challenge, a muscle toning challenge, as well as a nutritional challenge. As an added feature, the newsletter provides an appetizing 'Try This' healthy recipe. The school's staff was encouraged to participate and to log their daily efforts on a provided Fitness log sheet. Incentives for participation were awarded through such things as monthly drawings for fitness promoting prizes. Specially designed T-shirts with the logo 'Be FITT' were awarded, at the end of the school year, for those who had turned in their fitness log sheets each month. The staffers'

Table 1

Percentage of 9th grade Girls Passing Up to 5 Fitness Tests			
School Year	Fall %	Spring %	Overall Change
2007 - 2008	46.07	62.95	16.88
2008 - 2009	69.2	72.8	3.6
2009 - 2010	64.32	72.12	7.8

Table 2

Percentage of 8th grade Girls Passing Up to 5 Fitness Tests			
School Year	Fall %	Spring %	Overall Change
2007 - 2008	58.63	59.88	1.25
2008 - 2009	66.04	68.15	2.114
2009 - 2010	58.51	67.34	8.83

Table 3

Percentage of 9th grade Boys Passing Up to 5 Fitness Tests			
School Year	Fall %	Spring %	Overall Change
2007 - 2008	50.7	70.55	19.84
2008 - 2009	69.63	71	1.37
2009 - 2010	70.47	76.92	6.45

Table 4

Percentage of 8th grade Boys Passing Up to 5 Fitness Tests			
School Year	Fall %	Spring %	Overall Change
2007 - 2008	63.12	68.7	5.67
2008 - 2009	63.1	70.28	7.185
2009 - 2010	66.32	72.63	6.31

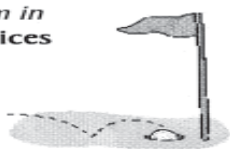
responses have been overwhelmingly supportive and participatory. Topics of conversation around the school typically evolved around how one was doing with the monthly health challenges.

The emphasis of the Clements' Health Challenge was placed on the concept that making even 'small changes' during one's day, can help to promote a healthier lifestyle as well as improve one's overall wellness. Holt stresses that the challenges are for only one month, if it was easy than it wouldn't be called a 'Challenge' and those at Clements certainly demonstrated that challenges are meant to be tackled and conquered, 'one step at a time'.

Overall Wellness is important to all and at all stages in one's life. The Clements' students and staff are moving in the right direction as they strive to work together in establishing healthy lifetime habits. Keeli Comrie has said, "It is our hope that everyone will be encouraged and motivated to make even 'small changes' during their day. Those 'small changes' can help to promote a healthier lifestyle as well as improve one's overall wellness." The Clements' Health Challenge link is located on the school's website, <http://staff.pgs.k12.va.us/~clements/fit.php>. Check out their link for nutrition and exercise ideas which offers a wide variety of challenges that can be helpful for everyone in their quest for a healthier lifestyle. The key is for everyone to be inspired, motivated and encouraged to 'Get Moving'!

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After-and in-School Fitness and Nutrition Programs for Elementary Students

Matt Rearick, Ph.D., John Creasy, Ph.D., Elizabeth Mumaw, Roanoke College; Jack B. Johnson, Ph.D., CSCS, Virginia Military Institute

INTRODUCTION:

In the face of statewide budget cuts in education and the likely changes for physical education as a content area taught in public schools, it is important now more than ever that we as a community explore alternatives to traditional health and wellness educational models. This does not suggest we forego offering and/or emphasizing physical education as a core topic in the schools; nevertheless change is upon us and we must consider how to preserve this important area of every child's education.

This paper outlines a series of successful, alternative health and wellness interventions carried out at the elementary level between 2006 and 2008. The primary motivation for the project was to determine what supplemental wellness experiences are good for kids, staff, and faculty and what can be done with limited fiscal means. Methods in this paper are described in such a way that any school or school district might adopt parts of or the entire program. Our hope is that this project provides the seeds for other programs of its kind in the state of Virginia. We also trust that those individuals and schools already employing much of this in their own schools will come forth and assist in this conversation so Virginia can continue to offer top-notch health and wellness programs in the schools.

PURPOSE OF PROJECT:

The Lewis and Clark Trail Project was designed and implemented in a school system in Pennsylvania between 2006 and 2008 to increase awareness and understanding of the importance of fitness and nutrition to a healthy lifestyle. The primary goal of the project was to weave a series of fitness and nutrition activities into the everyday life of the school. To do this, the theme of walking the Lewis and Clark Trail was used as the project and curricular linchpin. For example, individual classrooms competed to see who could walk the trail the fastest (maps were posted throughout the school and progress reports tallied in the multi-purpose room each week). In addition, the Lewis and Clark Trail served as a relevant historical, geographic, mathematical and language arts topic for everyday coursework. Thus, the project supported the fitness and nutrition needs of the school and its' children as well as provided the opportunity for integrative, contextualized learning.

TARGET AUDIENCE:

Over two academic years approximately 630 students (prepubescent children, grades 3-6) as well as teachers and administrators participated in a series of initiatives as part of the Lewis & Clark project. Participants took part in a school-wide walking program and an after-school wellness club (called "Trailblazers"). Students' also experienced new foods through modified snack and lunch options instituted district wide by the Food Service's Program and within each classroom as part of a fruit and vegetable taste testing segment, similar in spirit to the Take 10! Program (www.take10.net).

SCOPE OF THE PROGRAM:

The school-wide walking initiative required participants (students, teachers, administrators and staff) to wear a pedometer for the entire school week and record the number of steps taken each day. The goal was for a significant number of participants to achieve 10,000 steps a day on average. A secondary goal was to impact the everyday culture of the school by making fitness a priority for everyone, not just for students.

The after-school wellness club incorporated a variety of non-traditional fitness activities based on the successful Sports, Play, and Active, Recreation for Kids (SPARK) after-school program (www.sparkpe.org) as well as healthy snack options; students also assessed their nutrition intake by using the food pyramid (www.pyramid.gov). Finally, Food Services introduced district-wide menu changes (particularly related to ala carte options) and instituted class-wide taste tests of fruits and vegetables one time each semester.

Several important findings from this program included i) significant improvement in student attitude toward physical activity (as assessed by the C-PAAS, Children's Physical Activity Attitude and Self-Efficacy survey); ii) 100% of students improving on 1 or more SPARK fitness tests as part of the after-school program; iii) over 50% (n = 200) of elementary students reaching 10,000 steps per day on average; iv) stabilization or decrease in the average BMI across all students grades 3 - 6; v) over 80 students and 12 teachers involved in the after-school program (≅ 60 days per school year) and vi) over 60% of participants in the after-school program improving food choices (as tracked by the food pyramid).

The Lewis and Clark Trail Project was funded through a local health foundation's competitive grant program. All program components were approved by the School Board of the participating District.

PROGRAM DESIGN:

The Lewis and Clark Trail Project consisted of several fitness and nutrition initiatives rolled into one. The school - wide walking portion was designed around the earlier work of Veugelers and Fitzgerald (2005) and is further supported by the Coordinated School Health approach to Childhood obesity (Schetzina et. al., 2009), which specifically outlines the "America on the Move" approach. Here small changes in activity, monitored by tracking steps through pedometer use, are emphasized. The desire is to institute small, incremental changes in behavior over time where lifelong habits are created and attitude toward physical activity is influenced in positive ways.

The after-school wellness club was modeled after the successful SPARK program, where the emphasis is on creating changes in students' environment and behavior (<http://www.sparkpe.org/>). Fun environments are developed that foster healthy eating, use non-traditional activities and focus on consistent practice of well-

ness, with a particular emphasis on individual achievement over group competition known as “Personal Best”.

The nutrition component of the Lewis and Clark Project took on several forms and was modeled after the earlier work of Wardle and colleagues (2003) and is further supported by the recent Smart Bodies (Tuuri et. al., 2009) program. The Smart Bodies wellness program encourages the experience of tasting new, different and healthy foods. The rationale is the more opportunities children have watching others eat fruits and vegetables, as well as trying new foods themselves, the higher the probability they will develop healthy eating habits. The Lewis and Clark Project also introduced district wide changes in Food Services by instituting the NutriKids software program (<http://www.nutrikids.com>) and the Lunchbox, Point-of-Sale system ().

Special Considerations:

After two years of programming which included both formative and summative assessment, several issues are clear.

- 1.) Teacher buy-in and participation is the key to success in the school-wide walking and after-school programs. Everything starts with the teachers and trickles down to the students. We found these programs work best in an elementary school setting where teachers and students are together for most of the day.
- 2.) All assessment processes should be put in place prior to the beginning of the project and teachers should be trained in how to collect the number of steps taken per student per day. We found this works best when one teacher or administrator is in charge and they facilitate the data collection process among all other teachers. This individual also acts as impromptu motivator and formative assessor; thus problems can be identified and solved quickly.
- 3.) We observed very specific outcome differences across programs; therefore it is likely each had its’ own specific influence on student attitude and behavior. Nevertheless, we suggest a school only adopt one program to start (e.g. taste testing in the classrooms or the after-school program). As these programs become a part of the school’s wellness culture additional programs can be added, particularly more comprehensive ones like the school-wide walking which is more challenging to implement.

Facility and Equipment Needs

- a.) The in-school walking program requires all participants (students, teachers, administrators and staff) to have a pedometer for use during the school week. It requires one individual to oversee data collection from all classrooms at the end of each week.
- b.) The after-school program requires the use of a gymnasium or multi-purpose space, transportation [for various out-of-school activities (e.g., roller skating)] and 3 – 4 staff members to facilitate activities and the healthy snack during this period. Generally the after-school program runs three days per week over ten weeks in the fall and spring, respectively.
- c.) The nutrition components for the in-school and after-school program involve a staff person capable of facilitating the purchase of vegetable and fruit trays for in-school taste tests

(one to two times per year) and the purchase of snacks for after-school program (e.g., granola bars or grapes).

Assessment

It is our recommendation that one individual serve as the overall evaluator for the program. If this is not feasible (fiscally or practically) then one individual from the school, preferably with some experience in data collection, should be recruited. It is important to use formative assessment to track the program’s progress and make needed changes quickly instead of waiting for the program to complete a full yearly cycle. This is more efficient and cost worthy. The Lewis and Clark Project instituted an array of qualitative and quantitative assessment tools to track the program’s progress over time.

For the in-school walking program, students tracked steps taken each day. Generally this was reported and recorded on a tally sheet at the beginning of each school day. All these values were placed in an excel file for tracking. We have also tried another model which only uses pedometers during the school-day; they are handed out and collected within the same day. Both are equally challenging and rewarding methods and both meet our goal of impacting number of steps, awareness of fitness needs and overall attitude in elementary students.

For the after-school program, students took part in fitness testing (muscle endurance: sit-ups and push-ups, and cardiorespiratory endurance: loops) once every two weeks. This data was tracked on individual score cards. Values from score cards were placed in an excel file for tracking. Also, attendance, daily activities and snack options were tracked at each meeting. One time each semester (fall and spring) students self-assessed their own eating habits using the food pyramid (<http://www.pyramid.gov/>). They would track food consumed for a typical day and then set goals for the week. The following week they would track consumption again and look for positive changes in eating habits. Teachers would assist students in looking for positive changes and often would make recommendations for how they could improve even more.

Overall fitness and attitude were assessed by an outside team of college students majoring in health and wellness. This assessment model could easily be done in-house (e.g., with the school’s wellness teacher(s) and support faculty); however if access to a college setting exists, using college students (and appropriate faculty) has been effective for the Lewis and Clark project outlined in this manuscript. The outside assessment team conducted its’ assessment one time in the fall and one time in the spring, as close to the beginning and end of the school year as possible (based on the college academic schedule). Assessment included using a relatively random sample of 3rd – 6th grade students (n = 50 per grade level). Testing occurred over two days of normally scheduled physical education and wellness classes. Elementary students were subjected to a series of fitness assessments including: resting heart rate, height, weight, body mass index (BMI), Percent Body Fat via Bioelectrical Impedance (Raustorp et. al., 2006; Wells & Fewtrell, 2006) and submaximal VO₂ step test (Frances & Feinstein, 1991). Students also took a student knowledge survey (SuperFit Kids Knowledge Test; Serpas-Mott et. al., 1991) and attitude and self-efficacy survey (C-PAAS, Children’s Physical Activity Attitude and Self-Efficacy Survey; Maina, 2002).

NOTE:

We encourage interested schools to seek external funding to support their own fitness and nutrition program. All the programs within the Lewis and Clark Project were supported by a regional health foundation. This health foundation was particularly keen on our overarching project model as well as our assessment and evaluation plan.

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Mariah Burton Nelson, Mary Ann Laverty, Henry Castelvechi, and Vicki Miller at Sen. Mark Warner's office.

Students with Emotional Disturbances Participating in Recess

Matthew D. Lucas, Ed.D., C.A.P.E., Assistant Professor & Brittany Long, Longwood University

Introduction

The participation of a student with an emotional disturbance in recess can often be both challenging and rewarding for the student and teacher. This paper will address common characteristics of students with emotional disturbances and present basic solutions to improve the experience of these students in the recess setting. Initially the definition and prevalence of emotional disturbance will be presented. This will be followed by a discussion of the benefits of the recess setting for the student. Next, as a lead-up to the specific topic of recess for students with emotional disturbances, a discussion of possible modifications and teaching strategies for working with children with emotional disturbances in the classroom will be noted. The article will then address the possible challenges and subsequent modifications and teaching strategies for working with children with emotional disturbances in recess. Lastly, specific methods of proactively including a student with an emotional disturbance in a basketball-related recess activity will be discussed.

Definition and Prevalence of Emotional Disturbance

The Individuals with Disabilities Education Act (IDEA) states children who are determined to have emotional disturbances receive special education services if the disorder affects the educational performance of the child. An emotional disturbance is defined by IDEA as follows:

“(i) The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child’s educational performance:

(A) An inability to learn that cannot be explained by intellectual, sensory, or health factors

(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.

(C) Inappropriate types of behavior or feelings under normal circumstances.

(D) A general pervasive mood of unhappiness or depression.

(E) A tendency to develop physical symptoms or fears associated with personal or school problems.

(ii) The term includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance” (CFR §300.7 (a) 9) (IDEA, 2004).

According to the United States Department of Education (USDOE) approximately 2% of school-age children in the United States have been determined to have some form of an emotional disturbance. In addition to this percentage of prevalence it is important to note the following:

- The actual number of students ages 6-21 being identified and served under the IDEA category of emotional disturbance is less than half the USDOE estimate.
- 8% of students with disabilities fall under the emotional distur-

bance label, the fourth largest IDEA disability category (Taylor, Smiley, Richards, 2009).

Benefits of the Recess Setting for Children

Simply stated, the benefits of the recess setting for children are high. Included in these benefits are both physical and social benefits. In terms of physical benefits, recess has been shown to lead to:

- Improvement of out-of-school activity levels – children usually are involved in physical activities on days in which they participate in in-school physical activities (Dale, Corbin, & Dale, 2000).
- Improvement of general fitness and endurance levels for children (Kids Exercise, 2009).

Recess, as noted previously also leads to a variety of social benefits. Such benefits include improvements in the following social skills:

- Attentiveness (Pellegrini, Huberty, & Jones, (1995)
- Conflict resolution
- Cooperation
- Respect for rules
- Taking turns
- Sharing
- Using language to communicate
- Problem solving in situations that are real (Council on Physical Education for Children, 2001)

One should note that these social skills are of particular importance to an individual with an emotional disturbance.

Possible Modifications/Teaching Strategies For Working with an Individual with an Emotional Disturbance In the Classroom

Because of the common characteristics noted previously in the definition of emotional disturbance, the education of a child with the disorder can often be challenging in the classroom. It is important to note these classroom challenges as they will help form a better understanding of those challenges faced in the specific setting of recess. Common instructional modifications/teaching strategies utilized for children with emotional disturbances in the classroom include the following:

- having a small class size
- exposing students with behavioral disorders to other students who demonstrate appropriate behaviors
- having pre-established consequences for misbehavior, administering consequences immediately, then monitoring proper behavior frequently
- determining whether the student is on medication, what the schedule is, and what the medication effects may be on his or her class demeanor with and without medication - then adjusting teaching strategies accordingly

- using time-out sessions to cool off disruptive behavior and as a break if the student needs one for a disability-related reason
- in group activities, acknowledging the contributions of the student with a behavioral disorder
- enforcing classroom rules consistently
- providing encouragement
- in order to build self-esteem, rewarding more than you punish
- praising immediately at all good behavior and performance
- changing rewards if they are not effective for motivating behavioral change
- being patient, sensitive, a good listener, fair and consistent in the treatment of students with behavioral disorders (General Strategies, 2007).

Possible Challenges & Modifications for Children With Emotional Disturbances In the Recess Setting

As a result of many characteristics associated with the emotional disturbance category, and with an understanding of the challenges faced by these students in the classroom, one should be able to better understand the special challenges faced by a student with an emotional disturbance in the recess setting. An understanding of these factors is especially important in this environment because of the safety concerns that are unique to the recess setting. Failure to address many of the characteristics of a student with an emo-

tional disturbance such as inappropriate types of behavior and a tendency to develop fears could result in injury to the student or peers. Another reason why special consideration should be made to the recess is because this setting provides a unique opportunity for children to practice the social skills necessary to build and maintain relationships, often a problem for children with emotional disturbances (Emotional Disturbance, 2010).

The following chart notes possible challenges associated with children with emotional disturbances and possible modifications to these challenges in recess. It is important to note these modifications are simply the “classroom” modifications slightly altered to the recess setting. It is also important to remember not all of these characteristics are prevalent in all individuals with emotional disturbances and not all of these solutions will be successful when working with all children with emotional disturbances. They do, however, represent a solid foundation. It should also be noted these modifications attempt to develop an environment that is cooperative. Such a cooperative environment would seem to lead to a high comfort level which would in turn seem to be beneficial to many children with emotional disturbances. This is the case as an uncomfortable environment is often characterized by negative psychological and social feelings which can often lead to feelings of a poor self-concept, depression and isolation, withdrawal and paranoia (Emotional Disturbance, 2010). The following chart

Table 1: Possible Modifications/Teaching Strategies for Children with an Emotional Disturbance in Recess

Emotional Disturbance Characteristics (as noted in the IDEA definition)	Possible Modifications in the Recess Setting
An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.	<ul style="list-style-type: none"> ▪ organize all games that require teams – do not allow students to “pick” teams ▪ in group activities, acknowledge the contributions of all students, including the student with a behavioral disorder ▪ provide encouragement to all students
Inappropriate types of behavior or feelings under normal circumstances.	<ul style="list-style-type: none"> ▪ expose students with behavioral disorders to other students who demonstrate the appropriate behaviors ▪ use time-out sessions to cool off disruptive behavior and as a break if the student needs one for a disability-related reason ▪ have pre-established consequences for misbehavior, administer consequences immediately, and then monitor proper behavior frequently
A general pervasive mood of unhappiness or depression.	<ul style="list-style-type: none"> ▪ encourage non-competitive activities as they are less likely to lead to feelings of unhappiness or depression ▪ praise everyone for effort, not simply for success ▪ determine whether the student is on medication, what the schedule is, and what the medication effects may be on class demeanor with and without medication - then adjusting teaching strategies accordingly ▪ in order to build self-esteem, reward more than you punish ▪ change rewards if they are not effective for motivating behavioral change
A tendency to develop physical symptoms or fears associated with personal or school problems.	<ul style="list-style-type: none"> ▪ provide encouragement ▪ be patient, sensitive, a good listener, fair and consistent in your treatment of students with behavioral disorders

notes modifications stated in *Strategies for Teaching Students with Behavioral Disorders* (2007). For the purpose of this article, the authors have aligned each of these modifications with the characteristics of emotional disturbance noted in previously in the IDEA definition of the disability category.

Methods of Including a Student with an Emotional Disturbance in a Basketball-Related Recess Activity

For the purpose of discussion of including a student with an emotional disturbance in recess, the class would be participating in a simple activity in which students are divided into groups of approximately five, each group at its own basket. The groups will be shooting, one student at a time, from marked spots on the floor. The other four group members obtain the rebound, pass to each other, and back to the shooter. Each shooter will shoot for one minute before rotating to another shooter. The skills that will be practiced are shooting, rebounding, passing and cooperation. To appropriately include an individual with an emotional disturbance the following modifications should be made. Before beginning the activity, the teacher should choose the groups so as no one is “left-out” or “picked last”. The groups should be evenly divided in terms of skill so as not to have one group feel discouraged for poor performance. It is to be remembered this will allow students with behavioral disorders to be exposed to other students who demonstrate appropriate behaviors. The teacher should model the correct procedure, including behavior, during a demonstration of the class activity. The teacher should also make it a point to provide constant encouragement to all students and praise effort, not simply success. It is also important to note that score is not to be kept as non-competitive activities are less likely to lead to unhappiness or depression.

Conclusion

The participation of a student with an emotional disturbance in recess can often be both challenging and rewarding for both the student and teacher. The rewards can manifest themselves in the ability of the teacher to guarantee the safety of all students in an instructionally sound environment. This article has hopefully addressed some basic concerns and solutions to improve the recess setting of students with emotional disturbances.

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The Virginia Journal is published twice yearly (Fall and Spring) by the Virginia Association for Health, Physical Education, Recreation and Dance. Deadlines for submitting materials for inclusion in the spring and fall issues are January 15th and July 15th respectively. Manuscripts should be sent to Dr. Michael Moore, TVJ editor, by email in an attached WORD document. Each e-mail attachment should not be greater than 4 MB. In submitting a manuscript, the author affirms that it has not been published or accepted for publication elsewhere, unless otherwise stated in writing.

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Manuscripts follow the form of the Publication Manual of the American Psychological Association and must be typed on 8 ½ by 11 inch paper. The attached manuscript must be double spaced except that direct quotations of three or more lines in length are to be single spaced and indented. Manuscripts should not exceed 10 double-spaced pages of narrative including the citation page. Pages should be numbered consecutively. The name and institution of each author are inserted on a title page but not on the narrative. There should be provided on the title page biographical information on each author. This biographic information should include name and position at time of manuscript submission.

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References should be listed at the end of the manuscript and should be arranged in alphabetical order. Each reference cited in the article must be listed, but only those cited should be included. Sources should be cited by placing the author's name and date of publication followed by a page number when appropriate in parentheses: i.e., (Cowlick & Rice, 2003). The reference should be cited following the quote or fact noted. References listed at the end of the article should contain the following information:

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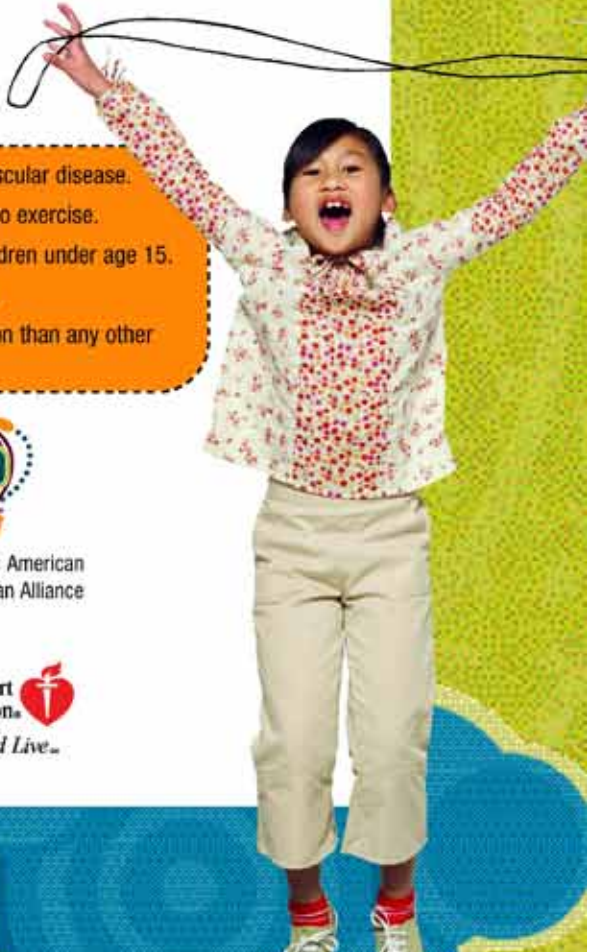
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