

# PASS: Creating a Healthier Tomorrow

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# Help Change How the:

- Children of today
- Impact the future of tomorrow

# What is the Problem?

- Children of today are in crisis because of the obesity epidemic facing this country
- Therefore, the future of tomorrow is in jeopardy if we continue down this same path

# What is the Problem?

- Obese and overweight children are at an increased risk for both physical and emotional health problems
- Emotional health risks include, but are not limited to depression, withdrawal, and behavioral problems (NGA, 2012; Lavizzo-Mourey, 2007).

# What is the Problem?

Obese children have:

- significant deficits in memory, learning and vocabulary due to sleep apnea.
- greater risk for learned helplessness, contributing to low self esteem, and an overall defeatist attitude toward physical activity and learning, carrying over into adulthood (CDC, 2012, 2009; Buhl, et al., 2005).

# What's Contributing to the Problem?

## Physical Inactivity:

- Leading cause of obesity
- Effects more than 23 million children and adolescents— one out of every three youths
- Less than half of U.S. children and adolescents meet the recommended 60 minutes of PA
- The first grade class of 2007-2008 is the first generation predicted to have a life expectancy less than that of their parents (Olshansky et al., 2005)

What do we do?

# Change the Story

Start by:

- Understanding the important connection between mind and body

# Mind/Body Connection

- 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).



# Mind/Body Connection

Dr. Stuart Brown (Stanford University) –  
Author of “The Science of Play”

- Exercise Grows Brain Cells
- Blaydes (2000), “Movement prepares the Brain for Optimal Learning”.

# Mind/Body Connection

- Movement anchors learning through our senses to increase retention and retrieval of memory
- About 85% of students prefer to process KINESTHETICALLY
- What makes us MOVE is also what makes us THINK

# What is Physical Activity?

- Physical activity simply means movement of the body that uses energy.

# Why We Need It?

- Long term health benefits.
- Eliminates obesity and Prevents Disease
- Benefits the BRAIN first
- Boosts brain function
- Improves cognition
- Strengthens memory
- Prepares the brain to learn
- Regulates behavior
- Weakens the ill effects of poverty

Blaydes  
(2000)

# How Much is Needed?

## **ADULTS (18 to 64 years)**

- At least 2 hours and 30 minutes each week of aerobic physical activity at a moderate level

OR

- 1 hour and 15 minutes each week of aerobic physical activity at a vigorous level.

# MVPA: Physical Activity Intensity

- Light PA= Physically active classroom (Attention reset)
- Moderate PA=lasting effects up to 60 minutes.  
PE & Recess
- Vigorous PA=initial fatigue, but effects last longer. PE class & structured recess, before & after school programs.  
(Phillips,2011;Tomparowski, 2003)

# How Much is Needed?

## **CHILDREN AND ADOLESCENTS (6-17 years)**

- 60 minutes or more each day of moderate - vigorous intensity aerobic physical activity
- At least 3 days a week of vigorous-intensity physical activity
- Should be developmentally-appropriate, fun, and offer variety

# How Much is Needed?

## **YOUNG CHILDREN (2-5 years)**

- No specific recommendation for the number of minutes young children should be active each day
- Should play actively several times each day
- Should be developmentally-appropriate, fun, and offer variety



# What is Physical Education?

- The development of physically literate individuals who have the knowledge, skills and confidence to enjoy a lifetime of physical activity
- PE builds the Framework for all Learning
- Neuroscience supports the need for Quality Physical Education

# Why we need it?

- Improves physical fitness
- Skill development
- Regular healthful physical activity
- Supports other subjects
- Self-discipline
- Improved judgment
- Stress reduction
- Strengthened peer relationships
- Goal setting
- Self confidence and self esteem

# NASPE

- The National Association for Sport and Physical Education, NASPE, (2011) recently released a position statement titled *Physical Education is Critical to Educating the Whole Child*
- Research confirms that students perform better in school when they are emotionally and physically healthy.

# How much is needed?

## NASPE MINIMUM Recommendations for PE

- Elementary School: 150 minutes/week
- Middle school & High School: 225 minutes/week

# Reality

A recent CDC report found daily PE in only:

- 4% of elementary schools
- 8% of middle schools
- 2% percent of high schools

# Does PE/PA Make you Smarter?

## What does the Research say...

- Neuroscience supports the need for Quality Physical Education

## Why?

- Exercise changes the brain at a MOLECULAR LEVEL
- It Grows Brain Cells

# Does PE/PA Make you Smarter?

- Exercise improves learning on three levels;
  - first** – it optimizes the mind-set to improve alertness, attention, and motivation,
  - second** - it prepares and encourages nerve cells to log in new information, and
  - third** - it spurs the development of new nerve cells from stem cells in the hippocampus – medial temporal lobe (Ratey, 2008).

# What's the Answer?

- Schools are excellent venues to start by providing opportunities for PA

-Many do not

-Budget constraints or pressure to improve standardized test scores often reduce or eliminate programs



# What's the Answer?

- School health and physical education programs alone are not enough to meet the needs of an epidemic of this proportion
- Should be at the core of a Comprehensive Physical Activity Plan

# **PASS:** Physically Active School Systems

## ***WHAT IS P.A.S.S.?***

- Embedding physical activity throughout the school day/system to enable all students to improve or maintain their physical fitness and their overall health and wellness, while enhancing their learning opportunities.
- Incorporates activities before school, during school, after school, at home and in the community

# WHAT ARE THE BENEFITS OF PASS?

- ++ Psychological well-being  
Pressure
- -- Anxiety and depression  
health
- ++ Self-esteem  
Focus
- - Overweight and obesity  
Absenteeism
- + HDL cholesterol  
issues
- - Blood
- ++ Skeletal
- ++ Cognition,
- -
- - Behavior

# PASS Stakeholders

- Cooperation among administrators (superintendents & principals), faculty (classroom teachers, physical educators, and other “special” subject areas), parents, students and community members needs to occur.
- Collaboration among legislators, institutions of higher education, community leaders, school administrators and parents needs to occur.

# PASS Stakeholders

- Legislators need to provide opportunities for grants and service learning projects throughout their districts.
- Legislators need to provide policy change, incentives, enabling resources guidance and support to this end.

# PASS Stakeholders

- Colleges and universities need to prepare their pre-service teachers to not only understand the benefits of PASS, but to be able to effectively implement a physically active program in their classrooms and schools
- School districts need to partner with other community 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.

# Is there a Happy Ending?

- By addressing several issues; society can begin to see the possibility of an end to the problems of childhood obesity, type II diabetes and declining test scores (Kelly, Kelly & Franklin, 2006; Cotman & Engesser-Cesar, 2002).

# We Retain

- 10% of what we **READ**
- 20% of what we **HEAR**
- 30% of what we **SEE**
- 50% of what we **HEAR and SEE**
- 70% of what we **HEAR, SEE and SAY**
- 90% of what we **HEAR, SEE, SAY and DO**



# Impacting Tomorrow

- It takes a village to raise one healthy child, and in that vein, a mass communication effort needs to take place to craft the message and image of physical activity and physically active learning as an expectation and a right!