In-school Physical Activity Policy and Practices in Rural, Low-income, Predominantly African American School Settings

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Mississippi Healthy Students Act

- **Unfunded** mandate to reduce childhood obesity
- Provisions of the law dictate activity-based instruction time
  - 150 minutes activity-based instruction for K-8th
  - $\frac{1}{2}$ Carnegie unit (60 hours)
- Nutrition requirements
- School Wellness Councils
Mississippi Health Disparities

- Overall decrease in Mississippi childhood obesity prevalence from 43.9% to 40.9% between 2006 and 2011
  - White: decrease from 40.6% to 34.8% (2005 – 2011)
  - Disparity is present and significant across all grade levels
Mississippi Delta

The Delta is a region that struggles to accelerate the rate of social and economic improvements that provide the “average” Delta resident a standard of living at least equal to that of the “average” Mississippian (Doolittle, 2002).
POLL QUESTION

How would you best describe the geography of the area in which your work is conducted?

a. Urban
b. Suburban
c. Rural
d. Native American Reservation
e. Other (please submit your response in Q&A)
What we knew.

“*If we build it, they will come – and be active.*”

AND

“*If we give them the time, they will use it – to be active.*”

Districts

- ↓ SES
- ↑ %Black
- Rural

Weak in-school physical activity (ISPA) Policy

MOST Obese Students

Infrequent & inadequate ISPA opportunity

MOST active, when given the opportunity
What we wanted to know.

WHO IS ACHIEVING SUCCESS AND HOW?
WHO IS STRUGGLING AND WHAT DO THEY NEED TO ACHIEVE SUCCESS?

• Focus groups
  • 4th and 5th grade students (n=16)
  • School PE teachers (n=21)
  • School Principals
• Interviews (n=11)
  • District Administrators (n=2)
What we learned.

Mississippi Department of Education Office of Healthy Schools
(State-Level Administration)

Mississippi State Department of Health (Assistance)
Bower Foundation (Funding Agency)
Center for Mississippi Health Policy (Evaluation)

“…need to be mindful of the message we are sending and how we are sending it…working to make progress in this field for 10 plus years…”

District-Level Administration

“…responsibility of school principal to develop and implement [ISPA] policy”
“…communication and evaluation are key…”

Principal (School-Level Administration)

- ISPA important for academic success
- Strong community partnerships
- Classroom integrated ISPA
- Rurality and resources are barriers

Teachers

- Scheduling
- Monetary resources
- Lack of administrative support
- Faculty/principal attrition
- Principal support and community partnerships

Students

- ISPA important for academic success
- Desire and enjoy ISPA
- Competition, games, dance
- Ample time/not ample time for ISPA
POLL QUESTION

Principal and/or faculty attrition is a barrier to implementing ISPA policy in my school district and/or school.

a. Strongly agree
b. Agree
c. Neither agree nor disagree
d. Disagree
e. Strongly disagree
School-Community Engagement

Socio-Ecological Levels of Influence

- Individual
  - Individual Student Level
    - Enhanced Focus
    - Increased Alertness
    - Improved Behavior
    - Increased Enjoyment
    - Increased Physical Fitness

- Interpersonal

- Environment/Culture
  - Fosters environment/culture supportive of ISPA

- Organizational
  - School-Level
    - Principal “ISPA Champion”
    - Teacher Buy-in
    - Student Norm

- Community
  - School Wellness Councils and community partnerships supportive of ISPA policy and practice
Logic Model to Reduce/Eliminate Health Disparities

**Resources and Inputs**
- School Level
  - Principal
  - Teachers
  - Students
- Community Level
  - Wellness Councils
  - Community partnership

**Strategies and Activities**
- Principal “ISPA Champion”
- ISPA policy
- ISPA behavior/engagement
- Teacher buy-in
- Physical education
- “Brain Breaks”
- “Move-to-Learn” (classroom integrated physical activity)
- Student norm
- Recess

**Outputs**
- Efficient and effective student-teacher and student-student interactions
- Environment and culture supportive of ISPA
- ISPA behavior/engagement

**Enhanced Focus**
- Improved academic performance

**Intermediate Outcomes**
- Improved Health Outcomes
- Increased Alertness
- Increased Enjoyment
- Improved Behavior

**Long-term Outcomes**
- Greater Educational Attainment
- More efficient and effective students/learners
- Reduced/eliminate health disparities
The problem is...

**Resources and Inputs**
- School Level
  - Principal "ISPA Champion"
  - Teachers buy-in
  - Students
- Community Level
  - Wellness Councils
  - Community partnership

**Strategies and Activities**
- Principal "ISPA Champion"
- Teacher buy-in
- Student norm
- ISPA policy
- Physical education
- Recess
- "Brain Breaks"
- "Move-to-Learn" (classroom integrated physical activity)

**Outputs**
- Efficient and effective student-teacher and student-student interactions
- Environment and culture supportive of ISPA
- ISPA behavior/engagement

**Outcomes**
- Short-term
  - Enhanced Focus
- Intermediate
  - Improved academic performance
  - More efficient and effective students/learners
  - Improved behavior
  - Improved fitness
  - Improved Health Outcomes
- Long-term
  - Improved Alertness
  - Increased Enjoyment
  - Increased Enjoyment
  - Greater Educational Attainment
  - Reduce/eliminate health disparities
**Poll Question**

Community engagement and/or developing community partnerships to support ISPA policies and practices are barriers in my school district and/or school.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree
Next Steps

Community-Level

• Develop sustainable School Wellness Councils to thwart principal and faculty attrition
  • Community-based and community-engaged action research
  • RARE model (Rapid Assessment, Respond, and Evaluate)
  • Combined with evidence-based strategies

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Mississippi ISPA Research Brief

- Active Living Research website
  http://activelivingresearch.org/mississippi-school-physical-activity-policy

- University of Mississippi Medical Center, Office of Population Health
  http://www.umc.edu/oph/
ISPA promotes academic achievement.

Hence, a good investment in the future of Mississippi’s public education may be through an investment in opportunities for ISPA and enhancing student fitness.