Sponsor Message: SPARK.....3

Journal Submission.....4

Teaching Tips.....5

Adults' Attitudes Toward Teen Pregnancy.....8

Nurturing Creativity: Using Improvisation as the Warm-Up.....15

Head, Heart, and Hands: Integrating STEM Curriculum with Physical Activity.....16

Perspectives.....27

Emerging Leaders.....28

White House: Press Release.....31

The Georgia Association for Health, Physical Education, Recreation and Dance, Inc. is affiliated with the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) and is in the Southern District of AAHPERD.

GAHPERD Journal

2013

Volume 45

Issue 2



Mission Statement

GAHPERD, Inc. is a non-profit organization for professionals and students in related fields of health, physical education, recreation and dance. GAHPERD, Inc. is dedicated to improving the quality of life for all Georgians by supporting and promoting effective educational practices, quality curriculum, instruction and assessment in the areas of health, physical education, recreation, dance and related fields.

Message from the **Editor:**

I am excited about this current issue of the GAHPERD Journal. As many of you may know, GAHPERD has not had a journal publication in quite some time, but we are excited about the opportunity to begin publishing research-based articles again. This current issue continues from the previous issue in Vol 45.

You will see "Special Topics" articles in a variety of areas, written specifically for GAHPERD members, by GAHPERD members.

New sections in the journal include 1) **Teaching** Tips for K-12 health and physical education teachers and coaches; 2) Perspectives, a chance for all readers to reflect and submit responses based on current trends; and 3) a specific section dedicated to undergraduate and graduate student entries: **Emerging Leaders.**

Please consider authoring a manuscript based on the knowledge and/or expertise you developed in the field, recent data collected through action research, or practical suggestions that will assist others to improve student learning.

Please contact me at bheidorn@westga.edu for more information.



GAHPERD Journal

GAHPERD Editorial Board

Reviewers

Dr. Graeme Connolly: Georgia Regents University

Dr. Rachel Gurvitch: Georgia State University

Dr. Jeff Johnson: University of West Georgia

Dr. Jackie Lund: Georgia State University

Dr. Ellen Martin: Columbus State University

Dr. Bridget Melton: Georgia Southern University

Dr. Brian Mosier: University of West Georgia

Ms. Lynn Roberts: Armstrong Atlantic University

Ms. Laura Russ: Georgia Regents University

Dr. Emily Vall: Georgia Perimter College

Dr. Shannon Williams: Georgia State University

Editor

Dr. Brent Heidorn: University of West Georgia

"Persistence can change failure into an extraordinary achievement."

Matt Biondi



GAHPERD Executive Board

President

Brian Devore briangahperd@comcast.net

President-Elect

Brent Heidorn bheidorn@westga.edu

Past-President

Jeff Townsend Jeffrey.townsend@cobbk12.org

Executive Director

Kim Thompson kthompson.gahperd@att.net

Parliamentarian

Cecil Marett dmarett@hart.k12.ga.us

Advocacy Coordinator Co-Chair

Bud Reiselt rreiselt@ec.edu bzsegall@gmail.com Brenda Segall

VP-Dance and VP-Elect

Karen Clevenger kclevenger@westga.edu Shannon Boss shannon.boss@gmail.com

VP-General and VP-Elect

M. Cerie Godfrey mcerie2010@gmail.com Peter St. Pierre pstpierr@kennesaw.edu

VP-Health and VP-Elect

Shannon Williams swilliams62@gsu.edu Mark Anderson mark.anderson@cobbk12.org

VP-Physical Education and VP-Elect

Joan Wyman wymanj@atlanta.k12.ga.us

Eliot Galvean eliot.galyean@cherokee.k12.ga.us

Chair and Chair-Elect, Adapted PE

dave.martinez@cherokee.k12.ga.us Dave Martinez Cathy L. Smith cathy.smith@cobbk12.org

Chair and Chair-Elect, Elementary PE

Jen Spiegel jennifer.spiegel@cobbk12.org

Stephanie Lawson stephanie.lawson@cobbk12.org

Chair and Chair-Elect, Middle School PE

Joanna Schall schallj@fultonschools.org Patrick Cuff pcuff@terrell.k12.ga.us

Chair and Chair-Elect, High School PE

Candenisa Thomas candenisa.stewart@docoschools.org Myss Johnson-Jelks mtjelks@atlanta.k12.ga.us

Chair and Chair-Elect, College/ University

tdonovan@kennesaw.edu Tom Donovan Trev Burdette gburdette@georgiasouthern.edu

Chair and Chair-Elect, NAGWS/Men's Athletics

Bridgette Stewart bstewart@westga.edu Cindy C. Slayton cincslay@hotmail.com

Chair-Elect, Exercise Science Jeffrey T. Johnson jeffj@westga.edu **Chair-Elect, Sport Management**

Jennifer Beck Willett jbeck@kennesaw.edu

Chair and Chair-Elect, Future Professionals

asmith54@my.westga.edu Angela Smith Ethan Dennis edennis1@my.westga.edu

District Reps

SE: Vacant

Metro: Susan Whitlock suwhitlo@kennesaw.edu

West: Jana Forrester

jana.forrester@carrollcountyschools.com

East: Graeme Connolly gconnolly@aug.edu

SW: LaTonya Conner

latonya.conner@asurams.edu

NE: Bud Reiselt rreiselt@ec.edu **NW:** Anita Dodd anita.dodd@cherokee.k12.ga.us

Journal Editor and Future Professionals Advisor

Brent Heidorn bheidorn@westga.edu

Webmaster

Stephanye Peek sdpeek@att.net

JRFH and HFH Coordinators

Emily Adams em.adams@mindspring.com ncobelli.comcast.net

Nancy Cobelli

Chair, Awards Committee

Amy Aenchbacher

amy.aenchbacher@cherokee.k12.ga.us

State Fitness Coordinator

Brian Mosier bmosier@westga.edu

Public Relations

Cecil Marett dmarett@hart.k12.ga.us

Liaison, BOR

Bonnie Young byoung@gpc.edu

Chair, Past President's Council jacque.harbison@comcast.net Jacque Harbison

Liaison, GA DOE

Therese McGuire tmcguire@doe.k12.ga.us



"Georgia AHPERD is thrilled to partner with SPARK! It is an outstanding organization that will assist in providing our members with quality resources and professional development. These tools will benefit Georgia's teachers by enhancing and strengthening their Physical Education instruction. We look forward to working with Paul Rosengard and the entire SPARK team in the years to come!" Brian Devore, GAHPERD President

SPARK: Countering Childhood Obesity since 1989

SPARK is a research-based organization that disseminates award-winning, evidence-based programs within four main content areas:

Physical Education (K-12)
After School (Ages 5-14)
Early Childhood (Ages 3-5)
Coordinated School Health

The original SPARK <u>Physical Education</u> (PE) study was supported by the Heart, Lung, and Blood Institute of the National Institutes of Health. A team of internationally known researchers and educators were funded to create, implement, and evaluate new and innovative approaches to physical education content and instruction, then test them in "real world" settings.

SPARK PE was designed to be more inclusive, active, and fun than traditional PE classes, and SPARK was proven to work with both physical education specialists and classroom teachers. Today, after lessons learned from more than 20 years of ongoing research and field testing nationwide, SPARK PE is one of the best physical education programs in the world – a true solution to our growing problem of overweight and obese children.

Each SPARK program strives to foster environmental and behavioral change by providing a coordinated package of highly active curriculum, on-site staff development, extensive follow-up support, and content-matched equipment.

For more information related to SPARK, go to www.sparkpe.org

Journal Submission: How do I submit an article to the GAHPERD Journal?

Publication Guidelines

The GAHPERD Journal is a peer-reviewed professional journal intended to meet the needs of health, physical education, recreation, and dance professionals in Georgia. It is also intended to be a forum for the discussion of new ideas and pertinent issues facing the profession. Before submitting a manuscript to *The GAHPERD Journal*, please be mindful of the following:

Manuscripts submitted to The GAHPERD Journal must not be submitted to other publications simultaneously.

Manuscripts with practical implications for educators at all levels are given priority.

Acceptance is based on originality of material, significance to the profession, validity, and adherence to the prescribed submission requirements.

Manuscript Preparation

Manuscripts should be double-spaced, including all references and quotations, formatted for 8-1/2" x 11" pages, using Times New Roman 12-point font. Manuscripts should be word processed in accordance with the following guidelines:

- Prepare the manuscript in Microsoft Word and submit it as an e-mail attachment.
- Number all pages and lines throughout.
- Submit all tables, photographs and figures as separate documents, not within the body of the manuscript.
- Limit the manuscript to approximately 8 to 12 pages.
- Include a cover page with the title of the manuscript, full name(s) of the author(s), academic degrees, positions, and institutional affiliations. List the corresponding author's address, telephone number, and email address.
- The writing should be simple, straightforward with clear, concise, and logically presented concepts. Use examples, capture the readers' interest, and stimulate the audience's thinking.
- Keep paragraphs short.
- Have a colleague review the manuscript prior to submission.
- Review all references as the authors are responsible for accuracy. For reference style, follow the Publication Manual of the American Psychological Association (APA-6th edition).
- Submit graphs, charts, and tables separately. Clearly label and title all illustrations according to APA guidelines.
- Photographs are encouraged. When submitting photographs, be sure they are digital and at least 300 DPI in a jpg format.

Manuscript Submission

Send all manuscripts to Dr. Brent Heidorn (bheidorn@westga.edu)

Manuscripts will be acknowledged by email when received.

The Review Process

The Publications Editor will distribute all manuscripts to three members of the Editorial Board for peer-review.

Publication

Copyright: Accepted manuscripts become the property of the Georgia Association for Health, Physical Education, Recreation and Dance. Upon request, authors receive permission to reprint their own articles.

The GAHPERD Journal is listed in the Physical Education Index.

Manuscript Tracking Policy

Manuscripts undergo a blind review using criteria of accuracy and applicability to the practical concerns of the target audience.

Authors will receive manuscript acceptance, revision or rejection letters via email in about six weeks. Authors asked to revise their manuscripts will be informed how much time they have for resubmission, always given at least two weeks.

Upon acceptance, the Publications Editor will send a formal acceptance email to all corresponding authors whose manuscripts have been accepted for publication.

The Publications Editor will select publication dates for all manuscripts based on an established editorial calendar. Authors will be notified in advance, and edited manuscripts will be submitted to authors for comments prior to publication.

Teaching Tips from the Health Division

What are the Characteristics of an Effective Health Education curriculum?

Focuses on clear health goals and related behavioral outcomes

Is research-based and theory-driven

Addresses individual values, attitudes, and beliefs.

Addresses individual and group norms that support health-enhancing behaviors

Focuses on reinforcing protective factors and increasing perceptions of personal risk and harmfulness of engaging in specific unhealthy practices and behaviors

Addresses social pressures and influences

Builds personal competence, social competence, and self efficacy by addressing skills

Provides functional health knowledge that is basic, accurate, and directly contributes to healthpromoting decisions and behaviors

Uses strategies designed to personalize information and engage students

Provides age-appropriate and developmentally-appropriate information, learning strategies, teaching methods, and materials

Incorporates learning strategies, teaching methods, and materials that are culturally inclusive

Provides adequate time for instruction and learning

Provides opportunities to reinforce skills and positive health behaviors

Provides opportunities to make positive connections with influential others

Includes teacher information and plans for professional development and training that enhance effectiveness of instruction and student learning

For more information about each of the individual characteristics, visit the CDC website: http://www.cdc.gov/healthyyouth/sher/characteristics/



Special thanks to Shannon Leigh Barrett-Williams, VP-Health for submitting the content on this page

Teaching Tips from the Dance Division

Suffice it to say that *DANCE* is enjoying quite a bit of popularity with this school-age generation! In fact, I have been euphoric to witness our upcoming physical education majors embrace the various styles of dance instruction with actual SMILES on their faces. However, as I always seek to provide rhythmical movement that can be associated with other academic subjects, perhaps some of the following "tips" may be of use to you in the coming school year.

*If you want to include *FOLK DANCE*, visit the History, Social Studies, or Literature teachers to discover their planned units of instruction. Select some dance styles from that period or country for students to learn more about the recreation of the people.



*Students of today believe that *STEPPIN*' to make rhythms with foot stomps and hand claps is new only to their generation. Via your laptop, allow students to view dances of the Netherlands and the Samoan Islands and they will note that not only are hand clapping and foot stomping used in all dance movements, but the MEN are the principal dancers!





*Incorporate *DANCE PROPS* into the student choreography! I recently taught a short dance routine using a baseball cap (which 99% of students own). I provided the first five counts of eight, but asked small groups to add their own three counts of eight as an ending. It made a great difference in the number of engaged learners versus "active bystanders!"



Samoan Islands





Special thanks to Karen Clevenger, VP-Dance for submitting the content on this page

Teaching Tips from the Physical Education Division

The tips from the Physical Education Division include two game ideas for use in physical education classes. Here is a complete description of each game...

Disc Lacrosse (Invasion Games)

This activity combines elements of Ultimate Frisbee and Lacrosse. The intent is to encourage students to understand "moving without the object" to get open for a pass, "leading a moving receiver", and "defending space" in Invasion Games. The game is played in a ½ court set-up to begin (4v4 on each ½), then moves to full-court "directional" play (6v6).

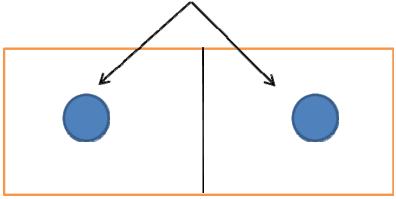
Setup

Place a disc golf target (or any target that can be hit with a Frisbee) in the center of each half of a basketball court, and create a **10-15**' **safety zone** around it that players are not allowed to enter at any time.

How to Play

One player begins play by passing the disc to a teammate from the outer boundary. Any player with possession of the disc cannot move. The objective is to hit the target with the disc. A disc cannot be hit while in the possession of an opposing player, but once it leaves a thrower's hand it will change possession if the following happen: a) the disc is not caught by a teammate of the thrower; b) the disc is intercepted; or c) the disc is knocked down by a defensive player. Play begins immediately on a turnover wherever the disc hits the ground.

"Safety Zone" indicated by the blue circles



Special thanks to Peter St. Pierre, VP-Physical Education for submitting the content on this page



Adults' Attitudes Toward Teen Pregnancy

Krystina Johnson, Helen W. Bland, & Bridget F. Melton

Department of Health and Kinesiology Georgia Southern University

Introduction

The Centers for Disease Control and Prevention has listed teen pregnancy prevention as one of their top six priorities (CDC, 2012a). Teen pregnancy is still a concern for the social and economic well-being of the United States, as teen childbearing cost the United States approximately \$10.9 billion in 2008 (The National Campaign, 2011). Although teen pregnancy rates are high nationally, they are particularly high in the southern states, with Georgia having a 22% higher teen pregnancy rate than the national average (Martin, Hamilton, Ventura, Osterman, Kirmeyer, Matthews & Wilson, 2011). Teen childbearing costs Georgians \$460 million per year (The National Campaign, 2011).

Infants born to teen mothers are more likely to suffer negative health outcomes, including lower birth weights and higher infant mortality rates (USDHHS, 2006). In 2010, the United States registered the births of 325,563 babies born with a low birth weight (CDC, 2011) and the infant mortality rate was 6.39 per 1000 in 2009 (CDC, 2012b). There were 13,052 infants with low birth weights born in Georgia in 2010, 1,728 of which were born to females aged 10-19. Twelve percent of births to females aged 10-19 in Georgia were in a low birth weight range, whereas only 9.5% of births to mothers of all other ages were low birth weight (Georgia Department of Community Health [GDCH], 2010). Fetal mortality rate was also higher in females aged 10-19 than in females 20 and older, with rates of 8.2 per 1000 and 7.9 per 1000, respectively (GDCH, 2010). Additionally, infants born to teen mothers in rural counties were more likely to have a low birth weight than those in non-rural counties, with 12.2% and 11.9%, respectively, born with a low birth weight (GDCH, 2010). Infants born to mothers aged 20 and up had a 9.9% and 9.4% of being born with low birth weight in rural and non-rural counties, respectively (GDCH, 2010).

Adolescent mothers, and especially rural adolescent mothers, are more likely to have an infant suffer from a low birth weight or an increased risk of infant mortality compared to non-adolescent mother (Chen, Wen, Fleming, Demissie, Rhoads & Walker, 2006).

In one such rural Georgia community, 99.2 out of 1000 teenage girls get pregnant each year ("Georgia campaign for Adolescent Pregnancy?," 2011). This rate is more than 50% higher than Georgia's overall rate of teen pregnancy. Nearly 70% of the total live births in this county in 2008 were to unwed mothers ("2011 Georgia county guide," 2011). A large proportion of the births to unwed mothers are also those to teen mothers. The current sexuality education policy for that particular county is abstinence-based and allows parents the option to prevent their children from participating in sex education classes ("Georgia local school," 2009).

A recent Canadian study found that abstinence-only education did not change students' attitudes toward engaging in sexual behavior for an extended amount of time and even negatively influenced students' motivation to use any kind of contraceptive or preventative measures when they did partake in sexual activities (SIECC, 2009). In order to prevent such a negative influence on the use of contraceptives in the United States, the American Public Health Association has suggested that schools replace their abstinence-only curricula with evidence-based curricula, so that teens can make informed decisions based on scientific evidence (Krisberg, 2010).

Numerous studies to determine program effectiveness and program acceptability among students have been conducted (Minnick & Shandler, 2011; Seunghyun, Johnson, Rice, & Manuel, 2004; Amu & Appiah, 2006; SIECC, 2009; McKay & Barrett, 2010). Yet, few recent studies have sought to determine how parents and community adults feel about teen pregnancy and sexuality education. One study correlated adult educational level and support for sex education, finding that the more education adults have, the more likely they were to support sexuality education in schools (Welshimer & Harris, 1994).

Continued on p. 9

The same study also found that parents are largely supportive of sexuality education in grades K-12 (Welshimer & Harris, 1994). In another study, 82% of adults surveyed stated that sexuality education should start in primary grades (McKay, Pietrusiak, & Holowaty, 1998). Nearly 70% of adults responding to that survey indicated that they did not believe that most parents were effective sexual education teachers to their children, while sixty percent agreed that teen pregnancy was a problem in their community (McKay, Pietrusiak, & Holowaty, 1998). However, these studies did not describe whether those adults, who were skeptical of parents' competence as sexuality educators, would be open to more comprehensive sexual education in schools.

This study sought to fill gaps in the existing research by gathering input from adults in a community affected by a high teen pregnancy rate. The purpose of this study was to describe adults' attitudes toward teen pregnancy and sexuality education in a rural area in southeastern Georgia.

Methods

Participants

A quantitative, descriptive, cross-sectional research design was employed for this study. Sampling methodology utilized was non-probability sample of convenience. Subjects were sought at a variety of community settings, including worksites, an afterschool program for at-risk youth, the public library, a behavioral health clinic, and public employees. The university's Institutional Review Panel gave IRB approval. Permission from site supervisors at workplaces was obtained. Participants completed this survey voluntarily, with anonymity and without any pressure from their employers.

A total of 101 adults participated in the study. Eighty-eight percent of participants had received some amount of a college education, though only 33% (N=31) completed their college degree. Over 38% (N=37) of the participants were aged 18-25. As depicted in Table 1, two-thirds of the participants were female (N=75) and over 56% (N=55) were white.

Table 1. Participant profile of subjects reported by frequency and percentile.

Demographics		n	Percentile
Age (n=98)			
	18-20	15	15.6
	21-25	22	22.9
	26-38	15	15.6
	39-47	15	15.6
	48-56	15	15.6
	57+	14	14.6
Gender (n=98)			
	Male	23	23.5
	Female	75	76.5
Race (n=97)			
	Black	40	42.1
	White	55	57.9
Education Level	(n=98)		
	Middle School	1	1.0
	Some High	1	1.0
	School High School Di-	1	1.0
	ploma	9	9.4
	Some College	54	56.3
	College Degree or		
	higher	31	32.3

Measure/Instrument

Adults' perceptions of teen pregnancy and current sexuality education in schools were measured by a Thurston scale. Scale items included 25 statements reflecting a broad spectrum of attitudes and four demographic questions. Attitudinal statements were taken from previous validated instruments (Brodie, 2009; Brooks, 2007; Griffin, 2001; Sigma Gamma Rho, n.d.) and compiled by the researcher. The establishment of psychometric characteristics included face content validity and internal consistency reliability with a Cronbach alpha of 0.623, indicating a reliable instrument (McSermott & Sarvela, 2007). Participants circled statements which they agreed with and aggregated totals were scaled on level of agreement.

Analysis

Data analyses included descriptive and inferential statistical computations. Descriptive analyses were reported by frequency and percentiles. Total scores were used to generalize individual attitudes toward teen pregnancy and sexuality education. One-way ANOVAs were used to determine statistical significances in differing attitudes based on age, race, gender, and educational level. The data analysis system SPSS version 19 (Statistical Package for Social Sciences) (SPSS Inc., 2010) was used to analyze the data.

Results

Adults in this study were consistently and overwhelmingly supportive of sexuality education (Table 2). The following statements were agreed with a majority of the participants: teen pregnancy could be prevented by teaching about contraceptives (N=64, 63.4%), teen pregnancy could be prevented by teaching teens about responsible sexual practices (N=64 (63.4%), and more people should be aware of the importance of birth control (N=89, 88.1%). Strong disagreement to the following statements

Table 2. Descriptive analysis of participants' responses as reported by frequencies and percentiles

Table 2. Descriptive analysis of participants' responses as reported by fre	equencies a	nd percentiles
	Agree n	
	(%)	Disagree n(%)
Teen pregnancy is accepted in my community.	54(53.5)	47(46.5)
My community is supportive of pregnant teens and teen parents.	38(37.6)	63(62.4)
In my family, it is acceptable to have a child out of wedlock.	20(19.8)	81(80.2)
More people should be aware of the importance of birth control.	89(88.1)	12(11.9)
It is natural for people to have sex before marriage.	55(54.5)	46(45.5)
If we want teens to refrain from sex, there need to be more constructive activities in the community to keep them occupied.	65(64.4)	36(35.6)
I am concerned about whether my county has enough teen pregnancy prevention programs.	71(70.3)	30(29.7)
Teen pregnancy could be prevented by teaching teens about contraceptives rather than focusing on abstinence.	65(64.4)	36(35.6)
I believe that preventing teen pregnancy is an important focus for improving the quality of life in my county.	84(83.2)	17(16.8)
Teen pregnancy could be prevented by teaching teens about responsible sexual practices rather than focusing on abstinence.	64(63.4)	37(36.6)
It is alright for unmarried 18 year olds to have sexual relations if they have a strong affection for one another.	24(23.8)	77(76.2)
When I was growing up, teen and unplanned pregnancy was accepted in my community.	13(12.9)	88(87.1)
Teen pregnancy is neither accepted nor disapproved of in my community.	27(26.7)	74(73.3)
When I was growing up, teen pregnancy was scandalous and unaccepted.	67(66.3)	34(33.7)
Strong affection for one another is not excuse for teens to have sex.	68(67.3)	33(32.7)
Sexuality education in schools should only include information on reasons and		
methods to remain abstinent until marriage.	17(16.8)	84(83.2)
Teens are taught all they need to know about sexuality in school.	06(05.9)	95(94.2)
Most parents have talked to their teenagers about healthy dating relationships.	17(16.8)	84(83.2)
Most teens think about what their parents have taught them when in a sexual		
situation.	11(10.9)	90(89.1)
Students have enough alternative activities that they should not have time for		
sexual behaviors.	06(05.9)	95(94.1)
People should not have sex before marriage.	11(10.9)	90(89.1)
Birth control makes teens more likely to have sex.	39(38.6)	62(61.4)
People should only have sex if they are married.	42(41.6)	59(58.4)
Teens should not have sex if they do not want to get pregnant.	55(54.5)	46(45.5)
Teen pregnancy is unacceptable.	41(40.6)	60(59.4)

illuminated participants' perceived need for more sexuality education in the schools: sexuality education in schools should only include information on reasons and methods to remain abstinent until marriage (*N*=84, 83.2%) and teens are taught about sexuality in school (*N*=95, 94.2%). Participants' perceptions of teenagers who were pregnant varied, yet the historical negative social stigma of teen pregnancy seemed to wane.

Inferential statistics determined differences of adult attitudes of teen pregnancy and sexuality education by demographics (Table 3). Race was found to be a statistically significant factor in determining one's attitude toward teen pregnancy and sexual education. Whites were significantly more likely to be open to and supportive of sexuality education in schools, while Blacks were less so. No statistically significant differences based on educational level, age, or gender were found.

Overall mean for the study participants was 11.015, indicating a higher need for sexuality education and open to a more comprehensive curriculum being taught (Table 4). All of the means by age, race, gender, and education level fell between 10 and 12 and were reported with a small standard deviation. Demographic groupings that were more accepting of a comprehensive sexuality educational approach in secondary school included: twenty-one to twenty-five year olds, white individuals, females, and those with some college education.

Discussion

The purpose of this study was to determine if adults in a rural community in Georgia thought about teen pregnancy and if the current sexuality education offered at the local high school was sufficient to prevent teen pregnancy and promote responsible sexual practices.

Table 3.	Statistical significance of adults' attitudes toward teen pregnancy
	and sexual education as determined by ANOVAs.

Demographics	Degrees of Freedom	Mean Sq.	F	Significance
Age	5	7.419	1.059	0.388/
Gender	1	0.526	0.074	0.786/
Race	1	40.718	6.045	0.016*
Education Level	4	10.686	1.557	0.193
*p≤0.05				

Table 4. Report of overall attitudes of adults toward teen pregnancy and sexuality education.

Demographic Var	iabla	n	Mean**	Standard Deviation				
	lable	<u>n</u>						
Overall		101	11.0151	0.26307				
Age								
	18-20	15	10.4347	0.54298				
	21-25	22	10.4347	0.58250				
	26-38	15	11.1320	0.56254				
	39-47	15	11.5313	0.58258				
	48-56	15	11.1980	1.01625				
	57+	14	11.6407	0.55974				
Gender								
	Male	23	11.2126	0.61816				
	Female	75	10.8700	0.29669				
Race*								
11000	Black	40	11.6820	0.36280				
	White	55	10.3560	0.37655				
Education Level								
Education Level	High School Diploma	9	11.6978	1.15903				
	Some College	54	10.3356	0.34912				
	College Degree or higher	31	11.5768	0.43884				
*p<0.05	Conege Degree of ingher	31	11.5700	0.43004				
1								
**Scoring:								
19-25	Belief in abstinence only sexuality	education						
13-18	Prefers abstinence education with	allowance for addit	cional information					
7-12	Favors sexuality education in scho	Favors sexuality education in schools						
0-6	Supportive of comprehensive sexu	ual education						

Sexuality Education

The vast majority of adults surveyed believed that teens were not taught everything they needed to know about sexuality in school nor from their parents. This means that most adults do not believe that teens are getting a sufficient amount of information on sexuality from school lessons or at home, the two places where teens spend most of their time. These findings are congruent with previous research, in which seventy percent of participants did not think that most parents are effective sexual health educators for their children (McKay, Pietrusiak, & Holowaty, 1998). Additionally, most adults in this study also disagreed that people should not have sex until they are married; meaning that adults do not think

abstinence is a plausible or viable alternative. Adults with some college had a lower mean score indicating they were more open to comprehensive sexuality education in schools, which is consistent with Welshimer and Harris' (1994) findings that more educated adults are more likely to be supportive of sexuality education.

In the Community

The majority of adults in this study felt that preventing teen pregnancy would increase quality of life in the county, but also stated that there were not enough constructive activities in the county to keep teens occupied with nonsexual activities. The Centers for Disease Control (2012) also determined that teen

pregnancy can negatively affect teens and their children's quality of life and indicated that avoiding places and situations that may lead to sex would be effective in preventing teen pregnancy. In this particular rural Georgian county, the only after school program for at-risk youth closed in late February 2012, after it lost funding due to changes in grant requirements. At present, the community is still lacking a constructive outlet for teens. Community leaders or organizations could use the research that has been generated from this study or may be conducted in subsequent studies in order to apply for funding to support a community center for teens.

Link to Practice

This research can be used as foundation for future research and program interventions, as it has shown evidence of the community's doubt about the efficacy of current sexuality education programs. Health educators taking a comprehensive approach should include information about contraceptives and healthy dating relationships in teen pregnancy prevention programs. Educators could also include in-depth discussions about sexuality that does not focus on abstinence, but offers it as an option; while emphasizing the importance of using contraceptives when or if adolescents do become sexually active. Programs should be designed with considerations to race, since race was found to be statistically significant in affecting one's attitudes toward sexuality education and teen pregnancy.

Study Limitations

One study limitation is that it is not an accurate representation of the demographics of the county. The mean age of the participants was lower than the mean age of residents, and three-fourths of the participants were female, while the county population has an almost even distribution of males and females ("2011 Georgia county guide," 2011). Additionally, the educational levels of the participants surveyed are also much higher than the statistics for the county. While 32.3% of participants surveyed had a bachelor's degree or higher, only 9.5% of residents have completed a college degree ("2011 Georgia county guide," 2011).

Quantitative data also forces participants to choose an option which may not accurately reflect the entire spectrum of specific attitudes. A greater sample size would have been desirable, as a larger sample may have better reflected the overall demographics of the county.

Conclusion

This study has determined that while abstinence is the main teen pregnancy prevention method taught in a rural Georgia county high school, most adults in the community did not think abstinence programs were sufficient in preventing teen pregnancy or teaching responsible sexual practices. Since the adults did not believe that people waited until marriage to have sex and thought that more people should be aware of the importance of contraceptives, one can assume that the community would largely support the inclusion of comprehensive sexual education. More research should be done on what types of sexual education programs parents would find acceptable to be taught in schools. Such research could also determine when parents think specific concepts of sexuality should be introduced (McKay, Pietrusiak, & Holowaty, 1998; Welshimer & Harris, 1994). Additional research could investigate what adults and teens think would be productive or constructive activities that could be implemented in the community, since many believed activities of this type were lacking. Future research could be utilized in applying for grants that could fund after-school programs or other constructive community resources for teens (United States Department of Health and Human Services, 2010).

References

- 2011 Georgia County Guide. (2011). Georgia faststats. Retrieved from
 - http://www.georgiastats.uga.edu/counties/033.pdf.
- Amu, O., & Appiah, K. (2006). Teenage pregnancy in the United Kingdom: Are we doing enough?. *The European Journal of Contraception and Reproductive Health Care*, 11(4), 314-318.
- Brodie, K. B. (2009). *Intrapersonal and community-related influences of rural adolescent pregnancy: A mixed-method approach*. (Unpublished doctoral dissertation). Walden University, Minneapolis, Minnesota.

- Brooks, C. M. (2007). Environmental risk factors and risky sexual behavior outcomes: Attitudes as a mediating factor. (Unpublished doctoral dissertation). University of Missouri, Columbia, Missouri.
- Centers for Disease Control and Prevention. (2011). Faststats
 Birthweight. Retrieved from http://www.cdc.gov/
 nchs/fastats/birthwt.htm.
- Centers for Disease Control and Prevention. (2012a). About teen pregnancy: Teen pregnancy in the United States. Retrieved from http://www.cdc.gov/TeenPregnancy/aboutTeenPreg.htm.
- Centers for Disease Control and Prevention. (2012b). Mortality data. Retrieved from http://www.cdc.gov/nchs/deaths.htm.
- Chen, K., Wen, S., Fleming, N., Demissie, K., Rhoads, G. & Walker, M. (2007). Teenage pregnancy and adverse birth outcomes: A large population based retrospective cohort study. *Internal Journal of Epidemiology*, 36, 368-373.
- Fahs, B. (2010). Daddy's little girls: on the perils of chastity clubs, purity balls, and ritualized abstinence. *Frontiers*, 31(3), 116-142.
- Falah-Hassani, K., Kosunen, E., Shiri, R., Jokela, J., Liinamo, A., & Rimpelä, A. (2009). Adolescent sexual behavior during periods of increase and decrease in the abortion rate. *Obstetrics And Gynecology*, 114 (1), 79-86.
- Georgia campaign for adolescent pregnancy prevention:

 County data. (2011). Retrieved from http://

 www.gcapp.org/county-data.
- Georgia Department of Community Health. (2010). Online analytical statistical information system (OASIS). Retrieved from http://oasis.state.ga.us/oasis/oasis/qryMCH.aspx.
- Georgia local school board policies on sex and health education. (2009). Retrieved from http:// www.gprhe.org/IMG/pdf/ GPRHE_GA_Local_County_BoE_Policies_29_pag es_.pdf
- Griffin, S. F. (2001). Measuring community capacity for teen pregnancy prevention in South Carolina. (Unpublished doctoral dissertation). University of South Carolina, Columbia, South Carolina.

- Krisberg, K. (2010). Teen pregnancy prevention focusing on evidence. *The Nation's Health*, *1*, 14.
- Martin, J., Hamilton, B., Ventura, M., Osterman, M., Kirmeyer, S., Matthews, T. & Wilson, E. (2011). *National Vital Statistics Reports*. 60(1).
- McDermott, R. J., & Sarvela, P.D. (1999). *Health education evaluation and measurement: A practitioner's perspective*. New York: McGraw-Hill.
- McKay, A., & Barrett, M. (2010). Trends in teen pregnancy rates from 1996-2006: A comparison of Canada, Sweden, U.S.A., and England/Wales. *The Canadian Journal of Human Sexuality*, 19(1-2), 43-52.
- McKay, A., Pietrusiak, M. & Holowaty, P. (1998). Parents' opinions and attitudes towards sexuality education in the schools. *The Canadian Journal of Human Sexuality*, 7, 139-145.
- Minnick, D. J., & Shandler, L. (2011). Changing adolescent perceptions on teenage pregnancy. *Children & Schools*, *33* (4), 241-248.
- Seunghyun, Y., Johnson, C. C., Rice, J., & Manuel, P. (2004). A qualitative evaluation of the Students of Service (SOS) program for sexual abstinence in Louisiana. *Journal of School Health*, 74(8), 329-334.
- Sex Information and Education Council of Canada. (2009). Sexual health education in the schools: Questions & answers (3rd edition). *The Canadian Journal of Human Sexuality*, 18(1-2), 47-59.
- Sigma Gamma Rho Sorority, Incorporated & The National Campaign, (n.d.). Behavior/attitude survey: African American teen & unplanned pregnancy. Retrieved from http://r.b5z.net/i/u/10099570/f/PR_Paper_Survey.pdf.
- SPSS Inc. (2010). SPSS Base 19.0 for Windows User's Guide. SPSS Inc., Chicago IL.
- The National Campaign. (2011). Counting it up: The public costs of teen childbearing. Retrieved from http://www.thenationalcampaign.org/costs/default.aspx.
- United States Department of Health and Human Sciences. (2006).

 Fact sheet: Preventing infant mortality. Retrieved from http://www.hhs.gov/news/factsheet/infant.html.
- United States Department of Health and Human Services. (2010).

 HHS awards evidence-based teen pregnancy prevention grants. Retrieved from http://www.hhs.gov/news/press/2010pres/09/20100930a.html.

Welshimer, K.J. & Harris, S.E. (1994). A survey of rural parents' attitudes toward sexuality education. *Journal of School Health*, 64(9), 347-352.

To communicate with the author(s) of the above article, contact Dr. Bridget Melton at Georgia Southern
University (bmelton@georgiasouthern.edu)

Nurturing Creativity: Using Movement Improvisation as the Warm-Up

Amy Howton

Kennesaw State University

It is important for students to be able to think creatively, no matter what they plan to do for the rest of their lives. Good problem-solving ability results from creative thought, and there are problems to be solved in all aspects of life. However, many students have not encountered any guided creativity assignments in their school experiences, particularly in the area of movement. In fact, many people believe that creativity is an innate talent, and it is not helpful to nurture it in individuals who do not possess that talent. Others believe it is related to intelligence and cannot be nurtured, although that premise has been the subject of many debates (Gautam, 2012).

Empirical evidence gathered by teachers as they assess student outcomes, and disseminated widely as lesson plans designed to encourage creative thinking, implies that creativity can be improved through practice. One way to develop creative thinking in students is through the making of art. The Getty Institute focused on art as a pathway to creative thinking in their Discipline-Based Arts Education model, which incorporated an arts conceptual framework for use in K-12 education. (University of Tennessee at Chattanooga; Columbia College, 1997) National Dance Standards developed for all children by the National Dance Association (National Dance Association), the National Dance Education

(National Dance Association), the National Dance Education Organization (Standards: An Overview), and the Consortium of National Arts Education Associations (National Dance Standards, 1994) each speak to developing creativity through dance and creative movement experiences.

In spite of the focus on creative thinking and problem solving by employers (AAC&U, 2011), and an abundance of dance, music, theatre, and other published arts standards, many students are not exposed to these concepts, either because of budgetary concerns, non-inclusion in curricula, time restrictions, or lack of teachers qualified in these specialty areas. Therefore, it often falls to physical educators to find ways to enhance children's creativity, in addition to improving their fitness and body composition, and fostering physical skill acquisition. Because creative movement has not traditionally been taught in the schools by all physical educators, many physical educators, who themselves had minimal opportunities to obtain these skills, do not feel comfortable designing lengthy plans or implementing creative movement lessons. In addition, curricula do not always allow for comprehensive units in dance or creative movement. By infusing short movement improvisation lessons into the warm-up for the physical education class, students can still develop creativity, even in the absence of a creative movement class or unit.

Children must learn which body part leads a particular movement, and which parts follow the initiation of the movement. A tennis serve and its follow-through exemplifies the way a student must coordinate body parts and shifts of weight to achieve the objective of accurate placement of the tennis ball. This knowledge can then be applied to large motor movements so that the child becomes aware of balance and weight placement, as well as the proper alignment of the body to facilitate specific movements. (Think of the complexity of a scissors leap or multiple turns—or throwing a shotput!) Experimentation within an improvisational movement framework can assist children in acquiring a better understanding of movement, balance, placement, and alignment.

Because all activities have an underlying rhythm, understanding various rhythms can help children acquire skills more quickly than they would without this understanding. Physical educators can teach students to find the rhythm in music accompanying the exercise, or in the movement itself. When interacting with music, they can enable students to avoid being distracted by the melody, which is often uneven, and instead engage with an even, steady rhythm. It is easy to build rhythmic components into creative

improvisation lessons. Sometimes, it is as simple as playing a piece of music, and proceeding with the lesson, using the rhythm as the underlayment for the movement. A five-minute improvisation session can incorporate both creative movement and interaction with rhythm.

Teachers should remind students that the classroom becomes their personal laboratory when creativity is the focus of the activity. Students who use their time to solve problems creatively are laying the groundwork for leadership skills, as well as learning basic concepts of both creativity and movement. The only time an improvisation can be "wrong" in the lab is if it does not address the problem assigned. Giving students permission to create, develop, evaluate, and redesign frees them from the fear of failure or "bad grades" and allows them to work in a learner-centered environment toward creative solutions to skills problems, instead of only returning the "right answer."

The creative movement warm-up exercises included here (in the following pages, Figures 1.1 through 1.7, beginning on page 18) may also be used as a warm-up or introduction for more extensive improvisation or choreography classes, as well as to warm up a class for a more traditional skills-based lesson. They are designed to engage the mind as well as warm up the body, and to encourage creative thinking beyond the classroom.

References

American Association of Colleges and Universities (2011).

The Leap Vision for Learning. Retrieved April 2,
2013, from American Association of Colleges and
Universities: http://www.aacu.org/leap/documents/leap-vision-summary.pdf

National Dance Standards. (1994). Retrieved February 4, 2013, from PE Central: http://www.pecentral.org/lessonideas/dance/dancestandards.html

Gautam, S. (2012, February 10). *Psychology Today*. Retrieved March 16, 2012, from Psychology Today blog: The Fundamental Four: http://www.psychologytoday.com/blog/the-fundamental-four/201202/creativity -and-intelligence-tripartite-structure

National Dance Association. (n.d.). *National Dance Association*. Retrieved February 8, 2013, from Amer ican Alliance for Health, Physical Education, Recrea tion, and Dance. http://www.aahperd.org/ndaprof

Standards: An Overview. (n.d.). Retrieved February 6, 2013, from National Dance Education Organization: http://www.ndeo.org/content.aspx?

page_id=22&club_id=893257&module_id=53060

University of Tennessee at Chattanooga; Columbia College (1997). Discipline-Based Dance Education. Chattanooga, TN: Southeast Center for Education in the Arts.

The activities presented in this article are continued on p. 20

To communicate with the author of the above article, contact Dr. Amy Howton at Kennesaw State University (ahowton@kennesaw.edu)

Head, Heart, and Hands: Integrating STEM Curriculum with Physical Activity

Peggy Moch & Sonya Sanderson Valdosta State University

Brain and physical fitness are both important attributes of learning in all academic areas (Sattelmair & Ratey, 2009; Smith & Lounsbery, 2009; Weldy, 2009). It is just as important to take care of the brain as it is the heart and the rest of the body. Helping students realize how to maximize their brain readiness will promote alertness and memory so they can be more attentive and productive in the classroom. Hands-on mathematics and successful math homework models are vital tools in helping students to be successful both inside and outside of the classroom.

Teaching across the curriculum is not a new idea. Making specific connections between brain activity, physical activity, and mathematical pedagogy seems to be a natural fit and one not discussed in the literature as a group. While these different ideas have been dealt with in isolation, it seems beneficial and relevant to take a more holistic approach to engaging students in the STEM (science, technology, engineering, and mathematics) areas.

STEM educators and physical education instructors can both increase interest in their respective disciplines by connecting these curriculums related to brain activity, physical activity, and academic success. In particular, STEM teachers can enhance their curriculum by encouraging students to be more physically active by incorporating physical actions into their lessons. Likewise, physical education instructors can reinforce mathematical ideas related to different physical activities. This article begins with a brief discussion about the academic benefits associated with brain health and function as related to physical activity and their associated educational benefits.

Head: The Brain, Exercise, and Learning

Exercise triggers the production and flow of a brain -derived neurotropic factor (BDNF) chemical (Nofuji, et al., 2012). With increased BDNF circulating in the brain, a greater amount of neurons are able to exchange and retain information, enabling individuals to understand, comprehend, remember, and retrieve more information and at a quicker rate (Nofuji, et.al). Matsui, et al. (2011) reported increases in the base-line of new neuron growth due to exercise. Matsui, et al. (2011) also suggests that with the presence of more neurons, an increased ability to learn may result. The more muscle groups and fibers recruited during physical activities integrated with subject matter concepts, the stronger and more concrete the learning (Ploughman, 2008). However, it is also well known that there are numerous additional benefits from participation in physical activity, specifically for the heart, but also in other ways.

Heart: Physical Activity and Learning

Being physically fit promotes higher functioning and more efficient cardiovascular system. With the increased functioning of the cardiovascular system from regular exercise, more blood volume is circulated throughout the entire body. Increased blood flow helps provide more energy, namely glucose and oxygen, to the brain (Gul & Hanninen, 2002). The California Department of Education (Grissom, 2005) found a significant relationship between fitness scores and academics (math specifically).

Grissom (2005) found that students who met minimum fitness levels in three or more physical fitness areas on the FITNESSGRAM scored higher on the math achievement tests. Therefore, "creative approaches to incorporating physical activity throughout the school day are needed, especially if physical education or recess is not part of the regular school day" (Evenson, Ballard, Lee, & Ammerman, 2009, p. 236). Increasing physical activity will support students becoming more physically fit.

Hands: Using Manipulative and Movement to Enhance Learning

No matter what grade level is being taught, the use of hands on objects (manipulative, also known as concrete or physical objects) provides physical models for student learning (Tichenor, 2008). It is important for instructors to provide "both a linguistic and nonlinguistic input systems" to maximize student understanding (Block, Parris, & Whiteley, 2008, p. 460). Instructors need to not only verbally inform students about concepts, but they need to show or demonstrate these concepts to assist students in grasping abstract concepts. Dr. Michael Taylor, Professor Emeritus at the University of Central Florida shared, "When a student is drowning in the sea of mathematical abstraction, it is but a kindness to throw them a concrete lifesaver, for concrete floats on the abstract sea" (personal communication, October 1998).

Physical Education / Recess

In many states, middle grades and secondary students do not have daily physical education or recess, which presents the need to find ways to increase physical activity within the STEM classroom. This will help facilitate increased learning in this critical academic area. With high stakes testing at the forefront of all educators' thinking, there are typically only small amounts of support for the addition of physical activities within the STEM classroom. The Georgia Department of Education (GA DOE) mandates what curriculum is to be taught and through process standards, how the students should be engaged with the curriculum. Fortunately, the GA DOE supports mathematics teachers adding physical activities into their curriculum, if done so in a thoughtful way.

Continued on p. 18

Core Content Georgia Performance Standards: Foundations and Guidelines Allowing for Scaffolding Learning to Movement

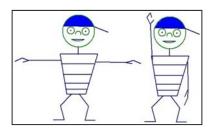
The Core Content Georgia Performance Standards (CCGPS) were instituted by the GA DOE to set the level of rigor for English language arts, social studies, science and mathematics for grade levels kindergarten through twelfth grades. Mathematics teachers in Georgia public schools are required to prepare their curriculum to reflect the CCGPS. By employing the CCGPS of modeling with mathematics, instructors are able to create quality materials for student learning. Further, mathematics teachers at all levels should use appropriate tools strategically, looking for and making use of structure by scaffolding new learning onto previously learned material by making explicit connections.

Since abstract materials may require more processing of conceptual information (the *why* of how something works), sometimes procedural skills (the *how* for completing a given task) are left underdeveloped. This is why procedural skills may benefit more from practice with concrete materials (Belenky & Nokes, 2009). Hence, using physical movements (like jumping jacks to show how to divide a circle into five equal parts) in the classroom may help to enhance conceptual learning in specific content areas. Thus, the research supports using physical materials as well as physical activities to reinforce abstract and procedural concepts in the mathematics classroom.

Unrelated and Purposeful Movements

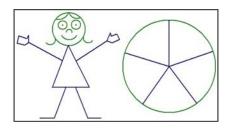
Two ways to use movement in the classroom are unrelated and purposeful movement. Unrelated movement is not specifically connected to content instruction and includes things like using a stress ball, toys for tactile stimulation, or exercise. Purposeful movement by contrast is directly related to the content being taught like horizontal versus vertical lines and their respective slopes using a baseball safe and out analogy or using your arms to show positive and negative slopes of lines (see figures on this page). Beaudoin and Johnston stated that "purposeful movement was found to increase student outcomes and attitudes" (2011, p. 91).

Continued on this page, next column

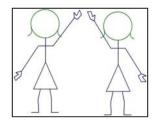


Horizontal Line \leftrightarrow Safe!

 $Vertical\ Line \leftrightarrow Out!$



Jumping Jack ↔ *Dividing a Circle into 5 Equal Parts*



(Teacher with back to students)

Right Hand Up, Left Hand Down \leftrightarrow Line with a Positive Slope Left Hand Up, Right Hand Down \leftrightarrow Line with a Negative Slope

Using the above activity, perhaps when students copy teacher movements and compare to their papers they can better distinguish between positive and negative slopes.

Conclusion

Using more muscles in an activity integrated with subject matter concepts provides for stronger learning connections (Ploughman, 2008). Increasing circulating BDNF levels through physical activity provides a host of learning benefits (Nofuji, et al., 2012). Finding enhanced academic performance in mathematics related to physical fitness is intriguing news for physical educators (Grissom, 2005). While physical activity and physical fitness are not the same things, increased physical activity can

help to improve student attitudes in both the STEM and the physical education classrooms. Georgia STEM educators are supported by the CCGPS, so that even in this environment of high stakes testing there are provisions for making strong connections between physical activity and the academic curriculum. Increasing student outcomes and improving attitudes towards STEM and physical education seems to be a win-win scenario (Beaudoin & Johnston, 2011).

In order to instill the idea that physical fitness and activity is beneficial in many facets of life and development, it is essential that STEM teachers begin using it as a tool in their classrooms. Likewise, physical education instructors can reinforce STEM connections by talking about how these curriculums are connected. Students should be taught at a young age that being physically active is important to their health and academics. The instilment of these beliefs and practices begins with movement education in schools. Davis, et al. (2011) found that exercise improved math achievement, so by taking care of brain and physical health in order to enhance mathematical learning potential makes good sense and justifies the time spent on using physical activities in the classroom. Teaching across the curriculum is a win-win situation for all teachers in all subject areas!

References

- Beaudoin, C. R., & Johnston, P. (2011). The impact of purposeful movement in algebra instruction. *Education*, 132(1), 82-96.
- Block, C. C., Parris, S. R., & Whiteley, C. S. (2008). CPMs: A kinesthetic comprehension strategy. *Reading Teacher*, 61 (6), 460-470.
- Grissom, J. (2005, March 3). A study of the relationship between physical fitness and academic achievement in California using 2004 test results. Retrieved July 9, 2013, from http://www.cde.ca.gov/ta/tg/pf/documents/pft2004resultsv2.doc
- Davis, C. L., Tomporowski, P. D., McDowell, J. E., Austin, B. P.,
 Miller, P. H., Yanasak, N. E., Allison, J. D., & Naglieri, J.
 A. (2011). Exercise improves executive function and achievement and alters brain activation in overweight children: A randomized, controlled trial. *Health Psychology*, 30(1), 91-98.

- Evenson, K. R., Ballard, K., Lee, G., & Ammerman, A. (2009). Implementation of a school-based state policy to increase physical activity. *Journal of School Health*, 79 (5), 231-238.
- Gul, M., & Hänninen, O. (2002). "Physiological basis of exercise" in *The Encyclopedia of Life Support Systems*. Oxford, UNESCO, Eolss Publishers Co. Ltd., in press.
- Matsui, T., Soya, S., Okamoto, M., Ichitani, Y., Kawanaka, K., & Soya, H. (2011). Brain glycogen decreases during prolonged exercise. *Journal of Physiology*, 589(Pt 13):3383-93
- Nofuji, Y., Suwa, M., Sasaki, H., Ichimiya, A., Nishichi, R., & Kumagai, S. (2012). Different circulating brain-derived neurotrophic factor responses to acute exercise between physically active and sedentary subjects. *Journal of Sports Science and Medicine*. 11, 83-88.
- Ploughman, M. (2008). Exercise is brain food: The effects of physical activity on cognitive function. *Developmental Neurorehabilitation*, 11(3): 236–240
- Sattelmair, J., & Ratey, J. (2009). Physically active play and cognition. *The American Journal of Play, 1*(3), 365-374.
- Smith, Nicole J., & Lounsbery, M. (2009). Promoting physical education: The link to academic achievement. *Journal of Physical Education, Recreation, and Dance*, 80(1), 39-43.
- Tichenor, M. (2008). Math manipulatives: Who, what, where, when, and why? *New Teacher Advocate, Spring*, 4-5.
- Weldy, D. (2009). Fitness and cognition. *The Ohio Family Physician*, *Spring*, 40-41.

To communicate with the author(s) of the above article, contact Dr. Sonya Sanderson at Valdosta State University (slsanderson@valdosta.edu)

From Howton, Nurturing Creativity: Using Movement Improvisation as the Warm-Up

Figure 1.1 Perception of Time/Creating Shapes

Perception of Time/Creating Shapes

Time

Students slowly walk the space for the amount of time each perceives as one minute. They freeze when they think one minute has passed. No looking at watches or phones! Teacher or a chosen student tells them how much time had elapsed when the first student stopped, and when the last one stopped.

Students repeat the exercise, but running this time instead of walking.

Did the students find they were accurate in estimating the minute? Why might this be an important skill to cultivate?

Were they more accurate running or walking? Why might this be?

Shapes

Students will use their bodies to make as many shapes as they can in one minute. The same shape made on the other side of the body doesn't count as a different shape! Ask students to count their shapes as they go, and truthfully report the number when time is called. (They may be informed afterward that an experienced improviser can usually make about 60 shapes in one minute. The trick to increasing numbers is to make the shapes without pre-planning them.) Video of the exercise may help students remember their shapes as well as validating the number created, as well as allowing students to learn from the work of others.

Time permitting, the students may be asked to make only linear shapes, only curvilinear shapes, or shapes that combine the two. Each of these can be given as a separate assignment on a different day. Students may be asked to remember a specific number of their favorite shapes for use in a future improvisation, or to use in the Theme and Variation project.

Assign different body parts to serve as supports (e.g., "support your body on one foot, one hand, and one elbow).

Assign a number of body parts to serve as supports, without specifying them (e.g., "use 5 supports," "use 11 supports."

Rhythms and Creative Movement

Creating a warm up that incorporates rhythm

Walk the perimeter

Add rhythm

Change tempo/activity

Change rhythm: can you tell the difference? Must the activity change? *Can* the activity change?

How can you help children become more independent in their creativity? How can you help them learn to become leaders?

Have the students follow the leader for any activity in part I, rotating leaders

Try this in large groups vs. small groups. How is the experience different? What different responsibilities does the leader have when the group size changes?

Shaping

Make linear shapes

Make curvilinear shapes

Make combination shapes

Create machines (moving sculptures that rely on the first shape and movement to be the "engine" for successive attachments)

NOTE: A barn dance, round dance, or folk dance (such as Tinikling) may always be used as a rhythm lesson as well as a warm-up, especially for children with little creative movement experience.

Walking Improv

Students draw a pattern on a card or small piece of paper. There are three rules:

You may not pick up your pencil between your start and finish

You must finish at the same point as your start

Your pattern must cross over itself at least once (You will probably get a lot of figure 8's!)

Students walk the pattern using the entire room, and watching out for each other. What adjustments must they make to avoid a "crash?"

Students run (gallop, leap, slide, etc.) the pattern using the entire room, watching out for each other

Students repeat 2 or 3 above, beginning from a different point in the room.

Students walk the pattern using only half the room (how they choose to divide the room in half is up to them).

Students walk the pattern using half the room and walking backwards. (They may divide the room differently this time if they choose.)

Students "walk," or travel, the pattern using one-fourth of the room, and one hand must contact the floor at all times. The student may choose which other body parts are used in contact with the floor.

Students travel the pattern using one-fourth of the room, and 4 body parts must contact the floor at all times. There must be at least 3 DIFFERENT body parts in contact with the floor (i.e., a foot, an elbow, and a knee)

Students travel the pattern, moving in any direction (forward, backward, sideways, or a combination) while attached to another person by three body parts.

Continue to build on this during successive classes. Ask students to suggest restrictions. You may at some point choose to have them draw new patterns, or exchange cards with another student.

Ask students how the patterns they have created in the laboratory space relate to traffic patterns on the road. What similar problems must be solved when designing traffic patterns and controls?

Sculptures

Sculptures—large or small groups

One student makes a shape. The other students in the group join the shape as they see a good connection to be made. They must connect by physically touching another student, or by entering the negative space with one or more body parts.

Use linear shapes and connect to the group

Use curvilinear shapes and connect to the group

Use combination shapes to connect to the group

Consider levels: students may be asked to work on the same level as the student who last added to the shape, or to find a different level from the last student's shape

To add creativity, the teacher can specify how many body parts must be in contact with a) the floor, or b) another student, or may specify that every student must be supporting at least one other student.

Can the students think of any art sculptures that are similar to any of the sculptures created in class? What natural phenomena are brought to mind by the shapes created? How could the group dynamic be used to problem-solve in another arena?

NOTE: If this project follows the study on perception of time, the following may be included:

Stop after one minute. How accurate were you in creating one minute of movement? Did all the group members connect to the sculpture within the one minute allowed?

What movements or shapes created by your classmates were of greatest interest or most exciting to you? Why did you like the ones you chose?

Found Object Study

Students should find an object in the equipment supply closet or have brought one from home. They should not know what they will do with the object until they have made their selection.

Students will create a 1 minute study of the object by:

becoming the object (creating a shape)

moving like the object

moving like they are using the object

having the object become something else and the student can do one of the above (e.g., an ironing board can "become" a table or a canoe and the student can set the table or paddle the canoe) How might finding a way for the object to serve another purpose be useful in daily life?

Students may exchange objects and repeat the assignment, or they may be asked to repeat the assignment, choosing a different way to depict the object (moving like the object instead of having the object become something else, for example).

SEGUE: If this project follows the perception of time project, students can be asked to create their found object study in one minute, or to make it last one minute (or use some other increment of time.)

How accurate were they in creating one minute of movement? Why might this be an important skill outside of class?

What movements, shapes, or entire studies were of greatest interest or most exciting to the students? Why do they believe these to be the most interesting or exciting?

Creating a Movement Theme

Using 5 shapes created in previous assignments as the starting point:

Decide the angles from which you want the audience to see each shape.

Decide the order in which you will arrange the 5 shapes

Determine transitional movement you will place between each shape in order to move from one to another. At least one of these transitions must locomote (move from one part of the space to another part.) Divide the space into 9 parts as shown in the diagram below, and be sure you move at least from one into another during your locomotor movement.

1	2	3
4	5	6
7	8	9

When showing your project, begin and end with stillness (silence).

For a more extended lesson, student may be asked to repeat this thematic phrase, exactly the same way each time, or to show it to classmates.

How does the locomotor movement add to the whole?

NOTE: a theme should be long enough to contain a complete idea, yet short enough that the audience will recognize it if they see it again. Think about the idea you are presenting in your theme. Examples would be: lines, curves, circles, or a combination of the above. Is there an overlay idea? (Such as a story, an object, an everyday activity, a creature—let your imagination work!)

Guidelines for Shape Exploration

- 1. Use different levels.
- 2. Use curved and straight lines.
- 3. Consider symmetry and asymmetry.
- **4.** A shape repeated on the other side of the body still counts as one shape.

Make the shape first; think about it later!

Guidelines for Critical Discussion

Does the variation solve the problem given?

Is the intent of the variation clear to the audience?

What moments in the combined piece are particularly interesting, and why?

Has the choreographer used the space well?

Are there contrasts in energy, level, direction, space, time, type of movement, repetition or lack of repetition? Does any part of the student's theme relate to a sport or other activity? In what way(s)?

Rhythmic Obstacle Course

This activity may be used as the primary activity for a class, **or** as a warm-up. If you are using it as a warm-up, be sure the obstacles are not difficult, nor stressful to the joints, and they should be primarily navigated at a walking pace.

Divide the activity space or gym into 4 quadrants.

Choose, or have students select, objects from the school equipment supply closet. Design an obstacle course using these items. Simultaneously determine a rhythm to be used in completing the course. Rules:

While completing the course, students should not manipulate any of the objects (e.g., they should not have to pick up a jump rope, ride a scooter, or throw a ball. These types of activities require monitors to return equipment to its original place when students get in a hurry and drop it without regard for the course design.)

The course should be designed so it does not create "bottlenecks" where students spend significant time waiting for a turn, once the students have all entered the course.

Students must complete the course using the rhythm and tempo selected by the course designers. (Music or a drum will help the students stay in rhythm and tempo.)

Course should be designed so the majority of the students, if not all the students, are moving at once. Consider giving waiting students an assignment to be performed in place (clap, march, opposite knee to elbow, etc.) that will help them maintain the rhythm.

Students should do a test run of the course they created. This test run should let them see problem areas, such as places where it is difficult to complete the course on rhythm or tempo, or places where backups cause students to have to stop moving. Students should adhere to safety instructions given by the teacher.

Time permitting, students may rotate to complete the courses created by the other groups of students.

P-3 students:

The teacher designs the course(s) according to the instructions above, and the students navigate the courses, adhering to the assigned rhythm.

Perspectives

The GAHPERD Journal "Perspectives" is a section for teachers, coaches, administrators, and future professionals to express their view(s) on a particular topic relevant to health, physical education, recreation and dance in today's schools and communities. With each *GAHPERD Journal*, one or more themes or questions will be posed. Several responses to the posed themes or questions will be published in the following journal, based on relevance, professionalism, and related criteria. Individual perspectives submitted and published in the *GAHPERD Journal* are not necessarily the viewpoint of GAHPERD, but are opinion-based views of the submitting authors. To submit a response for potential publication in the next *GAHPERD Journal*, send an email to bheidorn@westga.edu by November 15, with the subject heading: Perspectives. All submissions should be less than 200 words and related to the topics identified below. Be sure to include the theme or question with your response, in addition to your name, position, and professional affiliation (school, etc.).

September 15 Perspective One:

What is the ideal number of students to teach in a physical education class and why?

September 15 Perspective Two:

Should health and physical education teachers be required to coach in the K-12 setting? Why or why not?

Sample Entry

Name: John Doe

Position: Undergraduate Student

Professional Affiliation: ABC University

What is the ideal number of students to teach in a physical education class and why?

I believe that the ideal number of students in a physical education class is ...

Send your reply to bheidorn@westga.edu

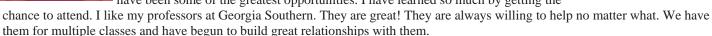


Rebekah Dohanich Newnan, GA GPA: 3.42



I am a Kappa Delta at Georgia Southern University. I love spending time with my sorority sisters as well as my family. I enjoy swimming, lifeguarding, and teaching children how to swim. I have a great interest in cooking and trying new recipes. I also love being active and doing anything outside.

I love the small class sizes at Georgia Southern University. My classmates and I have become very close over the past couple of years and I know that we can always count on each other. Being able to attend conferences such as GAHPERD and AAHPERD have been some of the greatest opportunities. I have learned so much by getting the



Being a part of Kappa Delta has provided me with so many service opportunities. Working with kids is a passion of mine. Working with the Girl Scouts and Prevent Child Abuse America has really touched my heart. With my undergraduate program I have been able to work with the Special Olympics, Fall Festivals at the surrounding elementary schools, and in the Special Education environment by teaching health lessons to students. Following graduation, I hope to find a career as an elementary school physical education teacher. I also want to coach cheerleading at the high school level. If I do not receive a job right out of college, I hope to attend graduate school at Georgia Southern University to further my education.



Kaci Nalley Douglasville, GA GPA: 3.5

Hobbies and Interests: spending time with family and friends; being involved in physical activity

Favorite Aspects About the Undergraduate Program at Georgia State University: the organization of the program, individual attention from faculty, and the amount of various field experiences

Professional involvement and Service Opportunities: member of GAHPERD, AAHPERD, PAGE, and HPE Panthers Long-term Goals: teach health and physical education at the

elementary or middle school level in Douglas County; coach varsity softball and/or cheerleading.



Ethan Dennis Franklin, GA GPA: 3.67

Hobbies and Interests: I am an avid outdoors guy who enjoys spending my time being adventurous (skydiving, fly boarding, slack lining, and camping). For the past two years I have been a team building facilitator where I take pride in developing self development, positive communication, leadership skills and the ability to work closely together to problem solve in a variety of client groups.

West Georgia

Favorite Aspects About the Undergraduate Program at the University of West Georgia: From the professors, our facilities, the professional development opportunities offered and my classmates, the overall Health & Physical Education program at UWG has been exceptional.

Professional Involvement and Service Opportunities: I am on the GAHPERD executive board as the chair of future professionals. I have presented and assisted with at GAHPERD and Share the Wealth, and I attended AAHPERD in Charlotte, NC.

Long-term Goals: After I graduate in April 2014 I hope to start my career in the teaching field in Health & Physical education. I also want to continue my education earning my masters degree in educational leadership. Eventually I want to be the principal of a school or hold a high ranking administrative position.

Reports: Executive Board Update

GAHPERD will have a major vote by the membership at the 2013 Convention. For several reasons, the Executive Board has voted to restructure the current board of over 50 members, down to less than 20 members. This motion passed as a result of information presented by a Presidential Ad Hoc Committee led by Shannon Williams and comprised of Board and non-Board members. This restructuring means that we will have to modify our bylaws and operating codes. A vote must be tallied by the membership to approve these changes. The new bylaws are currently on the website for our members to view. Please feel free to contact President Brian Devore (briangahperd@comcast.net) or any Executive Board member with questions. GAHPERD members will also have an opportunity to ask questions at the Town Hall meeting at the Convention (Sunday, October 27 at 4:00p) before the vote occurs.

Future Dates

September 21 GAHPERD Executive Board Meeting

October 26-29 GAHPERD Convention

Hilton Atlanta/Marietta Hotel & Conference Center

January 23-25 Share the Wealth Conference

February 17-23 SDAAHPERD Convention

March 18-22 AAHPERD National Convention Marietta, GA

Marietta, GA

Jekyll Island, GA Lexington, KY

St. Louis, MO

Membership

Are you interested in health, physical education, recreation or dance? Do you have passion and commitment for physical activity and wellness? Do you believe we can do more to help others and better prepare students for a lifetime of health and physical activity? Do you want to join the advocacy efforts of other dedicated professionals to pave the way toward a healthier generation of individuals? Do you believe in the power of numbers?

Join GAHPERD!

For more information, visit www.gahperd.org, contact Kim Thompson, Executive Director of the Georgia Association for Health, Physical Education, Recreation and Dance (kthompson.gahperd@att.net) or complete the membership form on the next page.

Mission Statement

GAHPERD, Inc. is a non-profit organization for professionals and students in related fields of health, physical education, recreation and dance. GAHPERD, Inc. is dedicated to improving the quality of life for all Georgians by supporting and promoting effective educational practices, quality curriculum, instruction and assessment in the areas of health, physical education, recreation, dance and related fields.

GAHPERD Membership Form

Please print clearly and provide all information requested. This will help us serve you better. Make check payable to GAHPERD and send this form with payment to: Kim Thompson, GAHPERD Executive Director, 9360 Highway 166, Winston, GA, 30187.

Please include all requested information

New:	Renewal:			Female:		Male:		
Last Name:	me:First Name:							
Classification and Membership Dues (check one)				1-year		(please circle) 2-year	3-year	
Professional (includes full time grad student Retired Future Professional (undergraduate student				\$25 \$12 \$8		\$45 n/a n/a	\$65 n/a n/a	
Preferred Mailing Ad	dress: (Street	Apt. #)						
(City)								
(State, Zip)								
County of Residence								
County of Employme	ent:							
School/Organization	/Employer:							
Home Phone:			Wo	rk Phone:				
Cell Number: :			FAX Number: _					
Email Address:								
Second Email:								
Employment Classifi Elementari Middle Sch Secondary Other Memberships	y nool		Two-Yea College/ City/Cou Other	/University	rator			
AAHPERD		No	GAE	Yes _	Ν	lo		
Membership #:				rship #:				
Areas of Interest:								
Division (che	ck one)		Section	ıs (check two)				
Dance		College/University						
General			NAGWS/Men's Athletics					
Health			Recreation					
Physical Education				Future Professional (Students check here)				
			Elementary PE Middle School PE					
	Secondary PE							
			3	ccondary FE				

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release August 30, 2013

NATIONAL CHILDHOOD OBESITY AWARENESS MONTH, 2013

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA A PROCLAMATION

In the United States, obesity affects millions of children and teenagers, raising their risk of developing serious health problems, including diabetes, cancer, asthma, heart disease, and high blood pressure. While childhood obesity remains a serious public health issue, we have made significant strides toward stemming the tide. After three decades of dramatic increases in obesity rates among America's youth, recent studies by the Centers for Disease Control and Prevention indicate that rates are holding steady and even decreasing in some areas. During National Childhood Obesity Awareness Month, let us build on this momentum and strengthen the trend toward healthier lifestyles and brighter futures for our Nation's children.

First Lady Michelle Obama's Let's Move! initiative is on the front lines in the fight against childhood obesity. With partners across the public and private sectors and through targeted programs, this comprehensive campaign aims to solve the challenge of childhood obesity within a generation. Let's Move! is dedicated to making nutritious food more available and affordable, helping kids get active, and fostering environments that support healthy choices.

To this end, the initiative is always looking for new ways to engage parents, families, kids, and communities. We launched *Let's Move!* Active Schools to help bring physical activity back into the school day. We are teaming up with mayors, faith leaders, and businesses to make the healthy choice the easy choice for families. And we are working with the Department of Agriculture to provide more nutritious school lunches and snacks.

Through the Affordable Care Act, my Administration is expanding access to services that can help all Americans reach and maintain a healthy weight. Thanks to this law, millions of children can receive obesity screening and counseling at no out-of-pocket cost to their parents. The Affordable Care Act also created the Community Transformation Grant Program, which is tackling the root causes of chronic disease, including poor nutrition and lack of physical activity. Through this initiative, communities across our country are working with public health leaders, businesses, schools, faith-based organizations, and individuals to build partnerships that promote healthy lifestyles.

We all share in the responsibility of helping our Nation's children enjoy longer, healthier lives. Together, we can give them the energy and confidence to learn, excel, and pursue their dreams.

NOW, THEREFORE, I, BARACK OBAMA, President of the United States of America, by virtue of the authority vested in me by the Constitution and the laws of the United States, do hereby proclaim September 2013 as National Childhood Obesity Awareness Month. I encourage all Americans to learn about and engage in activities that promote healthy eating and greater physical activity by all our Nation's children.

IN WITNESS WHEREOF, I have hereunto set my hand this thirtieth day of August, in the year of our Lord two thousand thirteen, and of the Independence of the United States of America the two hundred and thirty-eighth.

BARACK OBAMA

#