

February 28, 2016

Dear Members of the Education Committee:

Our names are Carol M. Ciotto and Marybeth H. Fede, Co-Founders of PASS (Physically Active School Systems) and Professors at Central CT State University and Southern CT State University. We urge you to support the PASS Red Ribbon School Program, *House Bill No. 5467, (Raised) An Act Establishing a Red Ribbon PASS Program.*

We want to thank-you very much for supporting the PASS Red Ribbon Program. We are hoping before the bill is voted on to make some revisions to it in order to better reflect the intention of PASS. Below is the current drafted wording with the proposed deletions highlighted and in brackets and below it the revisions we are hoping can be made. The way in which it currently reads does not truly capture the precise meaning behind PASS due to the focus being on the fitness scores which is only one of the criteria within the program that is not necessarily mandatory. We feel that the revised version truly captures the essence of PASS and is more accurately aligned with the criteria we have established for becoming a Red Ribbon PASS School.

Current Drafted Bill HB 5467 – Delete highlighted items within brackets

AN ACT ESTABLISHING A RED RIBBON PASS PROGRAM.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. (NEW) *(Effective July 1, 2016)* The Department of Education shall establish a Red Ribbon PASS Program. ~~The department shall recognize those local and regional school districts that qualify as a highly performing, physically active school system, or as an improving physically active school system. A local or regional board of education shall submit, at such time and in such manner as the department prescribes, a request for such recognition by providing the school district's results on the Connecticut physical fitness assessment. The department shall make information about the Red Ribbon PASS Program available on the department's Internet web site.~~ 10
This act shall take effect as follows and shall amend the following sections:

Revised Drafted Bill – add the underlined highlighted items

AN ACT ESTABLISHING A RED RIBBON PASS PROGRAM.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. (NEW) *(Effective July 1, 2016)* The Department of Education shall establish a Red Ribbon PASS *(Physically Active School System)* Program. Such program shall (1) be administered by the Connecticut Association for Health, Physical Education, Recreation and Dance and the cofounders of PASS, (2) recognize school districts as a highly performing, physically active school system and schools as an improving physically active school system, and (3) collect data from the preceding school year's Connecticut Physical Fitness Test from the State Board of Education on or before July first of each school year, beginning with the school year commencing on July 1, 2016. The department shall make information about the Red Ribbon PASS Program available on the department's internet website. This act shall take effect as follows and shall amend the following sections:

Section 1 *July 1, 2016* New Section

Statement of Purpose:

To establish a Red Ribbon PASS program

Testimony of Carol Ciotto and Marybeth Fede – Co-founders of PASS

PASS, a Physically Active School System, is a program by which school districts and schools utilize opportunities for school-based physical activity that enhance overall fitness and cognition which can be broken down into four integral parts. First, there needs to be an understanding of the important connection between mind and body. Making this connection is crucial to the success of the program and more globally to have an impact on childhood obesity. The positive effects of connecting physical activity to learning have been around for many years (Berg & Sady, 1983; McKenzie et al., 1996; Sallis & McKenzie, 1998; Stone, McKenzie, Welk, & Booth, 1998; U.S. Department of Health and Human Services [USDHHS] 2000). However, it wasn't until Ratey (2008) published his book, *Spark: the Revolutionary New Science of Exercise and the Brain*; that we have begun to take notice.

Second, cooperation among administrators (superintendents & principals), faculty (classroom teachers, physical educators, and other “special” subject areas), parents, and children needs to occur. Administrators need to be supportive of training for classroom teachers, so they are comfortable implementing informal, formal and content-rich physical activities in the classroom. They also need to recognize the importance of daily, quality physical education (PE) programs. These types of comprehensive programs not only provide health benefits for students, but can also reinforce the classroom curriculum, through such programs as the ABC's of Fitness (Katz, 2007) and Action Based Learning (Blaydes, 2000). There needs to be support of and cooperation among these groups in order for PASS to be successful.

Third, collaboration among legislators, institutions of higher education, community leaders, school administrators and parents needs to occur. Legislators need to provide opportunities for grants and service learning projects throughout their districts. Colleges and

universities need to prepare their pre-service teachers to not only understand the benefits of physically active classrooms, but to be able to effectively implement a physically active program in their student teaching placement and eventually in their full-time employment. Partner with organizations (i.e. parks and recreation departments, youth development organizations, local governments, health service providers, faith-based organizations, and parents) to build communities around good nutrition, and positive and inclusive physical activity. Legislators need to provide policy change, incentives, enabling resources, guidance and support to this end.

In order for PASS to be successful “school districts and schools should utilize all opportunities for school-based physical activity to develop physically educated students who participate in the nationally-recommended 60+ minutes of physical activity each day and develop the knowledge, skills, and confidence to be physically active for a lifetime (CSPAP, 2013, p.1). School districts need to make the commitment to become a physically active school system (PASS) through collaboration with the stakeholders, (administration, faculty & staff, students, family & community). The roles and responsibilities of the key stakeholders should be addressed. These individuals should have a vested interest in PASS. The best approach is to include representatives from: school boards, administrators, school faculty and staff, students, family and community partners.

Having a solid understanding of the benefits of a PASS program and why it is needed will help you to make important connections between mind and body in order to make a lasting commitment for creating a physically active environment. Being physically active is important in combating hypokinetic diseases and certain types of cancer (United States Department of Health and Human Services USDHHS, 1996-present). We can now add to the long list of benefits of physical activity; increased cognition, focus, and overall readiness to learn. It is the intent of the

authors, in this chapter, to help all educators understand and be able to feel comfortable using the powerful tool of movement to enhance students' physical, emotional, spiritual, and cognitive abilities.

Although it is important that high quality physical education programs exist within a school, it is only the beginning to solving the childhood obesity problem and how sedentary we as a nation have become. The current structure of the school day needs to be addressed. With all the research being done about the effects of physical activity on focus, cognition, readiness to learn (California State Board of Education, 2007, Ratey, 2008, Carson et. Al 2014), and armed with the fact that aerobic activity can actually help create new neurological pathways, and the Naperville, IL model, (Ratey, 2008) we now have proof that fit kids are smarter. According to Shlaes, 2012, sitting for extended periods of time (20+ minutes) impacts neurological development, interferes with students' health, and slows learning. We cannot over emphasize the importance of making the connection between the mind and body. How the information is disseminated is where the problem lies. History tells us that using the doom and gloom approach, the threat of disease, or even staving off diseases doesn't work. Educators have to change the Nation's story from the detrimental effects of a sedentary lifestyle to one about improved health and performance beginning with physical activity as the basis of the pyramid. Our social, emotional and spiritual health all depend on our physical health.

In order to understand the connection between the mind and the body, educators need to fully comprehend what physical activity/movement is, the benefits of imbedding it throughout the day. According to Blaydes (2000) there are three distinctions of movement that need to be addressed when reviewing brain research: 1) movement, 2) physical activity, and 3) exercise. Movement is the navigation of one's environment. Physical activity is any movement of the

skeletal muscle that expends energy. Exercise is physical activity that is planned and repetitive, with an increase in physical fitness as the goal. The two aspects of movement that benefit learners most are physical fitness and use of kinesthetic activities to anchor academic concepts resulting in cognitive reinforcement. According to Blaydes (2000); “movement prepares the brain for optimal learning”.

Early research dealing with physical activity and cognition showed that physical activity enriches the learning environment; physical fitness is positively related to academic performance, and aerobic fitness aids cognition (Diamond, 1998; Gage, 1999; Gardner, 1983; Jensen, 1998). More recent research has documented the positive benefits physical activity/movement and exercise, have on cognition. In 2008, Ratey introduced the world to *Spark: The New Revolutionary Science of Exercise and the Brain*. He began prescribing various types of physical activity and exercise to his patients as treatment for everything from anxiety, stress, and depression to Alzheimer’s disease. He also researched the effect of aerobic exercise on academic performance. With regular and prolonged aerobic activity, such as brisk walking or bike riding, new neurological pathways in the brain are created, which benefit old and young alike.

Movement differentiates instruction, increases retention, motivation, attention and engagement in the learning process, and should be utilized for its full potential benefits in both the classroom and in the gymnasium (Lengel & Kuczala, 2010; Ratey, 2008). “The research confirms that students perform better in school when they are emotionally and physically healthy. They miss fewer classes, are less likely to engage in risky or antisocial behavior, concentrate more and attain higher test scores” (SHAPE America, 2015).

Exercise is also of extreme importance, as it improves learning on three levels: 1) it optimizes the mindset to improve alertness, attention, and motivation; 2) it prepares and encourages nerve cells to log in new information; and 3) it spurs the development of new nerve cells from stem cells in the hippocampus (Ratey, 2008). By addressing the need for more physical activity during the school day and its positive effect on cognition, attendance and behavior, society can begin to see the possibility of an end to the problems of childhood obesity, type 2 diabetes and declining test scores (Kelly, Kelly & Franklin, 2006; Cotman & Engesser-Cesar, 2002).

In order to create PASS, school districts should implement an action plan that addresses the following components: Quality Physical Education Programs, Before School Physical Activity, During School Physical Activity, After School Physical Activity, and Family & Community Based Physical Activity.

A quality PE program needs to be the basis for PASS which includes a planned sequential program that is based on state and/or national PE standards and guidelines, where all students develop the necessary skills and knowledge to acquire and sustain a physically active lifestyle. In order to achieve this, quality PE programs should be taught by state certified physical education teachers, and meet the National Association of Sport and Physical Education, (SHAPE America) minimum recommendations for PE, (150 minutes/week for Elementary School, and 225 minutes/week for Middle & High School) (SHAPE America , 2015). Physical education programs should optimize moderate to vigorous physical activity to facilitate retention, concentration, and behavior. The use of light physical activity is an attention reset tool, which can also be utilized in the classroom. Moderate physical activity creates lasting effects up to 60 minutes and should be implemented during PE and recess. Finally, vigorous physical activity has initial fatigue, but the effects last longer and should be incorporated in PE, structured recess,

and before and after school programs (Mahar, 2011). Examples of these types of activities can be found in the 2008 Physical Activity Guidelines for Americans (www.health.gov/paguidelines).

Before and after school physical activities should include but not be limited to opportunities for all students, to have the chance to participate in unstructured/structured physical activity and to practice skills and concepts learned in PE. These types of activities promote cooperation, collaboration and problem solving skills. In addition, they improve attention and concentration for classroom learning, and can contribute significantly to increased cognition (California Department of Education, 2002; Dwyer, Sallis, Blizzard, Lazarus, & Dean, 2001; Ratey, 2008, Carson et al 2015). Some examples include: intramural sports, family fitness nights, the walking school bus, bike to school programs, and the Naperville model.

Educators need to make the important connection between the brain and the body. Physical activity during school reinforces the link between classroom curriculum and movement. It facilitates retention, concentration and positive behavioral attributes. There are three types of physical activity that can be imbedded throughout the school day. The first is, content rich activities which directly links curriculum to movement, and anchors learning. Brain breaks, which might include cross lateralization and rhythmic activities, can help stimulate the brain and prepare it for learning; an excellent example of this is The Brain Dance (Gilbert, 2000). The final types of physical activities are just plain fun, they don't necessarily link to curriculum, but help students to refocus, reengage, and reinvigorate their desire to learn.

Family and community support should play a critical role in getting children and adolescents participating in physical activity beyond the school day. They can act as positive role models by engaging in physical activity themselves to promote lifelong physical activity in their children. Families should try to incorporate physical activities into their daily routines and

engage in local school and community physically active events. Communities should provide a variety of opportunities for their members to be physically active, and should work with schools to increase and promote physical activity engagement. They should also collaborate with other local organizations to promote and host events that advocate for a physically active community. Examples might include family fun runs, health & wellness fairs, and active transport.

Schools and communities can provide a variety of strategies and approaches to help students become more physically active, that include quality physical education programs and opportunities that increases access to physical activity for all students to be physically active not just during physical education class but throughout the day. Students can get most of their physical activity through a quality physical education program that is complemented by activities before, during, and after school, recess, physical activity breaks, intramural programs, interscholastic sports, walking or biking to and from school and participating in community and family based physical activity. Communities and schools play a key role in shaping the social and physical development of their students.

Carol Ciotto and Marybeth Fede have developed the PASS model for Connecticut that is being implemented in various ways within several school districts in the state of Connecticut. In addition to PASS in the K-12 setting, CCSU and SCSU under the direction of Carol Ciotto and Marybeth Fede, respectively, are preparing their pre-service teachers to not only understand the benefits of physically active school systems, but to be able to effectively implement a physically active program within various field experiences and their student teaching placement and eventually in their full-time employment. School and community partnerships have been and will continue to be established at both universities. These partnerships provide teacher candidates with the opportunity to go into various school districts and/or community organizations to work

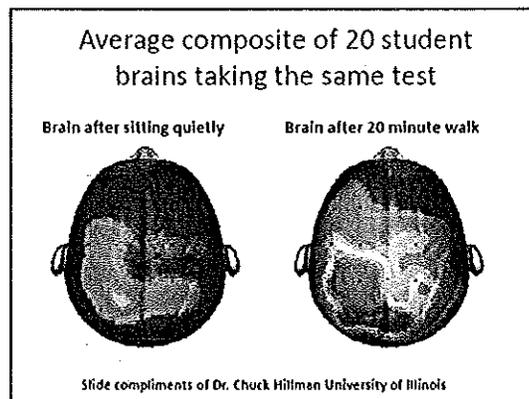
collaboratively with students, classroom teachers, school administrators, community leaders and state legislators to advocate for and implement PASS.

Many know the health-related benefits associated with being physically active, and now the field of exercise science can add brain power to the long list of tried and true benefits. Raley (2008) refers to the good news as a revolution, so let us take up the cause and raise our heart rates, put our heads together, and pull out all the stops to give children the best chance to be smart, healthy contributing members of society, by providing them with a truly interdisciplinary, holistic education.

It can be challenging to motivate students, especially when it comes to a lifestyle change. The most effective way to instill change is to make it simple and attainable. By imbedding physical activity as a part of the school's culture before, during and after school, children will more likely adopt it as a part of their everyday behavior. By providing opportunities for physical activity throughout the school day, students can bring this new behavior home and out into the community so we can all learn the importance of healthy behavior while improving cognition and academic success.

Physical exercise is not only important for your body's health - it also helps your brain stay sharp and perform better. The brain is really not any different from the rest of the muscles in your body. "Use it or lose it" The benefits of physical exercise, especially aerobic exercise, have positive effects on brain function on multiple fronts, ranging from the molecular to the behavioral level. According to a study done by the Department of Exercise Science at the University of Georgia, even briefly exercising for 20 minutes facilitates information processing and memory functions. Exercise affects the brain on multiple levels, increases heart rate, pumping more oxygen to the brain and

aids in the release of several hormones providing a nurturing environment for the growth of brain cells. Any exercise that is good for your heart is great for your brain. Aerobic exercise is not only great for the brain and body by improving brain function; it can also help repair damaged brain cells. The below image shows that kids who engage in light exercise before exams, like a one-mile walk, performed 25 percent better than their counterparts who were tutored for the same amount of time.



It is critical that we begin to integrate physical education throughout the curriculum. Connecting all educators with other subject area teachers to reinforce classroom concepts, Common Core and 21st century learning skills is critical to continued student success. We must all join the *PASS* movement to educate ourselves and our students on the many benefits of living a physically active lifestyle. So together, let's get moving, raise our heart rates and pass *House Bill No. 5467, (Raised) An Act Establishing a Red Ribbon PASS Program.*

Sincerely,

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Fall 2015 CT PASS SPEAK OUT DAY!