



## **Creating the Environment**

**Houston Independent School District**

**School Health Advisory Council**

**Annual Progress Report**

**June 2011**

**School Health Advisory Council (SHAC)  
2010-2011 Annual Progress Report to the Board of Trustees**

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## Introduction

Every independent school district is required by law to have a school health advisory council (SHAC) of which the majority of members must be parents who are not employed by the school district. The SHAC is annually appointed by the local education agency Board of Trustees. (Texas Education Code; Title 2, Chapter 28, Section 28.004)

## What is a SHAC?

A SHAC is a group of individuals representing segments of the community and school district which provides advice to the district on coordinated school health (CSH) programming and its impact on student health and learning.

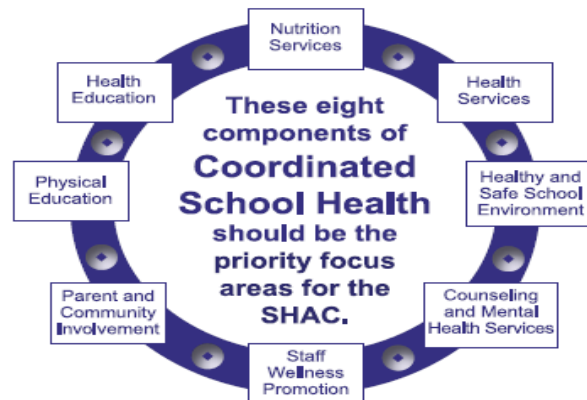
## Houston ISD SHAC Members 2010-2011

REPRESENTING	MEMBERS	STATUS
Anna Eastman- Dist. 1	Mary Lawton – Parent Replacement TBA	Resigned
Carol Galloway- Dist. 2	John Gibbs – Parent	
Manual Rodriguez- Dist. 3	Lucy Reyna – Parent	
Paula Harris- Dist. 4	Deandrea Dillard – Parent	
Michael Lunceford- Dist. 5	Ben Barnett – Parent	
Greg Myers- Dist. 6	Dale Davidson – Parent (Co-Chair)	
Harvin Moore- Dist. 7	Susan Tortolero - Parent Replacement: Eric Ratliff - Parent	Resigned
Juliet Stipeche- Dist. 8	Mike Pomeroy	
Larry Marshall- Dist. 9	Melanie Rosen - Parent Replacement TBA	Resigned
Parent-at-large	Illiana Kuntz – Parent Bettina Seigal – Parent/Food PAC Esther Flores – Parent Muriel Jackson – Grandparent Chrysi Polydoros – Parent Louise Goldberg – Parent	
School Level Educators	Delia Thibodeaux – Westside HS Cynthia Roesler – Lanier MS Tom Goslin – Cage ES/Project Chrysalis	Resigned Resigned
Community	Sheryl McCurdy – UT School of Public Health Orell Fitzsimmons – United Labor Union Robert Austin – Pediatric Consultants – Houston Joseph Le – Joint City County Commission on Children Florida Kweekeh – City of Houston Department of Health Dena Gray – Concept 2 Resources	
District Resource Team Non-voting members	Rose Haggerty – Secondary HPE (Co-Chair) Melanie Crawford – Elementary HPE Felicia Ceaser-White – Health Ed. Specialist Beverly Marlin – Health Ed. Specialist Sarah McDonald – HISD Food Services Dietician Gwendolyn Johnson – Health and Medical Services Teresa Blake - Asthma Management Program, Health/Medical Services Christine Bachman – University of Houston Downtown Julie Sprecklemeyer – Aramark Management Lydia Ramos – HPE Secretary	



## What is Coordinated School Health?

Coordinated School Health (CHS) is a systematic approach of advancing student academic performance by promoting, practicing, and coordinating school health education and services for the benefit and well-being of students in establishing healthy behaviors designed to last a lifetime.



**“Research shows that healthy children do better in school - from attendance and behavior to academics and overall performance.”**

## Texas Education Agency 2010-2011 Goals for Districts and Campuses

- ✓ Collect and submit fitness assessment data representing 100% of eligible students.
- ✓ Increase percentage of students able to achieve the healthy fitness zone standard in all six required test items.
- ✓ Continue to develop and implement and/or strengthen goals and objectives for physical education/activity
- ✓ Incorporate Coordinated School Health as a part of Campus Improvement Plans.
- ✓ Strengthen and utilize SHACs to support the implementation of all school health policies and practices.

## Texas Legislation requiring SHAC involvement

**Senate Bill 283:** Requires the local board of trustees to appoint at least five members to the local SHAC. The council is required to meet at least four times a year and must annually submit recommendations to the superintendent regarding the district's health education curriculum and instruction. If human sexuality is taught, the district must provide written notice, a summary of course content, and information on parents' rights to opt their child out of instruction.

**Senate Bill 530:** Requires elementary students to participate in moderate or vigorous daily physical activity for at least 30 minutes and middle schools students to participate for 30 minutes daily, or 135 minutes weekly, or 225 minutes every two weeks. Middle schools must offer physical activity/physical education for at least four semesters. Physical activity must be part of the district's physical education curriculum. Exemptions include students with illness or disabilities, participating in extracurricular activities with a moderate or vigorous physical activity component or in school-related activity or activity sponsored by a private league or club.

**Senate Bill 891:** Requires that full-day prekindergarten students participate in at least 30 minutes of moderate or vigorous daily physical activity throughout the school year. To the extent practicable, students enrolled in half-day prekindergarten must participate in the same type and amount of physical activity as those in full day programs. The bill also requires the district to identify ways to maintain the safety of the student, especially if the student to teacher ratio is greater than 45 to 1. Additional regulations regarding the physical education curriculum are addressed.

**Senate Bill 892:** Expands requirements of an elementary or junior high Campus Improvement Plan to develop goals/objectives for the CSH program at the campus. Campus performance goals and objectives will be based on fitness assessment data (including data from research-based assessments), academic performance data, student attendance rates, percentage of disadvantaged children, the use and success of any method employed to ensure student participation in physical activities or other recommendations by health advisory council. (Not applicable for high school.)

**Senate Bill 1344:** Directs school districts to choose an evidenced-based alcohol awareness instructional program to use in the district's middle school (MS), junior high school (JHS), and high school (HS) health curriculum. The curriculum must address the dangers, causes, consequences, signs, symptoms, and treatment of binge drinking and alcohol poisoning.

**House Bill 3076:** Allows districts to use the parenting and paternity awareness program (PAPA) developed by the State Board of Education in conjunction with the Office of the Attorney General in middle or junior high school curricula. School districts and teachers may use their discretion to modify the suggested sequence and pace of the program at any grade level. Students under 14 years of age must have parental permission to participate in the parenting and paternity awareness program.

**House Bill 3:** Overhauls the State of Texas' accountability and graduation requirements. Students in the Recommended High School Plan are no longer required to complete a ½ credit in health education; they are now required to complete one credit in physical education rather than 1-½ credits.

**State Legislated SHAC Requirements**

- ✓ A parent must serve as a co-chair
- ✓ A minimum of five members must be appointed to serve on the SHAC by Board of Trustees
- ✓ Majority of members must be parents who are not employees of the district
- ✓ SHAC must meet at least 4 times a year
- ✓ SHAC must deliver an annual report to the Board of Trustees
- ✓ SHAC is required to submit recommendations regarding the districts' health education curriculum

**SHAC's other activities**

SHAC can provide oversight for the following activities required of local campus/districts per legislation:

- ✓ Provide written notice, course content and parents' rights regarding sexuality education if taught
- ✓ Ensure that full-day pre-k students participate in 30 minutes of daily vigorous activity
- ✓ Include goals and objectives for CSH in HS and MS Campus Improvement Plans
- ✓ Administer FitnessGram® to all students in grades 3-12
- ✓ Identify and select an evidenced-based alcohol awareness instructional program
- ✓ Use the PAPA program in HS or MS health classes
- ✓ Comply with revised graduation requirements

## Houston Independent School District SHAC

The Houston ISD seeks and values the input from parents and community leaders in its effort to enhance all students' health and wellness. The SHAC acts as ambassador to represent the community's concerns and influence health education curriculum and instruction.

**Vision:** The vision of the SHAC is for parents, employees and community leaders to work together to evaluate school health and provide recommendations that result in the Board of Trustees taking positive actions to ensure healthy, happy, and productive students, empower them to graduate from HISD, and assist them in making healthy choices.

**Mission:** The mission of the Houston ISD SHAC is to advocate for a healthy environment, promote school health and safety, encourage healthy life-long practices throughout the district and the community, set norms for health instruction, and establish a platform to create a culture of wellness.

### 2010-2011 Accomplishments:

- Convened a June retreat to identify priority areas for 2010-2011 school year.
- Identified a scheduled time for the SHAC annual report to the board of trustees
- Recruited new members
- Received TEA award: Characteristics of Effective School Health Advisory Council (SHAC) in the amount of \$4,500
  - Used funds to develop presentation display boards, flyers and brochures to inform the HISD community about SHAC as well as recruitment tools for new members (see Appendix A)
- Developed sub-committees to work on the following prioritized areas:
  - Nutrition Priority: Food Services/Nutrition Education. Provide exposure to nutritious foods and educate HISD students to understand the relation between food and health/wellness.
  - Fitness Priority: Physical Education/Activity/Fitness. Ensure the support for quality physical education and fitness instruction and assistance in creating a culture of wellness in the HISD community.
  - Sexual Health Priority: STI/HIV/Teen Pregnancy Prevention. Utilize evidence-based programs and best practices as criteria to identify and implement the most accurate and effective sexual health education curricula in HISD schools.
- Monitored the collaboration with UT Health Science Center regarding district wide implementation of the evidence-based STI/HIV/Teen Pregnancy prevention program, titled "It's your Game...Keep It Real", for students in grades 7-8.

- Revised district policy regarding the governance of SHAC such as rules of attendance and assigning duties and responsibilities of members.
- Monitored the district's health-related grants such as Youth Risk Behavior Survey administration (100% school participation), HIV Prevention, Asthma Management and Texas Fitness Now for program activity updates, outcomes and recommendations.
- Provided recommendations to the Elementary School Guidelines related to the important of recess and how schools should schedule recess into the instructional day.
- Selected 2 members to represent SHAC as a part of Team HISD to attend the "It's Time School Summit (June) and the first of its kind "Urban Physical Education Leadership Summit (July)

During the 2010-11 school year, the SHAC identified three priorities: nutrition, fitness and sexual health and created three sub-committees to work on these issues. Each group consisted of several SHAC members who met several times throughout the year to identify the problem, the cause and recommendations. The three priorities are further explained in the following pages.

## **Nutrition Priority: Food Services and Nutrition Education**

### **Nutrition Priority: Food Services and Nutrition Education**

Provide exposure to nutritious foods and educate HISD students to understand the relation between food and health/wellness and make better choices.

**Background:** HISD campuses offer students an array of “competitive” foods (i.e., foods sold in competition with the federally subsidized school meal program) that either contribute to obesity (high in fat and sugar) and/or offer little nutrition to a healthful diet (i.e., lower in fat and sugar but providing only “empty calories”) while instilling poor eating habits among HISD students. In 2009, in connection with the opening of the new central kitchen, HISD publicly announced its goal of becoming “*a national leader in child nutrition and wellness among public school districts.*” Yet the sale of these foods on HISD campuses disagrees with this goal, undermines wellness education HISD students receive in the classroom and directly contributes to poor health.

**What do the data tell us?** According to 2010 FitnessGram data, between 30% to 37% of HISD students have an unhealthy amount of body fat as measured by BMI, these data also show a negative correlation between obesity and some test scores in the district.

### **Recommendations**

**Short Term:** SHAC recommends that the Board continue to work with Food Services/Aramark to enforce TDA regulations regarding the sale of competitive foods by student groups, PTO’s, teachers and the like. As the Board is aware, simply by enforcing existing policies, many unhealthful foods (i.e. donuts, candy, fried food, etc. sold as school or team fundraisers) will be driven from HISD campuses..

**Long Term:** SHAC proposes to work with Food Services/Aramark to formulate a “No Empty Calorie” policy to eliminate foods which currently meet TDA guidelines and may meet more rigorous nutritional standards by the USDA, but which still offer little nutritive value to students (i.e., cookies, baked Flaming Hot Cheetos, Reduced Fat Doritos, Rice Krispie Treats and the like).

**Overarching:** Collaborate with Food Services/Aramark to create a wellness culture by revising the district’s Wellness Policy. In doing so, includes high expectations to encourage HISD personnel and students to make the best possible choices.

## So why should SHAC and the community even care?

### HISD students' health status:

**Overview:** A significant percentage of HISD students have an unhealthy amount of body fat as calculated by BMI:

Percents of Obesity from 2008-2010 (Using Fitnessgram data)												
GRADE	2008 % of obesity				2009 % of obesity				2010 % of obesity			
	Girls	Boys	Combined	N	Girls	Boys	Combined	N	Girls	Boys	Combined	N
Elementary	24.5	43.60	34.16	19775	23.9	42.68	33.44	17371	23.6	42.50	33.19	21004
Middle	31.1	39.69	35.4	15932	30.7	38.80	34.76	14751	31.8	42.57	37.36	17417
High	25.3	28.30	24.59	17672	30.6	29.48	30.05	13453	31.9	28.30	30.10	15044

Source: Texas Education Agency; Michael and Susan Dell Center for Healthy Living, University of Texas School of Public Health

Overweight and obese students are at a higher risk for obesity-related diseases such as diabetes, heart disease, and stroke. They are also more likely to suffer from school absenteeism, bullying, depression and are a greater risk for suicide.

Yet, despite the alarming obesity crisis in our community, HISD campuses allow a variety of unhealthful foods to be readily available to our children on a daily basis:



These foods are referred to as “competitive” foods (because they are sold in competition with the federally subsidized school meal program) and their sale is regulated by the Texas Public School Nutrition Policy, Texas Administrative Code Title 4, Part 1, Subchapter A (the “Texas Nutrition Policy”) which is administered by the Texas Department of Agriculture (“TDA”).

Some competitive foods (chips, cookies, etc.) are legally sold by HISD Food Services/Aramark as “a la carte” items in school cafeterias. Other competitive foods (i.e., delivered pizza, Chinese food, donuts, candy, etc.) are sold by parent groups, student groups and teachers on school campuses often in violation of the Texas Nutrition Policy. In either case, these sales continue because they are revenue-producing for schools and for Food Services/Aramark.

**But when is it ever acceptable to raise money at the expense of our children's health?**



**Competitive foods background**

The Texas Nutrition Policy regulates the sale of competitive foods and beverages on HISD campuses as follows.

**Time and Place for Competitive Food Sales:** Food Services/Aramark is permitted to sell competitive foods during the school day in the cafeteria. All other vendors, however, must abide by certain time and place restrictions. Specifically, foods sold by entities other than Food Services/Aramark may not be sold either: before the last bell rings (elementary schools); from 30 minutes before to 30 minutes after meal periods (middle schools); or during meal periods in areas where reimbursable meals are served and/or consumed (high school).

**Nutritional Requirements:** In addition, even if sold at a proper place and time, competitive food must also meet certain nutritional requirements, including the requirement that individual items not contain more than 23 grams of fat per item, more than 30 grams of sugar per 8-fluid ounces (in the case of beverages) and many other restrictions (see Appendix B).

In addition, due to the recent passage of the Healthy, Hunger-Free Kids Act of 2010, new federal regulations will be issued regarding competitive foods. Because these regulations are very likely to follow the Institute of Medicine recommendations, the nutrition standards applied to competitive foods in HISD will most likely be more rigorous in the near future.

**Penalties:** If TDA finds a school in violation of the Texas Nutrition Policy, it may disallow meal reimbursement for the day on which the violation occurred and require the school to pay Food Services/Aramark the disallowed reimbursement. TDA may also, depending on the nature, frequency and severity of the violation, impose alternative sanctions on the school or school district, including disallowance of all meal reimbursements to the school district for the four-week period immediately preceding the day of the violation(s).

**Violations of the Texas Nutrition Policy by student groups, parent groups and teachers:** HISD Food Services/Aramark has informally collected data (see Appendix C) showing that many Houston schools, particularly high schools, flagrantly disregard the Texas Nutrition Policy regarding competitive food. Among items currently sold on campuses are Popeye's chicken, donuts, cookies, cake, gummi bears, Domino's pizza, Chick-Fil-A, Chinese take-out, ice cream, chips, nachos and soda. Often these foods are sold in impermissible areas (i.e., too close to where the federally subsidized school meal is served or consumed) and it seems certain that many of these foods fail to meet the nutritional requirements outlined above. These sales are therefore in clear violation of the Texas Nutrition Policy.

**Harm to HISD Students:** Competitive foods sold by parent groups, student groups and teachers are almost uniformly of poor nutritional quality, and therefore have a *direct negative impact* on the health of HISD students. In addition, food vendors do not always follow good food safety practices, and competitive foods have been known to cause food-borne illnesses on HISD

campuses. Finally, the sale of food by these groups deprives Food Services/Aramark of needed revenue that could be used to improve school food overall, for all students.

**Spotty Enforcement and Ineffective Deterrents:** TDA enforcement of the Texas Nutrition Policy is spotty due to lack of resources and personnel. Moreover, many school groups make enough money on competitive food sales to render monetary policies toothless. School groups are also emboldened by the fact that, as far as the SHAC is aware, the HISD School Board has not publicly advised schools in recent years of the expectations to adhere to the Texas Nutrition Policy.

**Fundraising Alternatives:** The SHAC understands the need for schools to raise funds, especially given the current economic crisis. However, some schools have banned the sale of competitive food yet still effectively raise money using non-food-related fundraisers. The SHAC final report will include a complete list of such fundraisers such as shopping donation programs; car washes; the sale of non-food items; and events like walk-a-thons, read-a-thons, spell-a-thons, and more. Some of these fundraisers may require more effort than simply putting out a table of fatty, sugary junk food and a cash box. Yet replacing unhealthy fundraising practices with ways that promote health and wellness demonstrates the school's awareness and willingness to promote a wellness culture.

**SHAC Preliminary Recommendation:** SHAC understands that the Board has already authorized Food Services/Aramark to contact the worst-offending schools regarding competitive food sales. SHAC applauds this decision and urge the Board to continue to support Food Services/Aramark in this regard, and to expand these efforts across all HISD schools. SHAC also hopes the Board will recognize the importance of this issue and stand firm in the face of inevitable resistance from parents and fundraising groups as school become accustomed to working within the requirements of the Texas Nutrition Policy.

## **The legal sale of unhealthy “a la carte” foods by HISD Food Services/Aramark**

**Background:** Under the Texas Nutrition Policy, HISD Food Services/Aramark is permitted to sell competitive foods in school cafeterias, even during the service of a school meal as “a la carte” items. These “a la carte” foods must also comply with the Texas Nutrition Policy’s nutritional requirements, and Food Services/Aramark has indicated that it is moving toward using more rigorous standards of the Healthier U.S. School Challenge (perhaps in anticipation of the new federal guidelines yet to be released).

**The Problem:** While some of the items sold by HISD Food Services/Aramark on its “a la carte” lines are healthful (fruit, yogurt, etc.), many are low-nutrient, “empty calorie” foods like cookies, Rice Krispies Treats, baked Flaming Hot Cheetos, reduced fat Doritos, artificially colored and flavored ice pops, and other similar items. Unfortunately, because these items are sold in cafeterias at meal times, many HISD students make their entire lunch out of these nutritionally sub-par items, contributing to poor student health and obesity, as well as poor lifelong eating habits.

**The Question:** While the sale of these foods is legal under the Texas Nutrition Policy (and may well be legal under the forthcoming federal regulations), the Board should consider whether the sale of such foods is consistent with the district’s stated goal of becoming a national leader in child nutrition and wellness.

### **SHAC Preliminary Recommendation**

To launch HISD’s commitment to become a national leader in student nutrition and health, it is incumbent upon the Board (the employer of HISD Aramark, food service management company) to request better food offerings on the “a la carte” line, or consider eliminating the sale of “a la carte” foods altogether.

To achieve this goal, the SHAC first proposes to study this issue further and get input from Food Services on, among other things, the economic impact of removing such foods. Final recommendations will be based on these findings. In the interim, attached for the Board’s review (see Appendix D) is the “No Empty Calories” policy successfully instituted in San Francisco Unified School District to keep competitive foods with little nutritive value out of its schools.

**Conclusion:** SHAC commends HISD for its desire to be a national leader in child nutrition and for its preliminary efforts to curtail illegal competitive food sales. SHAC encourages the Board to expand this effort and to continue working toward improving the nutritional profile of all food offered to HISD students. The members of the SHAC subcommittee on Nutrition look forward to presenting our final report and recommendations in the near future.

**Fitness Priority: Physical Education/Activity/Fitness**

## Fitness Priority: Physical Education/Activity/Fitness

Ensure the support for quality physical education and fitness instruction and assistance in creating a culture of wellness in the HISD community.

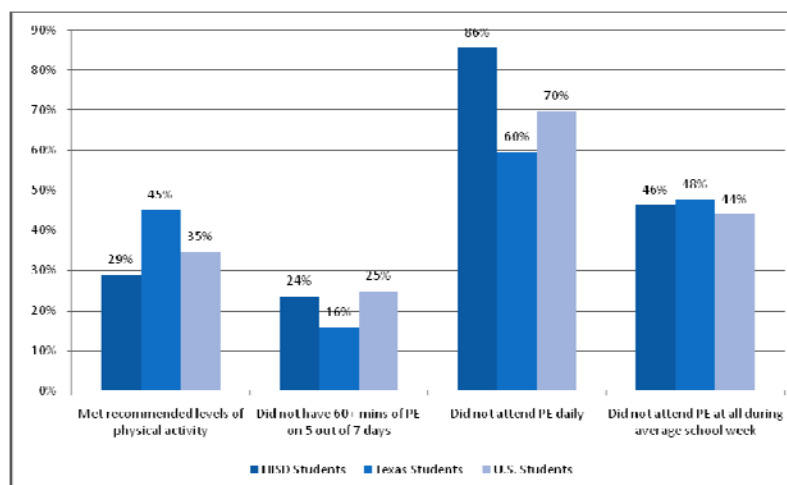
**Background:** Since the *No Child Left Behind Act* in 2001 was passed, recess, physical education (PE), and fine arts have been slowly phased out of curriculums to provide more time for academic instruction. However, research clearly shows that recess and PE and even fine arts stimulate the brain which helps students to learn better.

Empirical research focusing on play, both structured and unstructured, shows that play has positive benefits for physical, social, emotional, and cognitive development. Specific research studies are described in the appendix to support these claims. Physical activity and play also play a positive role in academic achievement, problem-solving skills, social skills, student engagement and physical health. (see Appendix E)



Even though the Texas legislation supports physical activity and wellness requirements, many schools in the district do not comply with Senate Bill 530 which requires 30 minutes of physical activity daily (or when impractical a minimum of 135 minutes weekly) for elementary and junior high students. Moreover, the Senate Bill 892 stipulates that every school principal must include in the yearly Campus Improvement Plan strategies to meet P.E. requirements.

**What do the data tell us?** 59% of males and 46% of females played on one or more sport teams during the last 12 months.



Yet, 43% of students watched TV three or more hours a day while 24% played a video, computer games or used a computer.

Research shows a positive correlation between physical fitness and indicators of academic achievement along with better school attendance and fewer disciplinary incidents. Data identified by the Texas School Health Advisory indicate that:

- 80 percent of the students have healthy levels of cardiovascular fitness among schools that have earned the state's top rating of Exemplary versus 40 percent of the students achieved cardiovascular fitness in schools that have received the state's lowest rating of Academically Unacceptable.
- Counties with high levels of cardiovascular fitness tended to have high passing rates on the Texas Assessment of Knowledge and Skills (TAKS). Regional and county data can be found at [www.texasyouthfitnessstudy.org](http://www.texasyouthfitnessstudy.org).



## Recommendations:

**Short Term:** SHAC recommends that HISD make 30 minutes of daily recess mandatory for all elementary schools.

**Long Term:** SHAC recommends that all principals be held accountable for meeting and/or exceeding the state physical activity requirement. Senate Bill 892 requires every school principal to include how they will address coordinated school health as part of the campus improvement plan.

## Overarching: SHAC recommends

- an evaluation plan to track school compliance with physical activity requirements;
- identify strategies to address Coordinated School Health;
- develop a plan to ensure that elementary students receive 30 minutes a day or 150 minutes per week or when impractical 135 minutes per week of physical education/activity;
- make 30 minutes of daily recess mandatory for all students grade K-5 by passing a resolution to add it to the curriculum. See the attached sample resolution (see Appendix F) for making recess mandatory that has been provided by Texas SHAC;
- implement a safety plan when student /teacher ratio exceeds 45:1;
- require that HISD obtain, maintain, and exceeds compliance towards Senate Bill 892 and Senate Bill 530 as highlighted in the state goals for districts; (see Appendix G)
- ensure that all HISD school principals comply with the mandates of Senate Bill 892 requiring all School Principal to include in their Campus Improvement Plan how they will address coordinated school health requirements of Senate Bill 530.



## **Significant Relationships Between Physical Fitness and Indicators of Academic Achievement**

The evidence clearly demonstrate the positive impact of recess and play on the cognitive, physical, social and emotional well-being of children and youth, stress management, problem solving.

The Texas Youth Fitness Study indicates

- ✓ Small but consistent positive associations between fitness and academic achievement and school attendance. Findings regarding improved academic performance are consistent with recent research (<http://www.sciencedaily.com/releases/2010/09/100915171536.htm>) Fit children score better on standardized math and English tests.
- ✓ An inverse association between fitness and negative school incidents. Higher levels of fitness at a school were also associated with fewer disciplinary incidents. The research looked at the number of incidents involving drugs, alcohol, violence and truancy.
- ✓ Counties with high levels of cardiovascular fitness tended to have high passing rates on the Texas Assessment of Knowledge and Skills (TAKS). Regional and county data can be found at [www.texasyouthfitnessstudy.org](http://www.texasyouthfitnessstudy.org).
- ✓ Research conducted with HISD students shows a correlation to physical fitness and academic achievement. These results are consistent with other related research. (see Appendix H).

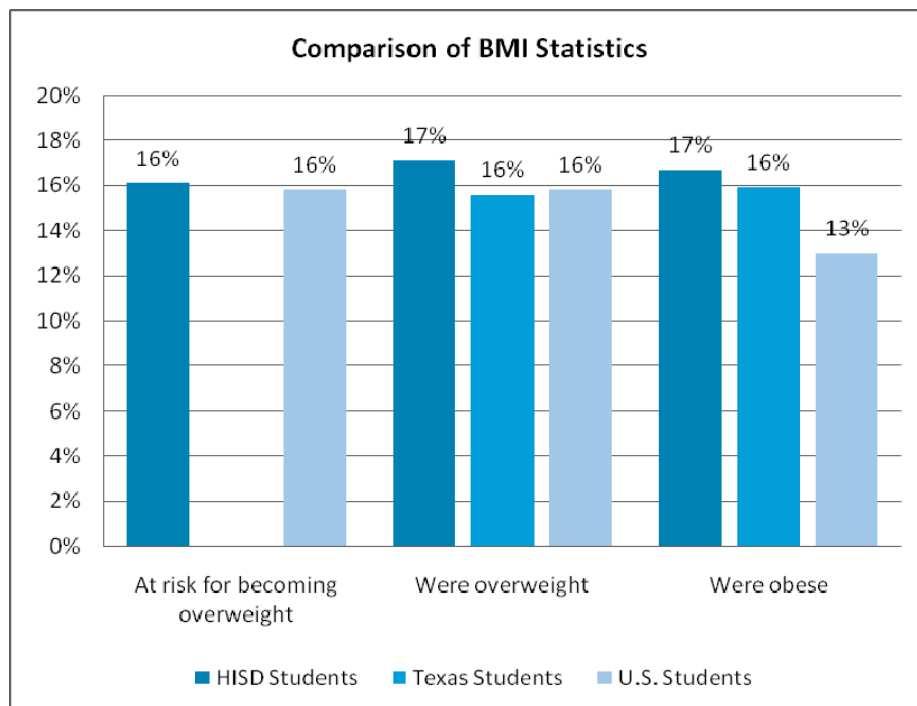
**What does the research tell us?** A recent Science Daily reports several studies all involved in the examination of physical activity and performance (see <http://www.sciencedaily.com/releases/2010/09/100915171536.htm>). Below are summaries of some interesting findings:

- ✓ Research indicates an association between physical activity and brain development in 9- and 10-year-old children. Specifically, the hippocampus in the physically active children is larger than in the less active children. Given the role of the hippocampus in memory, a larger hippocampus will boost memory tasks.
- ✓ Fit young adults have a higher IQ and are more likely to go to college. Researchers find that those physically fit individuals are better at logical thinking and verbal comprehension.
- ✓ Middle school students who participate in vigorous exercise (i.e., organized sports) tend to do better academically relative to the sedentary students. Their math, science, social studies and English scores were about 10% greater.

- ✓ Young girls participating in sports feel healthier and happier about life. Boys were five times more likely, and girls 30 times more likely, to describe their health as fair/poor when they were not playing on a sports team.

Approximately 10% of adolescents (2.2 million) experienced at least one major period of depression in the past year. Additionally, nearly two-thirds of children and adolescents suffering from depression also had another mental health disorder such as an anxiety disorder or a substance abuse disorder. Finally, children and adolescents with major depressive disorder are much more likely to commit suicide. Simply put, depression in school-aged children is real and it's a serious problem that all too often goes unnoticed. (<http://psychiatry.uams.edu/upload/docs/PRI/PsychTLC/depression.pdf>) Motl and colleagues (2004) found a positive impact of physical activity on depressive Symptoms (Motl, Birnbaum, Kubik, & Dishman, 2004).

Several studies (see Appendix I) show the benefits of physical activity on physical, mental and social well being. The psychosocial benefits include self-confidence, self-esteem, higher energy levels, body image, less depression and anxiety. Finally, physically active students have more knowledge and confidence to be physically active for life, and are less likely to be overweight or obese and experience chronic disease as they mature. Below is a graph that illustrates high school student status as indicated in the 2007 YRBS data.





**Conclusion:** Given that research shows that recess and physical education improves student performance in the classroom, HISD should recognize that physical activity is a part of the equation for improving academic performance. Being a leader by exceeding minimal expectations should result in improved academic performance, improved attendance and reduced disciplinary actions. With monitoring systems adopted as outlined in the recommendations, the physical activity subcommittee looks forward to the challenge of presenting a future report giving the status of physical activity in the curriculum from observation and recording instead of only anecdotal reporting.

**Sexual Health Priority: STI/HIV/Teen Pregnancy  
Prevention**

### **Sexual Health Priority: STI/HIV/Teen Pregnancy Prevention**

Utilize evidence-based and best practices as criteria to identify and implement the most accurate and effective sexual health education curricula in the schools of HISD.

**Background:** Senate Bills 1 and 19, Senate Bill 1357 address the state requirements related to health instruction and human sexuality instruction, including HIV/AIDS prevention education. The district's Health Education programs are in compliance with those state guidelines by ensuring that instruction:

- presents abstinence from sexual activity as the preferred choice of behavior in relationship to all activity for unmarried persons of school age;
- devotes more attention to abstinence from sexual activity than to any other behavior;
- emphasizes that abstinence from sexual activity, if used consistently and correctly, is the only method that is 100% effective in preventing pregnancy, STDs, infection with HIV/AIDS, and the emotional trauma associated with adolescent sexual activity;
- directs students to a standard of behavior in which abstinence from sexual activity before marriage is the most effective way to prevent pregnancy, STDs, and infection with HIV/AIDS;

HISD has an “abstinence-plus” program, which provides age appropriate instruction.

- In elementary school, emphasis is placed on instilling skills to deal with peer pressure, making healthy lifestyle choices, and communicating with parents. At this level, the school nurse provides gender specific instruction focused on growth and development.
- In middle school, discussion regarding human sexuality begins, while skills taught in the elementary grades are reinforced. Students are introduced to concepts regarding abstinence, pregnancy and disease prevention (contraceptives) but are not given “how to” instruction.
- Throughout high school, the message that abstinence is the best choice to prevent HIV infection, sexually transmitted diseases, and teen pregnancy is stressed. Students receive yet more details about abstinence, pregnancy and disease prevention (contraceptives). The message, which is reinforced across the grade levels, is that abstinence is the best decision.

**What do the data tell us?** Each year, young people in Houston engage in high rates of sexual behaviors, putting themselves at risk for becoming infected with HIV and other sexually transmitted diseases as well as unintended pregnancies. According to the 2007 HISD Youth Risk Behavior Survey results of high school students reported the following:

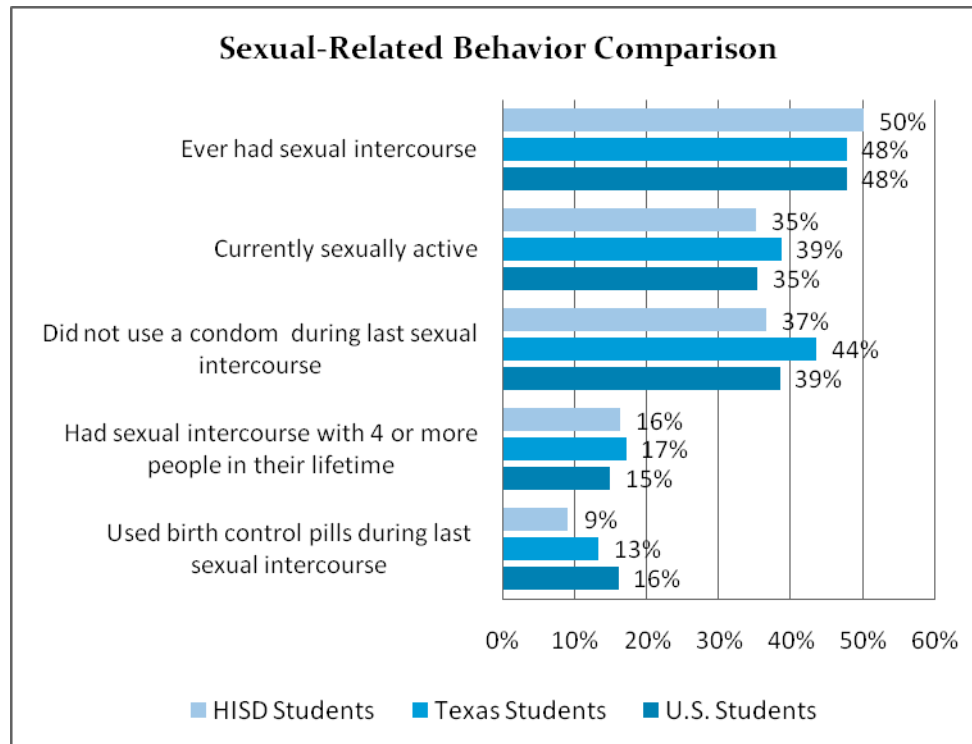
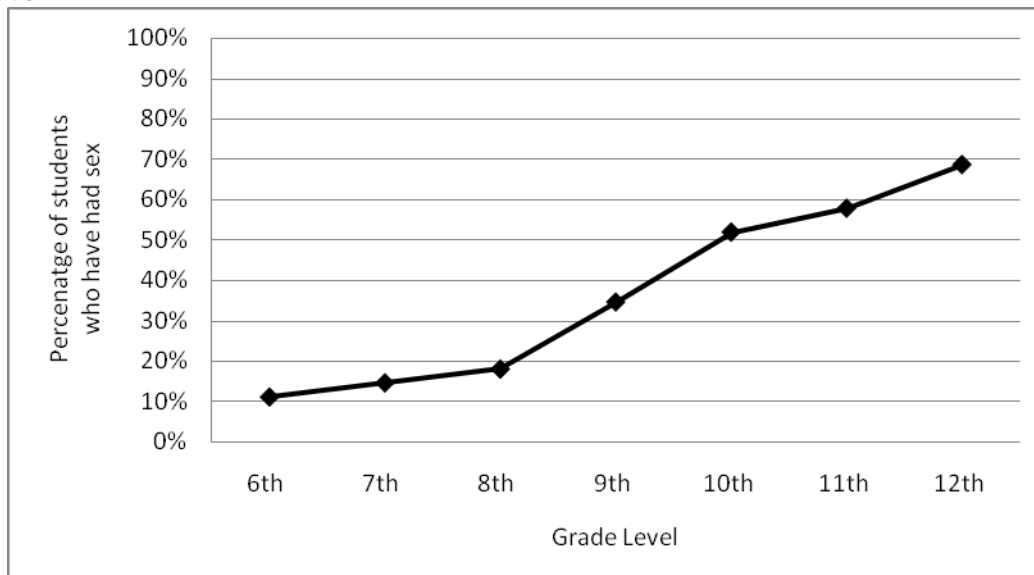
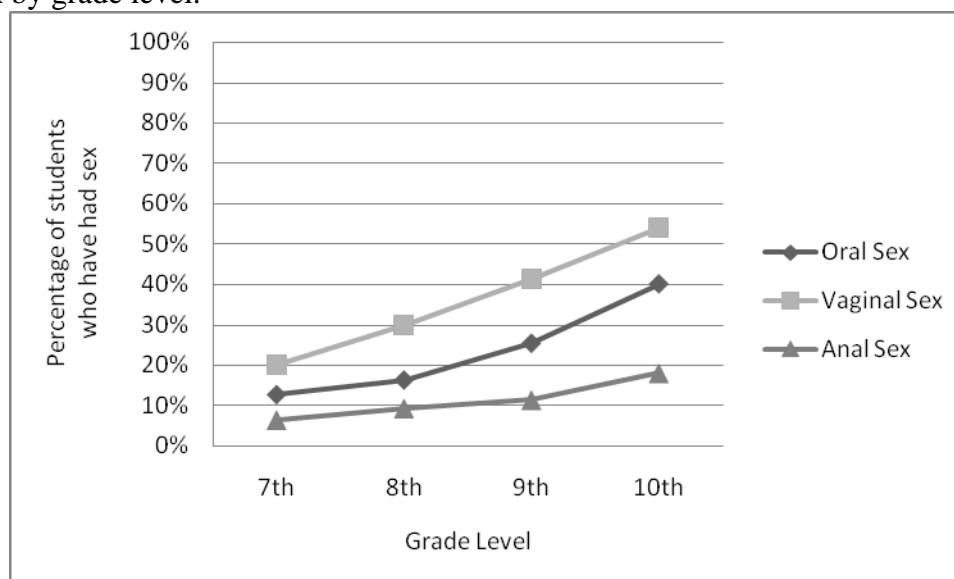


Figure 1. Estimated percentage of Texas middle and high school students who have had sex by grade level



Sources: Shanklin, S.L., Brener, N., McManus, T., Kinchen, S., Kann, L. (2007). 2005 Middle School Youth Risk Behavior Survey. Atlanta, G.A.: Centers for Disease Control and Prevention. YRBS Results YRBSS: Youth Online Comprehensive Results. Retrieved May 2, 2011 from <http://apps.nccd.cdc.gov/yrbss>.

Figure 2. Estimated percentage of middle and high school students who have had oral, vaginal, or anal sex by grade level.



Source: *All About Youth* study. Markham, C.M. (2011). Unpublished data. University of Texas Prevention Research Center, Houston, TX.

Table 1. Estimated number of sexually experienced students in Houston Independent School District (HISD)

Grade	Percent Having Sex <sup>a,b</sup>	Number of Students Enrolled in HISD (2010-2011) <sup>c</sup>	Estimated Number of Sexually Experienced Students
6 <sup>th</sup>	11.2%	12,865	1,440
7 <sup>th</sup>	14.7%	12,628	1,856
8 <sup>th</sup>	18.1%	12,871	2,330
9 <sup>th</sup>	34.7%	14,788	5,131
10 <sup>th</sup>	52.0%	12,459	6,479
11 <sup>th</sup>	57.9%	11,263	6,521
12 <sup>th</sup>	68.7%	10,952	7,524
Total	35.5%	87,826	31,281

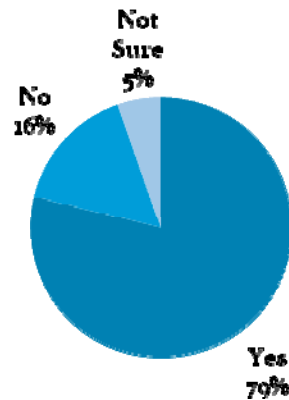
<sup>a</sup> Shanklin, S.L., Brener, N., McManus, T., Kinchen, S., Kann, L. (2007). 2005 Middle School Youth Risk Behavior Survey. Atlanta, G.A.: Centers for Disease Control and Prevention.

<sup>b</sup> 2009 YRBS Results YRBSS: Youth Online Comprehensive Results. Retrieved May 2, 2011 from <http://apps.nccd.cdc.gov/yrbss>.

<sup>c</sup> Enrollment in Texas Public Schools, 2010-2011. Available at: <http://www.tea.state.tx.us/>

According to the 2007 YRBS data, the majority of students indicated that they received instruction in HIV prevention which includes pregnancy prevention.

Figure 3: HISD students' response when asked if they were taught in school about AIDS or HIV



As indicated in the Youth Risk Behavior Survey (YRBS), all of our students do not practice abstinence. Health instruction is designed to address the needs of all students. See Appendix (map). Therefore, it is necessary for us to design instruction that delivers the following messages:

- Students who practice abstinence, the message is to remain abstinent until marriage or until they are in a secure and responsible relationship.
- Students who are sexually experienced, the message is that it is okay to refrain from sexual activity from this point forward.
- Students who choose to continue sexual activity, the message then becomes one of protection. Instruction on various contraceptive methods, reliability rates of each and accessing available resources is a focal point to this group of students. There is also a strong message to encourage students to understand the consequences of continued sexual activity and to make the decision to change their behavior.

### Recommendations:

**Short Term:** Increase Health Education teacher training in human sexuality, human growth/development and disease prevention to ensure that students are receiving medically and scientifically accurate information including abstinence and contraceptive methods.

**Long Term** Develop an action plan to target upper (4<sup>th</sup> & 5<sup>th</sup> grade) elementary school students that focuses on healthy relationships, with a major emphasis on abstinence education, including personal hygiene and puberty.

**Overarching:** Ensure that all students receive age-appropriate instruction in sexual and reproductive health including STIs/HIV/AIDS/Teen Pregnancy prevention.

**Conclusion:** The decision to maintain health education as a graduation requirement, speaks to the commitment the district shares with SHAC's vision "Healthy Kids-Healthy Schools". The next step is to maintain the high level of expectation by ensuring quality instruction and effective teachers in every classroom including health. As indicated in the data representing birth rates associated with the geographic locations within HISD, providing a venue for students to learn knowledge and skills necessary to make healthy decisions for a lifetime is key. (see Appendix J) This committee looks forward to future presentation and/or reports related to sexual health.

## **APPENDICES**





# School Health Advisory Council

## SHAC Laws

Every independent school system is required by law to have a School District Health Advisory Council; of which the majority of members must be parents who are not employed by the school district.

Title 2, Chapter 28, Section 28.004 of the Texas Education Code at

<http://tlo2.tlc.state.tx.us/statutes/ed.toc.htm> details the specifics of this mandate.

## Benefits of Having a SHAC

1. Addressing the health needs of students through the work of the SHAC, helps meet district performance goals and alleviates financial constraints.
2. SHACs play an important role in communicating the connection between health and learning to school administrators, parents and community stakeholders.
3. SHACs can help parents and community stakeholders reinforce the health knowledge and skills children need to be healthy for a lifetime.

## How to Participate

If you would like to be considered for either the council or a committee, please contact the manager of Secondary Health and Physical Education at Tel: 713-556-6823.

Website: [www.houstonisd.org](http://www.houstonisd.org)



It is the policy of the Houston Independent School District not to discriminate on the basis of age, color, handicap or disability, ancestry, national origin, marital status, race, religion, sex, veteran status, or political affiliation in its educational or employment programs and activities.



Houston Independent  
School District





**“Research shows that healthy children do better in school - from attendance and behavior to academics and overall performance.”**



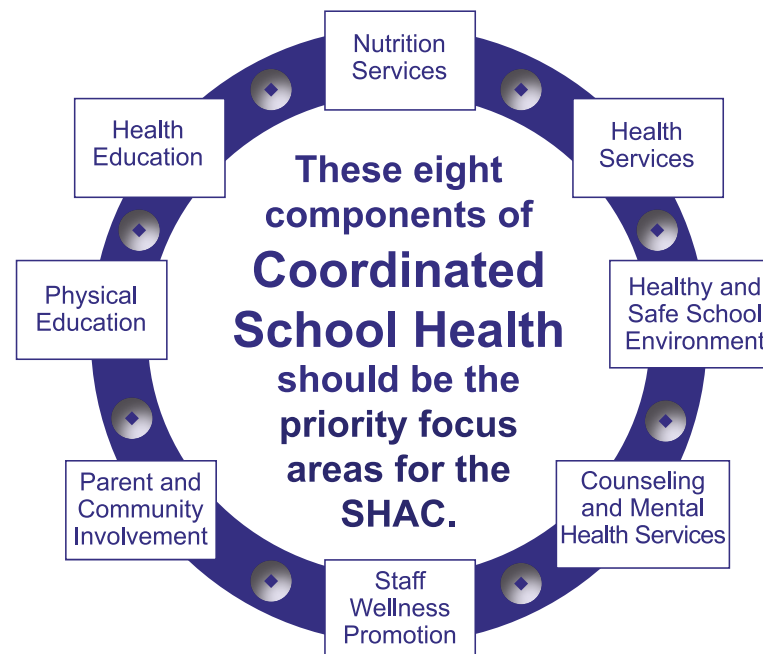
Appointed by the HISD Board of Education, members serve a three-year period. The membership may consist of individuals who represent HISD school teachers, administrators, and students, as well as health care, business community, and law enforcement professionals, along with senior citizens, local clergy and nonprofit health organizations. The majority of the membership must be parents who have children enrolled in HISD schools and who are not employed by HISD.

### **Responsibilities**

The council makes recommendations to the superintendent of schools regarding the district's health education curriculum and instruction. Recommendations may include:

- The number of hours of health education instruction to be provided;
- Grade-level appropriate health education curriculum designed to prevent obesity, cardiovascular disease, Type II diabetes, and the use of tobacco;
- Strategies for integration of curriculum components in a coordinated school health program;
- Grade-level appropriate instruction of human sexuality; and
- Suggested nutrition guidelines and wellness goals for developing a district-wide wellness policy.

The Houston Independent School District (HISD) values the input from parents and community representatives in its efforts to improve student achievement and safety by providing a comprehensive and sequential health/physical education programs. Through collaboration with the School Health Advisory Council (SHAC), the district ensures that local community values and health issues are reflected in the district's health education instruction.



## **Summary of Competitive Food Nutritional Requirements Under the Texas Nutrition Policy**

Under TDA regulations, competitive foods must meet the following nutrition standards and portion size guidelines:

- Individual food items must not contain more than 23 grams of fat.
- Beverages (other than milk) – 12 oz. or less (Must not contain more than 30 grams of sugar per 8 fl. oz. No limit on non-carbonated, unflavored water.)
- Reduced Fat Milk – 16 fl. oz. (Flavored milks must not contain more than 30 grams of sugar per 8 fl. oz.)
- Chips/Snacks – 1.5 oz. or less
- Cookies/cereal bars – 2 oz. or less (Total fat must not exceed 30% of calories or 3 grams per 100 calories; saturated fat must not exceed 10% of calories or 1 gram per 100 calories; sugar must not exceed 10 grams per ounce.)
- Bakery items – 3 oz. or less (Total fat must not exceed 30% of calories or 3 grams per 100 calories; saturated fat must not exceed 10% of calories or 1 gram per 100 calories; sugar must not exceed 10 grams per ounce.)
- Frozen desserts – 4 oz. or less
- Yogurt – 8 oz. or less
- Frozen Fruit Slushes – (must contain a minimum of 50% fruit juice); Middle/Junior High--8 fl. oz.; High School--12 fl. oz.;

Other items should be no larger than the portions of those foods served as part of the school meal program.

**Competitive sales data gathered by HISD Food Services/Aramark from a sampling of HISD campuses**

<b>WHAT item(s) is/are being sold? (each line represents a campus)</b>
Monday--Chinese Food: cheese puffs (2) \$1.00, egg roll (1) \$1.00, beef a stick, \$1.00 , beef or chicken w/ rice \$4.50, beef or chicken lo mien noodles \$4.50, sweet & sour chicken w/ rice \$4.75 soy milk \$2.00, Lenny sandwich shop; sandwich & chips \$4.00, cookie \$1.00; Tuesday--Subway: turkey on white or wheat, ham on white; Wednesday--Fire House; sandwiches \$3.50 w chips \$4.00, personal pizza \$3.00; Thursday--Taco Bell; Friday--Chick fil a \$4.00, Quiznos Ham or turkey sub w chips \$4.00; Tapioca House 16 oz \$2.50 whenever they want
Popeye's Chicken, Jack in the box, PowerAde, Minute Maid
rice krispie treats, chips, drinks
candy, chips
PowerAde, ice cream
Shipley's donuts, Coffee, Snacks
nachos, sodas, hot dogs, etc.
gatorade, pickles, chips, water
Ice Cream Vending
PowerAde, Water
Coke vending machine in Teacher's Lounge
Chick-fil-a, cookies, hot wings. Hamburgers, chips, pickles, candy, soda, gatorade, powerade, water, can't think what all is being sold in hot spot, culinary arts, & rotc
chips, cookies, crackers, drinks
chips, Popeye's chicken, cookies, drinks, cake, gummi bears
M&M, Poll, Pop, Popcorn, snickers, hot chips
Chips, Beef Jerky, Peanut Butter Crackers, Flaming hot cheetos etc. ice cream
Candy, chips, juice and water, cookies, ice cream
Ice cream, chips, sodas, juice

Ice Cream Vending
Chick- fi -A, chips, drinks, donuts, and more
non-food sales only
Various
McDonald's, cinnamon rolls, cup of soup, chips, hot dogs, Gatorade, candy, and honey buns.
Dominoes Pizza, Burger King, Taco Bell, Chick-fil-a, Cookies, Candy. Sometimes Coke vending machines.
pizza, chips, drinks, candy, Subway, slush, Gatorade
Water, minute maid juice, different chips, candy, etc.
Red baron pizza, Popeye's chicken, Chick-fil-a twice a week
Chinese Food, Chick-fil-a, Bullritos
Sub sandwich, Muffin, Chips, Cookies
caramel popcorn, variety of popcorn
PowerAde, ice cream, Dasani, Minute Maid
Chips, pickles, ice cream, rice & granola treats; Chick-fil-a
Raman Noodles and Easy Mac and Cheese.



## Sample “No Empty Calories” Policy (from San Francisco USD)

**The SFUSD nutrition policy is “No Empty Calories.”****October 2010**

In order for a snack food to be approved for sale or service in the SFUSD, it must earn a minimum of seven checkmarks based on the criteria below, with at least five checkmarks in the top table.

	At least 5% DV per serving	(✓)	At least 10% DV per serving	(✓)
Protein	2.5 g		5 g	
Vitamin A	250 IU		500 IU	
Vitamin C	3 mg		6 mg	
Calcium	50 mg		100 mg	
Iron	0.9 mg		1.8 mg	
Thiamin	0.075 mg			
Niacin	1 mg			
Riboflavin	0.085 mg			
				(✓)
Low sodium (< 140mg sodium per 100g serving)				
Very low sodium (< 35mg sodium per 100g serving)				
Good source fiber (10% of DV or 2.5g fiber per serving)				
High fiber (20% of DV or 5.0g fiber per serving)				
Contains only naturally-occurring sugar (Labeled as “No added sugars” or “Without added sugars”)				
Organic (Labeled as “100% Organic,” “Organic,” or “Made with Organic Ingredients”)				
<b>The following qualify for one half point (half ✓) each:</b>				
California grown (Labeled California-grown or produced in the state of California)				

**All products must be trans fat free (no hydrogenated or partially hydrogenated oils)**

Name of product: \_\_\_\_\_

Total points (✓): \_\_\_\_\_

**Maximum allowable serving size for a snack food/drink:**

**1 ¼ ounces** for chips, crackers, popcorn, cereal, or jerky

**2 ½ ounces** for trail mix, nuts, seeds, or dried fruit

**2 ounces** for cookies or cereal bars

**3 ounces** for bakery items

**3 fluid ounces** for frozen desserts, including, but not limited to, ice cream

**8 ounces** for non-frozen yogurt

**12 ounces** for beverages, excluding water

### Empirical evidence in support of recess:

Research supporting recess and child development: Empirical evidence is clear regarding the positive impact of play and recess on children development. Below are a few selected articles selected from TSHAC:

- (1) Ginsberg, K.R. and the Committee on Communications and the Committee on Psychosocial Aspects of Child and Family Health of the American Academy of Pediatrics. **The importance of play in promoting healthy child development and maintaining strong parent-child bonds.** *Pediatrics*. 2007; 119(1), 182-191. Retrieved from <http://aappolicy.aappublications.org/cgi/content/full/pediatrics;119/1/182?eaf>

Play is essential to development because it contributes to the cognitive, physical, social and emotional well-being of children and youth. A comprehensive review of the research on the benefits of play and the effects of reduced play are included. Play also offers an ideal opportunity for parents to engage fully with their children. Despite the benefits derived from play for both children and parents, time for free play has been markedly reduced for some children. This report addresses several factors contributing to the decrease in play, including a hurried lifestyle, changes in family structure, and increased attention to academics and enrichment activities at the expense of recess or free child-centered play. The dangers of over-scheduling for children and adolescents are discussed. Guidelines are offered for pediatricians to advocate for children by helping families, school systems, and communities consider how best to ensure that play is protected to create the optimal developmental milieu.

- (2) Robert Wood Johnson Foundation. **Recess Rules: Why the undervalued playtime may be America's best investment for healthy kids and healthy schools.** Report produced by the Robert Wood Johnson Foundation, Princeton, NJ. 2007. Available at [www.rwjf.org/files/research/sports4kidsrecessreport.pdf](http://www.rwjf.org/files/research/sports4kidsrecessreport.pdf)

A review of the research examines the benefits of recess for the physical, emotional and social development of children. The review also reports that students from minority and low income families are more likely to suffer from poor access to recess. The report proposes “structured play,” defined here as games and physical activities taught and led by trained adults during recess. Structured play offers many advantages such as teaching children healthy play, learning to follow rules, and resolving conflicts. Such experiences are even more meaningful for students in communities where such practice is not common. Structured play also ensures that all children participate and engaged, rather than marginalized or excluded. Positive effects were found for students’ feelings of safety, engagement and classroom productivity. The researchers argue for more funding to support recess and structured play programs, especially for low income communities.

- (3). National Association of Early Childhood Specialists in State Departments of Education **Recess and the importance of play: A position statement on young**

**children and recess.** 2002. Retrieved from <http://www.naecs-sde.org/publications>

This position statement asserts that recess is an essential component of education and preschool and elementary students must have the opportunity to participate in regular periods of active, free play with peers. Research is reviewed that supports positive connections between physical activity and academic improvement, stress reduction, attention to academic tasks, classroom behavior, physical, social, emotional, and cognitive development. The statement makes recommendations to support policies that require recess to be part of the preschool and elementary curriculum, support further research on the effects of recess on the developmental domains (physical, social, emotional and cognitive), develop policies and resources to support an awareness of the importance of recess and active free play, support research on the benefits of recess for children with attention disorders, and support research and professional development for educators in the observation and assessment of developmental growth through the play process.

- (4). National Association for Sport and Physical Education. **Recess in Elementary Schools: A position paper from the National Association for Sport and Physical Education.** *Council on Physical Education for Children.* 2001. Retrieved from <http://www.njahperd.org/PDFs/RecessforElementarySchoolStudents.pdf>

This position paper examines the benefits of recess in elementary schools and improvements in physical, social, emotional, stress management, problem-solving, and cognitive skills. Recommendations are made for ways to implement recess, and the authors strongly advocate that recess should not replace physical education, or used as a negative consequence to for behavior.

- (5). United States Department of Agriculture. Healthy Meals Resource System. **Recess Before Lunch: A Guide For Success,** 2008. Retrieved from [http://healthymeals.nal.usda.gov/nal\\_display/index.php?info\\_center=14&tax\\_level=2&tax\\_subject=552&level3\\_id=0&level4\\_id=0&level5\\_id=0&topic\\_id=2732&&placement\\_default=0](http://healthymeals.nal.usda.gov/nal_display/index.php?info_center=14&tax_level=2&tax_subject=552&level3_id=0&level4_id=0&level5_id=0&topic_id=2732&&placement_default=0)

The resource library provides a guide regarding ways to assist schools in implementing recess. A report from Montana schools show that recess

- Improves student behavior on the playground, in the cafeteria and classroom.
  - Prevents students from wasting food and helps them drink more milk, leading to increased nutrient intake.
  - Improves the cafeteria atmosphere.
  - Contributes to settling down children and gets them ready to learn upon returning to the classroom.
- (6) National Association for Sport and Physical Education. *Shape of the Nation Report.* 2010. Retrieved from



<http://www.aahperd.org/naspe/publications/upload/Shape-of-the-tion-Revised2PDF.pdf>

This report indicates that for elementary school children, recess provides an opportunity for needed physical activity. Children also learn to make decisions, cooperate, compete constructively, assume leader/follower roles and resolve conflicts by interacting in play.

### **Empirical evidence in support of physical activity**

- (7) Viadero, D. **Exercise seen as priming pump for students' academic strides.** *Education Week*. 2008; 27 (23): 14-15.

This news article examines the link between physical activity and academic gains on standardized tests. When students with low test scores participated in early morning physical activity, followed closely in time by learning support classes, their subsequent test scores increased significantly relative to similar students who had the learning support classes only. In another study children were assigned to 40-minute after school daily workouts, 20-minute after school workouts, or no workouts. After 14 weeks, those in the 40-minute sessions made twice the gains that those in the 20-minute sessions made. A third study indicates that children who scored high on an aerobic fitness measure and had a healthy body mass index had higher scores on state exams in reading and math. Recent research on physical activity and brain development, especially the link between physical activity and the brain's production of brain-derived neurotrophic factor (BDNF) shows that BDNF encourages development and connections between brain cells considered critical for learning.

- (8) National Association for Sport and Physical Education. Shape of the Nation Report. 2010. Retrieved from <http://www.aahperd.org/naspe/publications/upload/Shape-of-the-tion-Revised2PDF.pdf>

Effective physical activity instruction

- a. Provides physical, mental and social/emotions development of students.
  - b. Helps students understand, improve and/or maintain their physical well being.
  - c. Contributes to the development of cognitive concepts about motor skills and fitness
  - d. Affords students with opportunities to improve emerging social and cooperative skills and gain multicultural perspective
  - e. Helps students develop the knowledge and confidence to be physically active for life.
- (9) A multitude of research has examined the relations between physical activity and community building, social development, body image, identity, self-esteem and

self-confidence. The President's Council on Physical Fitness and Sports. Physical activity and sport in the lives of girls. Retrieved from [http://www.cehd.umn.edu/tuckercenter/projects/PresidentsCouncil/pcpfs\\_report.pdf](http://www.cehd.umn.edu/tuckercenter/projects/PresidentsCouncil/pcpfs_report.pdf)

A review of the literature documents a combination of psychosocial benefits such as self-confidence, self-esteem higher energy levels and positive body image. Greenberg and Oglesby indicate that exercise and sports are effective in decreasing depression and anxiety disorders among young females. Duncan focuses on the link between high-school athletics and academic achievement, positive social adjustment, lower risk for dropout and greater likelihood to attend college. Two studies indicate that female adolescents involved in sports are more likely to avoid unwanted sexual behavior and pregnancy.

The research indicates a positive association between physical activity and psychological well being, self-esteem, physical ability self-concept, physical appearance self-concept, and positive moral development for all children. Being engaged in physical activities also promotes prosocial or ethical behaviors. Active children are likely to learn their rights and responsibilities, moral dilemmas and resolution strategies relating to sports.

Regular physical activity during childhood and youth may prevent or delay development of etiology (e.g., obesity, degenerative diseases of the heart and blood vessels and musculoskeletal disorders, specifically osteoporosis and low-back syndrome). Habits of engaging in regular physical activity developed during childhood and adolescence may persist into adulthood and thereby reduce the later incidence of such conditions.



**SAMPLE RESOLUTION**  
**\_\_\_\_\_ ISD School Health Advisory Council**  
**Recommendations on Recess for Elementary School Students**  
**Date: \_\_\_\_\_**

**WHEREAS**, SB 530 requires the local school health advisory council to consider and make policy recommendations to the District concerning the importance of daily recess for elementary school students; and

**WHEREAS**, the local school health advisory council has considered research concerning unstructured and undirected play; and

**WHEREAS**, the local school health advisory council has considered research concerning academic and social development; and

**WHEREAS**, the local school health advisory council has considered research concerning the health benefits of daily recess; and

**WHEREAS**, the local school health advisory council has considered that local community values are reflected in any recommendation made by the council; and

**WHEREAS**, recess, while separate and distinct from physical education, is an essential component of the total educational experience for elementary aged children; and

**WHEREAS**, recess provides children with discretionary time and opportunities to engage in physical activity that helps to develop healthy bodies and enjoyment of movement; and

**WHEREAS**, recess allows elementary children to practice life skills such as conflict resolution, cooperation, respect for rules, taking turns, sharing, using language to communicate, and problem solving in real situations that are real; and

**WHEREAS**, recess may facilitate improved attention and focus on learning in the academic program.

**NOW, THEREFORE**, based on this information, **BE IT RESOLVED** that the \_\_\_\_\_ Independent School District School Health Advisory Council recommends the following:

- ◆ Recess should not replace physical education. Recess is unstructured playtime where children have choices; develop rules for play and release energy and stress.
- ◆ Physical education provides a sequential instructional program with opportunities for children to learn about and participate in regular physical activity, develop motor skills, use skills and knowledge to improve performance.

## Appendix F

- ◆ \_\_\_\_\_ ISD elementary schools should develop schedules that provide for supervised, daily recess in grades pre-kindergarten through grades five.
- ◆ Recess should not be viewed as a reward but a necessary educational support component for all children.
- ◆ \_\_\_\_\_ ISD should provide the facilities, equipment and supervision necessary to ensure the recess experience is productive, safe and enjoyable.
- ◆ Adults should direct or intervene when a child's physical or emotional safety is an issue. Bullying or aggressive behavior must not be allowed and all safety rules should be enforced.

BE IT FURTHER RESOLVED, that the \_\_\_\_\_ Independent School District School Health Advisory Council endorses the following statement:

**Quality physical education, along with daily recess, are necessary components of the school curriculum that enable students to develop physical competence, health-related fitness, self responsibility, and enjoyment of physical activity so they can be physically active for a lifetime.**

Approved and adopted the \_\_\_\_\_ day of \_\_\_\_\_ 2008. We, the undersigned, hereby certify that the foregoing Resolution was duly adopted by the \_\_\_\_\_ ISD SHAC.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

*Some of the statements in this resolution were taken from recommendations made by the National Association for Sport and Physical Education, an association of the American Alliance for Health, Physical Education, Recreation and Dance © July, 2001*

External links to other sites appearing here are intended to be informational and do not represent an endorsement by the Texas Department of State Health Services (DSHS). These sites may also not be accessible to people with disabilities. External email links are provided to you as a courtesy. Please be advised that you are not emailing the DSHS and DSHS policies do not apply should you choose to correspond. For information about any of the initiatives listed, contact the sponsoring organization directly. For comments or questions about this publication, contact Ellen Smith at (512) 458-7111 ext. 2140 or by email at [ellen.smith@dshs.state.tx.us](mailto:ellen.smith@dshs.state.tx.us). Copyright free. Permission granted to forward or make copies as needed.

## Physical Fitness Assessment Initiative

### Programmatic Leveling Analysis

Summary of Data Analysis:

Grade	2007-2008 Data FITNESSGRAM® Test (% Achieving Healthy Fitness Zone on all 6 Tests)			2008-2009 Data FITNESSGRAM® Test (% Achieving Healthy Fitness Zone on all 6 Tests)			2009-2010 Data FITNESSGRAM® Test (% Achieving Healthy Fitness Zone on all 6 Tests)		
	Total # Tested	Girls (%)	Boys (%)	Total # Tested	Girls (%)	Boys (%)	Total # Tested	Girls (%)	Boys (%)
3	102,342	33.25	28.60	116,096	36.42	30.89	119,401	37.27	30.98
4	80,539	28.50	21.14	95,842	33.53	24.55	102,709	34.22	25.26
5	66,798	23.82	17.89	79,281	28.02	20.85	87,389	30.12	21.81
6	60,663	23.08	17.60	75,610	28.20	20.55	83,982	30.23	27.70
7	55,441	21.32	17.26	66,950	26.01	19.58	76,555	28.14	21.42
8	48,971	18.99	17.88	60,004	22.28	19.80	67,218	24.18	21.62
9	39,456	13.90	15.04	46,206	16.25	16.14	48,278	17.04	15.71
10	28,650	12.42	13.70	32,865	13.33	13.88	32,069	13.16	12.98
11	21,152	10.68	12.24	24,416	11.10	12.16	23,431	10.6	11.14
12	13,040	8.18	8.96	15,468	8.78	9.25	15,214	8.07	8.54

Students Assessed: 2,658,665  
Districts Submitting: 1,074 (84.77%)

Students Assessed: 2,801,486  
Districts Submitting: 1,132 (89.42%)

Students Assessed: 2,903,200  
Districts Submitting: 1,141 (92.24%)

### Summary of Data Analysis:

State level data continued to increase slightly from year two to year three in grades 3-8. With continued focus at the local level in the implementation of evidence-based physical activity and nutrition program, we should continue to see improvement each year. School districts are encouraged to review their own data using the FITNESSGRAM® software reporting systems, as well as other evaluation methods. Students, school personnel, parents and community members are encouraged to utilize this locally-collected data to motivate the implementation of new programs and practices, as well as nurture existing best practices, that will continue to improve the health and well-being of their youth.

### Goals for Districts for 2010-2011:

Collect and submit fitness assessment data representing 100% of eligible students.

Increase the percentage of student achieving the healthy fitness zone standard in all six required test items.

Continue to development and implement and/or strengthen goals and objectives for physical activity programs.

Incorporate Coordinated School Health as part of Campus Improvement Plans.

Strengthen School Health Advisory Councils to support the implementation of all school health policies and practices.



# The Effects of Obesity on Student Achievement using HISD FITNESSGRAM®

Venita Holmes, Dr.P.H. & Rose Haggerty, M.Ed.  
Houston Independent School District

## Appendix H

### Introduction

- ❖ The prevalence of childhood obesity has increased dramatically in the United States over the past decade. However, previous research suggests that coordinated physical activity programs have positive effects on a variety of cognitive outcomes (Basch, 2010; CDC, 2010).
- ❖ Specifically, several recent literature reviews suggest that school-based activity programs are associated with short-term cognitive benefits (Taras, 2005), improved cognitive functioning among students (Sibley & Etnier, 2003), and do not hinder academic achievement (Trudeau & Shepard, 2008).
- ❖ The current study hypothesizes that health and physical fitness are correlated with academic achievement (Basch, 2010; Byrd, 2007; Grissom, 2005).

### Method

#### Sample

- ❖ The study sample consisted of 54,060 HISD students from grades 3 through 12 who participated in the FITNESSGRAM® assessment during the 2008-2009 academic year. **Table 1** displays descriptive characteristics of the sample.

**Table 1**  
Sample characteristics, 2008-2009 (N = 54,060)

	N	%
Gender		
Male	27,123	50.2
Female	26,937	49.8
Ethnicity		
American Indian	40	0.1
Asian	2,186	4.0
African American	14,342	26.5
Hispanic	32,234	59.6
White	5,258	9.7
Economically Disadvantaged		
Yes	41,910	77.5
No	12,150	22.5
At Risk		
Yes	30,221	56.6
No	23,218	43.4
Special Education		
Yes	4,673	8.9
No	48,483	91.2

#### Health-Related Measures

- ❖ The FITNESSGRAM® was developed by the Cooper Institute to assess children's fitness levels. The assessment includes measures of childhood obesity, aerobic capacity, and muscular endurance.
- ❖ **Body Mass Index (BMI)** categories were used to determine whether children in the sample were considered underweight, normal weight, overweight, or obese (see **Table 2**).

**Table 2**  
BMI Category Definitions

Underweight	<18.5
Normal Weight	18.5 - 24.9
Overweight	25 - 29.9
Obese	30 or greater

**Table 3**  
Descriptive statistics for health measures

Health Factors	N	Mean	SD
Height (in)	53,631	60.31	5.49
Weight (lbs)	54,060	117.80	40.54
BMI	53,627	22.31	6.52
PACER Laps	33,702	21.99	16.59
1 Mile Run	17,186	12.59	4.38

- ❖ The **Progressive Aerobic Cardiovascular Run (PACER)** measured aerobic capacity in the FITNESSGRAM® assessment battery.
- ❖ The **one-mile run** measured the muscular endurance of the sample.
- ❖ **Table 3** depicts descriptive statistics for each of the health measures.

#### Academic Measures

- ❖ The **Stanford Achievement Test Series (Stanford 10)** was administered in the Spring of 2009 and was used to assess student achievement in reading, language, mathematics, and science in the FITNESSGRAM® sample. Group mean Normal Curve Equivalent (NCE) Scores were used to categorize students as above average ( $\geq 65.6$ ), average (34.4 - 64.9), and below average ( $\leq 34.4$ ).

### Results

#### Are there correlations among Stanford 10 test scores and FITNESSGRAM® variables?

- ❖ **Table 4** provides Pearson product-moment correlations for Stanford 10 Reading and Math scores and FITNESSGRAM® variables.
- ❖ Stanford 10 reading and math scores were significantly related to all of the FITNESSGRAM® variables.
- ❖ The data show that as Stanford 10 reading scores increased, BMIs decreased. Of the two test scores, BMI shared the strongest association with math test scores.
- ❖ It should be noted that while the bivariate correlations between Stanford 10 test scores and FITNESSGRAM® variables were all statistically significant, they reflect somewhat weak relationships, most likely due to the large sample size.

**Table 4**  
Correlations for Stanford 10 Reading and Math scores and Covariates

	1	2	3	4	5
Stanford 10 Reading	1.000				
Stanford 10 Math	.531*	1.000			
BMI	-.072*	-.088*	1.000		
PACER Laps	-.095*	.107*	-.220*	1.000	
1 Mile Run	.033*	-.009*	.110*	-.032*	1.000

\* Correlation is significant at the 0.01 level (2-tailed)

#### What were covariate predictors of students' reading and math performance?

- ❖ Logistic regression was conducted to determine whether the multivariate effect of several predictors and covariates of Stanford 10 test scores could accurately distinguish between above average and not above average reading and math performance. Dependent variables (reading and math scores) were recoded to reflect the Stanford 10 cut point for above average performance (NCE  $\geq 65.6$ ).

**Table 5**  
Logistic regression predicting likelihood of above average scores on the Stanford 10

Predictor	Stanford 10 Reading			Stanford 10 Math		
	B	SE B	e <sup>B</sup>	B	SE B	e <sup>B</sup>
BMI	-.019	.003	.982*	-.021	.003	.979*
Economic Status	-1.454	.036	.234*	-1.029	.033	.357*
White vs. Non White	1.289	.048	3.630*	.976	.046	2.653*
Elem vs. MS/HS	-.009	.035	.991	-.279	.030	.756*
Gender	-.234	.033	.791*	.030	.027	1.031
1 Mile Run	-.005	.007	.995	-.019	.006	.981*
PACER Laps	.008	.001	1.008*	.009	.001	1.009*
$\chi^2$	4536.532*			3252.410*		
df	8			8		

Note: e<sup>B</sup> = exponentiated B

\* p < .01

- ❖ Models included the three primary fitness predictors (BMI, PACER laps, and 1 Mile Run), along with four covariates (economic status, ethnicity, grade level, and gender). **Table 5** displays unstandardized regression coefficients, standard errors, and odds ratios for the predictors and covariates.
- ❖ Overall, both models were statistically significant, indicating that the predictors and covariates were able to distinguish between students who scored above average and those who did not on Stanford 10 reading and math subtests. More specifically, the model predicting above average performance on reading correctly identified 83.4% of respondents and the model for math accurately classified 62.8% of the cases.
- ❖ In both models, students scoring above average on reading and math subtests were more likely to have lower BMIs and completed more PACER laps than those who did not score above average. Similarly, in both models, those scoring above average were more likely to be White, attending elementary school, and female.

### Discussion

- ❖ Findings from the current study are consistent with previous research that supports an inverse relationship between student achievement and obesity (Basch, 2010; Byrd, 2007; Grissom, 2005) by documenting how fitness and school-based physical activity influence educational outcomes (Basch, 2010).
- ❖ Taken together, the research suggests the need for school districts to build sustainable physical education programs by implementing population-based strategies and interventions.
- ❖ Future research is warranted to investigate trends in the association between BMI and achievement to assess the impact of specific programs aimed at reducing obesity rates, among student groups.

### References

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# Recommendation and Research on Recess and Physical Activity: Impact on Student Health and Academic, Social and Emotional Development May 5, 2008

## I. Background

Play, both structured and unstructured, has been shown in an extensive body of research to have positive benefits for physical, social, emotional, and cognitive domains of child development (see examples of research that follow). Benefits of physical activity and play have also been demonstrated in the areas of academic achievement, problem-solving skills, social skills, student engagement and physical health.

Senate Bill 530 (80th Session-Texas Legislature) requires the following:

“A school district shall require a student enrolled in kindergarten or a grade level below grade six to participate in moderate or vigorous daily physical activity for at least 30 minutes throughout the school year as part of the district’s physical education curriculum or through structured activity during a school campus’s daily recess. A school district shall require students enrolled in grade levels six, seven and eight to participate in moderate or vigorous daily physical activity for at least 30 minutes for at least four semesters during those grade levels as part of the district’s physical education curriculum.”

Senate Bill 530 further requires the following:

“The local school health advisory council shall consider and make policy recommendations to the district concerning the importance of daily recess for elementary school students. The council must consider research regarding unstructured and undirected play, academic and social development, and the health benefits of daily recess in making the recommendations. The council shall ensure that local community values are reflected in any policy recommendation made to the district under this subsection.”

## II. Purpose

The purpose of this document is to assist local school health advisory councils (SHACs) across the state to meet the requirements of SB 530, by providing research resources for local review. As the law emphasizes, local SHACs must take the responsibility to review the research and to include local community values as they make recommendations to their school districts about daily recess for elementary students.

## III. Recommendation

Given the increasing incidence of obesity, diabetes, and other health concerns (including mental health issues) among children and youth, and considering a review of the existing research concerning the benefits of physical activity for all domains of child development, TSHAC acknowledges the following:

- Research supports the positive benefits of physical activity and play on the cognitive, physical, social, and emotional health and development of children and youth;



## Appendix I

- Due to societal factors such as lifestyle issues, well-intentioned over-scheduling of enrichment activities, more single-parent families, increased pressure within schools to focus on academic issues, more options for passive entertainment available to children and youth, and in many communities, the lack of safe play areas outside the home, the opportunities for children and youth to engage in physical activity and play has gradually been reduced;
- The increases in the societal and academic factors listed above have resulted in increased stress for our young people;
- There is a need to inform communities, parents, educators and young people about the benefits of engaging in regular physical activity and the dangers of not doing so;
- Providing recess and physical education classes has been shown to have a positive impact on students' academic performance, including test scores;
- Parents have a significant role to play in striking balances for their children between structured activities and free play, between passive and active entertainment, and between physical and sedentary activities;
- Schools have significant roles to play in providing opportunities for students to engage in physical activity on a regular basis, to teach young people about lifelong physical activity habits for all people regardless of competitive skill levels, and to educate parents and employees in these same areas; and
- Communities have a significant role to play in providing the infrastructure of playgrounds, parks and athletic facilities; security measures and supervision; and financial support to allow all citizens to develop physically healthy habits.

TSHAC recommends every local SHAC review the research cited here as well as other sources to promote change or to affirm existing policies in school districts and in communities across Texas.

### IV. Research

(1). Ginsberg, K.R. and the Committee on Communications and the Committee on Psychosocial Aspects of Child and Family Health of the American Academy of Pediatrics. **The importance of play in promoting healthy child development and maintaining strong parent-child bonds.** *Pediatrics*. 2007; 119(1), 182-191.

Available at <http://aappolicy.aappublications.org/cgi/content/full/pediatrics;119/1/182?eaf>

Play is essential to development because it contributes to the cognitive, physical, social and emotional well-being of children and youth. A comprehensive review of the research on the benefits of play and the repercussions of reduced play are included. Play also offers an ideal opportunity for parents to engage fully with their children. Despite the benefits derived from play for both children and parents, time for free play has been markedly reduced for some children. This report addresses a variety of factors that have reduced play, including a hurried lifestyle, changes in family structure, and increased attention to academics and enrichment activities at the expense of recess or free child-centered play. The dangers of over-scheduling for children and adolescents are discussed. Guidelines are offered for pediatricians to advocate for children by helping families, school systems, and communities consider how best to ensure that play is protected to create the optimal developmental milieu.

## Appendix I

- (2). Robert Wood Johnson Foundation. **Recess Rules: Why the undervalued playtime may be America's best investment for healthy kids and healthy schools.** Report produced by the Robert Wood Johnson Foundation, Princeton, NJ. 2007. Available at [www.rwjf.org/files/research/sports4kidsrecessreport.pdf](http://www.rwjf.org/files/research/sports4kidsrecessreport.pdf)

After reviewing research that supports the benefits of recess for the physical, emotional and social development of children and documenting that students from minority and low income families are being the most shortchanged when it comes to access to recess, the monograph makes a case for “structured play” at recess. Structured play means games and physical activities that are taught and led by trained adults. Structured play provides instruction in healthy play, following rules, and resolving conflicts for students in communities where those may not be common knowledge. Structured play also ensures that all children participate and are engaged, rather than having some become marginalized or excluded. Positive effects were found for students’ feelings of safety, engagement and classroom productivity. The researchers argue for more funding for recess and structured play programs, especially for low income communities.

- (3). National Association of Early Childhood Specialists in State Departments of Education **Recess and the importance of play: A position statement on young children and recess.** 2002. Available at <http://naecs.crc.uiuc.edu/position/recessplay.pdf>

This position statement asserts that recess is an essential component of education and preschool and elementary students must have the opportunity to participate in regular periods of active, free play with peers. Research is reviewed that supports positive connections between physical activity and academic improvement, stress reduction, attention to academic tasks, classroom behavior, physical, social, emotional, and cognitive development. The statement makes recommendations to support policies that require recess to be part of the preschool and elementary curriculum, support further research on the effects of recess on the developmental domains (physical, social, emotional and cognitive), develop policies and resources to support an awareness of the importance of recess and active free play, support research on the benefits of recess for children with attention disorders, and support research and professional development for educators in the observation and assessment of developmental growth through the play process.

- (4). National Association for Sport and Physical Education. **Recess in Elementary Schools: A position paper from the National Association for Sport and Physical Education.** *Council on Physical Education for Children.* 2001. Available at [www.aahperd.org/naspe/pdf\\_files/pos\\_papers/current\\_res.pdf](http://www.aahperd.org/naspe/pdf_files/pos_papers/current_res.pdf)

This position paper asserts that the benefits of recess in elementary schools include improvements in physical, social, emotional, stress management, problem-solving, and cognitive skills. Recommendations are made for how recess should be implemented, how it should not replace physical education, and that recess should not be used as a consequence for behavior.

## Appendix I

(5). Montana Team Nutrition Program, Office of Public Instruction School Nutrition Programs. **Recess Before Lunch: A Guide For Success**, 2003. Available at [www.opi.mt.gov/schoolfood/recessBL.html](http://www.opi.mt.gov/schoolfood/recessBL.html)

The Web site includes an implementation guide, PowerPoint presentation, transparencies, brochures and handout from the Montana Team Nutrition Program and School Nutrition Program staff. The *Recess Before Lunch* program helps:

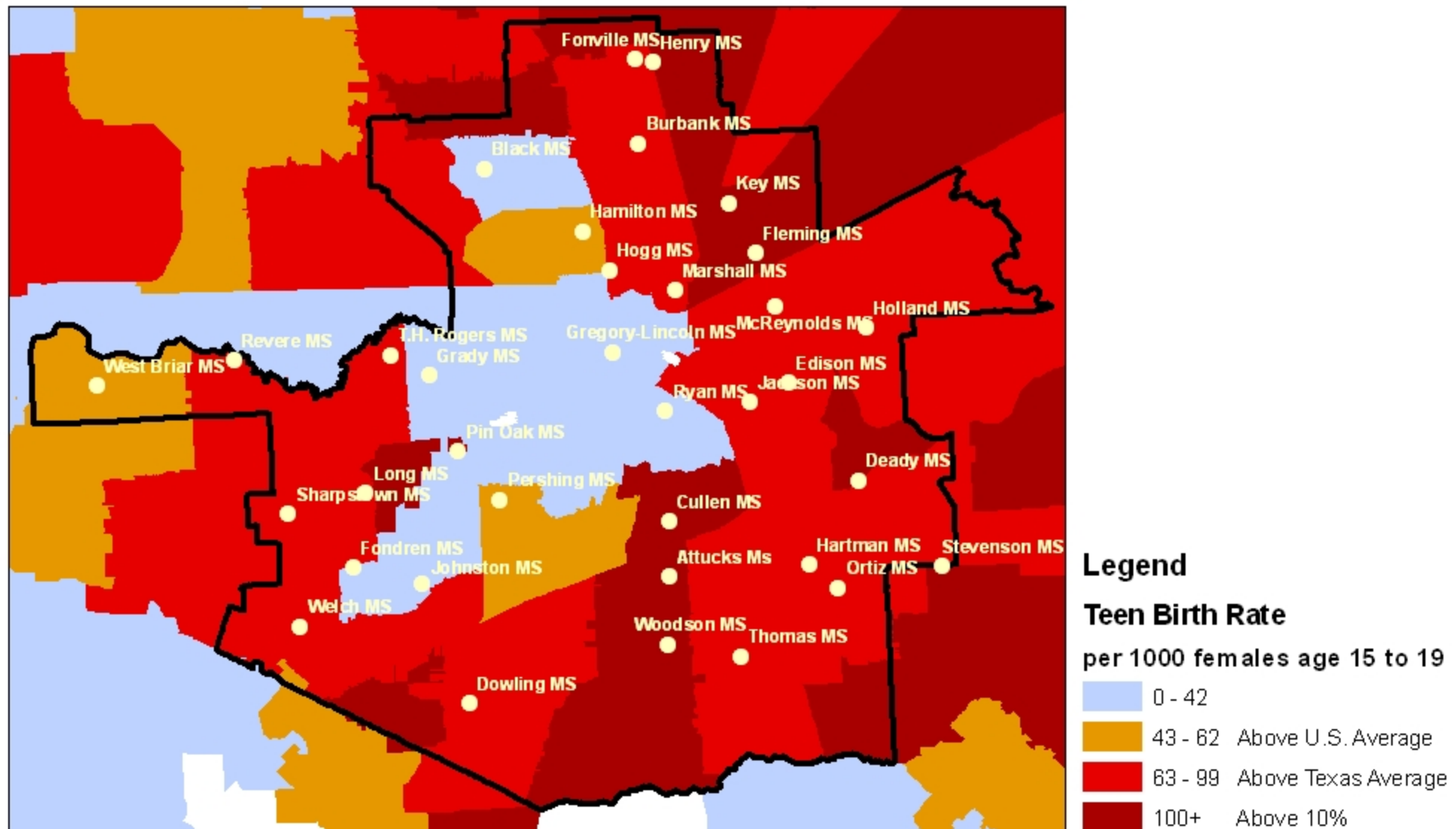
- Improve student behavior on the playground, in the cafeteria and classroom.
- Students waste less food and drink more milk, leading to increased nutrient intake.
- Improve the cafeteria atmosphere.
- Children be more settled and ready to learn upon returning to the classroom.

(6). Viadero, D. **Exercise seen as priming pump for students' academic strides**. *Education Week*. 2008; 27 (23): 14-15.

This news article reports on action research in schools that links exercise during PE classes with academic gains on standardized tests. When students with low test scores participated in early morning PE sessions, followed closely in time by learning support classes, their subsequent test scores increased significantly more than similar students who had the learning support classes only. In another reported study children were assigned to 40-minute after school daily workouts, 20-minute after school workouts, or no workouts. After 14 weeks, those in the 40-minute sessions made twice the gains that those in the 20-minute sessions made. In a third study reviewed in the article, children who got good marks on an aerobic fitness measure and a measure of body mass index had higher scores on state exams in reading and math. Connections are made between physical activity and recent research on brain development, especially the link between exercise and the brains production of brain-derived neurotrophic factor (BDNF). BDNF encourages development and connections between brain cells considered critical for learning.

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## Teen Birth Rates in HISD, 2008



THE UNIVERSITY of TEXAS  
SCHOOL OF PUBLIC HEALTH

Source: Texas Department of State Health Services; Bureau of Vital Statistics, 2008

## Additional Resources/References

### Useful Web Sites

- ✓ Texas School Health Advisory Committee:  
[www.dshs.state.tx.us/schoolhealth/shadvise.shtm](http://www.dshs.state.tx.us/schoolhealth/shadvise.shtm)
- ✓ TXPTA Healthy Lifestyle Web page: [www.txpta.org/programs/healthy-lifestyles](http://www.txpta.org/programs/healthy-lifestyles)
- ✓ TEA Fitness Data: [www.tea.state.tx.us/index4.aspx?id=3975](http://www.tea.state.tx.us/index4.aspx?id=3975)
- ✓ Youth Risk Behavior Surveillance (YRBS) Survey:  
[www.dshs.state.tx.us/chs/yrbs/query/yrbss\\_form.shtm](http://www.dshs.state.tx.us/chs/yrbs/query/yrbss_form.shtm)
- ✓ CDC Coordinated School Health: [www.cdc.gov/HealthyYouth/CSHP](http://www.cdc.gov/HealthyYouth/CSHP)
- ✓ Texas Department of Agriculture Square Meals:  
[www.squaremeals.org/fn/home/page/0,1248,2348\\_2349\\_0\\_0,00.html](http://www.squaremeals.org/fn/home/page/0,1248,2348_2349_0_0,00.html)
- ✓ Regional Education Service Centers: <http://ritter.tea.state.tx.us/ESC>
- ✓ Texas Legislature Online: [www.capitol.state.tx.us](http://www.capitol.state.tx.us)

### Physical Activity

- 1) Is There a Relationship Between Physical Fitness and Academic Achievement? Positive Results from Public School Children in the United States: Virginia R. Chomitz, PhD; Meghan M. Slining, MS, MPH; Robert J. McGowan, EdD; Suzanne E. Mitchell, MD, MS; Glen F. Dawson, MA; Karen A. Hacker, MD, MPH. Journal of School Health, Jan. 2009, vol. 79, number 1:
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- 5) Effect of Physical Activity on Autonomic Nervous System Function in Lean and Obese Children: N. Nagai and T. Moritani. International Journal of Obesity, 2004, vol. 28, number 1, pp 27-33.