

STATE OF SOUTH CAROLINA DEPARTMENT OF EDUCATION

Summary Report of the Implementation of Physical Education and Physical Activity Minutes for Students in Grades Kindergarten through Five as Required by the Students Health and Fitness Act of 2005

School Year 2011–12

Issued by the South Carolina Department of Education

Mick Zais, Ph.D. State Superintendent of Education

Prepared by Dr. Christine Beyer Office of Teacher Effectiveness December 1, 2012

Statutory Requirement for the Report

Section 59-10-10 (C) reads:

During each year of implementation of the reduced student to physical education teacher ratio, each district shall report to the State Department of Education by June fifteenth, the number of minutes of physical education instruction and the minutes of additional physical activity students receive daily with a total for the week. The State Department of Education shall provide a summary of this information to the General Assembly by December first of each year of implementation.

Students Health and Fitness Act of 2005 (SHFA) Requirements

- 150 minutes of combined physical education (PE) and physical activity (PA)
 - o 60 minutes of designated physical education time
 - o 90 minutes of designated physical activity time
- An individual student's fitness status must be reported to his parent or guardian during a student's fifth grade, eighth grade, and high school physical education courses. Only elementary schools were surveyed for purposes of this report.

Survey Administration

The South Carolina Department of Education (SCDE) notified all schools with grades Kindergarten through grade five of the need to complete two online school level surveys in April 2012. One survey was to be completed by the school administrator and the other was to be completed by classroom teachers. (See Appendix A.) The survey was required to be submitted online by June 1, 2012.

School participation in the surveys

Six districts did not complete either the administrator or the classroom teacher surveys. Those districts were: Dillon 4, Edgefield, Jasper, Saluda, York 3 and York 4. This was a dramatic improvement from last year's non-reporting districts which numbered 26. Jasper County is the only district that has not submitted a report for the last two years. (See Appendix B)

More administrators (80 percent) completed the administrator survey compared to the percentage of teachers (69 percent) completing the classroom survey. The number of teachers submitting surveys the past two years has remained about the same with over 7,000 teacher responses.

Overall school participation rates in the first three years of the administration of the survey (2006-2009) were 88 percent. After a two year decline in survey participation in 2010 and 2011, the 2012 overall school survey participation rates increased by 14 percentage points. The SCDE transition from paper submission to online survey formats may explain the higher submission rate for 2012. Four elementary schools submitted unusable data with 'not applicable' responses for all questions. Those schools were: Honea Path in Anderson 2, Mt. Lebanon in Anderson 4, E.B. Morse in Laurens 55, and Dacusville in Pickens County.

Compliance Summary					
Percent of Schools Reporting	2007-08	2008-09	2009–10	2010-11	2011-12
Compliance with required PE time	72%	62%	57%	52%	57.1%
Compliance with required PA time	92%	84%	90%	95%	92.2%
Fitness reports sent to parents	74%	65%	75%	79%	74%

Physical Education (PE) and Physical Activity (PA) Minutes

Ninety-eight percent of 7,324 classroom teachers who responded to the survey answered the PE/PA time compliance questions. Minute or time compliance to the law remains relatively unchanged since the second year of the implementation of the law. It appears that schools struggle most with meeting the physical education time requirement. There has been some stagnation in physical education weekly minute compliance since 2008. Roughly a third of schools (35 percent) report that they offer students more than 60 minutes of physical education each week. Implementation of the required 90 minutes of physical activity minutes has remained consistently high over the years.

Types of Physical Activity Provided by Schools

The methods of delivery of physical activity minutes used by schools have changed since the law was implemented. Recess, walking programs, special events, teacher-led activities, and Jump Rope for Heart continue to be major ways schools meet the physical activity (PA) requirement for students. Since SHFA was passed, there has been an increasing tendency for classroom teachers to lead and develop their own planned physical activities for students. There is notably less use of commercially developed programs such as video exercise. In the past year, only 40 percent of classroom teachers reported using video programing to promote student physical activity. This is an encouraging trend, because it shows school commitment and personalization of programming. It is interesting to note that parent involvement in school physical activity programs has increased with 64 percent of classroom teachers reporting that their schools offers activity programs for families.

	Top Five Physical Activity Programs Schools Provided for Students By Activity (Percent of Responding Schools Providing Activity)					
Rank	2007-08	2008-09	2009–10	2010–11	2011-12	
1	Recess (64%)	Recess (89%)	Recess (97%)	Recess (99%)	Recess (97%)	
2	Walking Clubs (40%)	Physical Education Class: (88%)	Walking clubs: (73%)	Physical Education Class (98%)	Special Events (95%)	
3	Special Events (24%)	Special Events (88%)	Special Events (97%)	Walking Clubs (75%)	Classroom Activities (79%)	
4	Video Exercises (23%)	Low Organized Games (65%)	Video Exercises (57%)	Special Events (88%)	Low Organized Games (77%)	
5	Morning Exercises (16%)	Classroom Activities (64%)	Morning Exercises (40%)	Low Organized Games (72%)	Jump Rope for Heart (66%)	

Outcomes of Students Health and Fitness Act			
School Level Administrator Report	2009-10	2010-11	2011-12
	n=629	n=445	n=664
Programs devoted to increased Physical Activity	78%	93%	88%
Increased health/nutrition/fitness awareness	83%	85%	84%
Increased recess	61%	84%	23%
Academic benefits	3%	81%	75%
Decrease in school discipline problems	26%	DU	50%
Opportunity to access students	62%	84%	63%

Challenges to school compliance with Students Health and Fitness Act				
School level Administrator Report	2009-10 <i>n</i> =629	2010-11 <i>n</i> = <i>445</i>	2011-12 n=664	
Scheduling issues, not enough time	54%	52%	29%	
Record keeping	29%	53%	11%	
Funding	46%	47%	28%	
Equipment	27%	DU	10%	
Space and Facilities	33%	DU	19%	

Program Practice: School Level Administrator Report

The following chart provides a comparison of school level program practices reported by school level administrators for the last two years. It is encouraging to note that the reported classroom student-to-teacher ratios have improved between 2011 and 2012 and that total teacher- to-student daily ratios rarely exceeded the recommended maximum of 600 students to one teacher. Only nine percent of school administrators reported that they were able to add more physical education teachers to their staff during the 2011-12 school year. Continuation of the recommended teacher-to-student ratio practices are limited due to fiscal year Proviso 1.38 that suspends the ratio requirements for students. The impact of the proviso on exceptional needs students who are exempt from the provisions of Proviso 1.38 remains questionable for the coming school year. Thirty-one percent of administrators reported that they have more than three special needs students in physical education classes. The burden of the instructional load placed on physical education teachers has not improved due to the fact that approximately one in ten physical education teachers do not have an instruction planning period during the school day.

Withholding recess as a punishment continues to be a common practice in spite of the preponderance of research that supports recess as an important component of social development for young school-aged children.¹

Less than 50 percent of elementary schools provide at least 20 minutes per week of legislated nutrition education to their students. There is little excuse for this lack of compliance, considering that nutrition education is a component of Comprehensive Health Education instruction and is clearly outlined in the 2009 South Carolina Academic Standards for Health and Safety Education.

Some program practices that impede the implementation of the SHFA can be corrected at the administrative level. Between a fifth and a quarter of schools report scheduling issues, lack of equipment and space, Fitnessgram software, and funding issues as barriers. The same number of schools report the practice of withholding recess as punishment and continue the practice of offering unhealthy snack and party foods.

Program Practice		
School level Administrator Report	2010-11	2011-12
Did your student-to-teacher ratio in a physical education class not exceed the average student-to-teacher ratio of 28 to 1?	84%	96%
At any time, did the number of students in a PE class exceed 40?	7%	9%
Did your school have to replace or reduce time dedicated to instruction in the arts taught by certified arts specialists?	5%	4%
Was the student-to-certified-physical-education-teacher ratio in your elementary school no more than 600 to 1?	89%	88%

¹ Barros, RM., Silver, EJ., Stein, REK., (2009) School Recess and Group Classroom Behavior, *Pediatrics* 123(2), 431-436.

Ramstetter, C L., Murray, R., Garner, A. (2010) The Crucial Role of Recess in Schools, Journal of School Health 80(2), 517-526.

Does your school withhold recess as punishment?	22%	27%
Does your school have age-appropriate equipment and facilities to implement the physical education curriculum standards?	96%	96%
Did the physical education teachers receive a planning period every day?	87%	89%
Were all physical education classes based on the South Carolina Academic Standards for Physical Education?	99%	99%
Did your school provide as a part of the health curriculum for students in kindergarten through fifth grade a weekly nutrition component?	59%	52%
Did your school have more than 3 special needs students in any PE class?	39%	31%

Conclusions

Since the implementation of the SHFA, there has been growing evidence of the institutionalization of the law into everyday school programs and practice. Problems with record keeping, class scheduling, funding, facilities and equipment are diminishing. The value of the physical education and physical activity programs to students, parents, teachers, and administrators is also apparent. Benefits such as improved academic performance² and reduction in discipline problems³ have been reported to be attributed to the practices of the SHFA. The broad intent of the law was to improve the health and wellbeing of youth in South Carolina. It is encouraging to report that 70 percent of teachers and 75 percent of school administrators believe that the SHFA has resulted in having healthier and more physically fit students in Kindergarten through grade 5 in South Carolina schools. The true picture of the health fitness levels of all South Carolina public school students would be more apparent if there was 100 percent compliance in reporting. Currently there are no penalty provisions in the SHFA for non-reporting schools.

² Carlson, SA., Fulton, JE., Lee, SM., Maynard, LM., Brown, DR., Kohl III, HW, Dietz, WH. (2008) Physical Education and Academic Achievement in Elementary School: Data From the Early Childhood Longitudinal Study, *American Journal of Public Health*, 198(4), 721-727

Stevens, TA., To, Y., Stevenson, SJ., Lochbaum, MR. (2008) The Importance of Physical Activity and Physical Education in the Prediction of Academic Achievement, *Journal of Sport Behavior* 31(4), 368-388.

Telford, RD., Cunningham, RB., Fitzgerald, R., Olive, LS., Prosser, L., Jiang, X., Telford, RM. (2012) Physical Education, Obesity and Academic Achievement: a 2-year Longitudinal Investigation of Australian Elementary School Children, *American Journal of Public Health*, 102(2), 368-374.

Trudeau, F., Shepard, RJ., (2008) Physical Education, School Physical Activity, School Sports and Academic Performance, *International Journal of Behavioral Nutrition and Physical Activity*, 5, 1-12.

³ Podulka, D., Pivarnik, J. Womack, CM., Reeves, MJ. Malina, RM. (2006) Effects of Physical Education and Activity Levels on Academic Achievement in Children, *American College of Sports Medicine* 8(8), 1515-1519.

Satcher, D. (2005). Healthy and Ready to Learn: Research shows that nutrition and physical activity affect student academic achievement. *Educational Leadership* (63) 26-30.

Appendix A: 2011-12 Students' Health and Fitness Act Survey Questions

K-5-Classroom Teacher Survey

District	
School	
School Level Physical Education Director	
Name of the teacher completing this survey	
Select the grade level that you teach (K-5).	
E-mail address of person completing the survey	

Please answer YES or NO to each of the following questions concerning the implementation of the Students' Health and Fitness Act in your school during the 2011-12 school year.

- 1. Did your students receive at least 60 minutes of physical education (PE) instruction per week provided by a certified physical education instructor?
- 2. If the answer to the previous question 1 is NO, please explain.
- 3. Did your students receive more than 60 minutes of physical education (PE) per week provided by a certified physical education instructor?
- 4. Did your students receive at least 90 minutes of physical activity (PA) opportunities per week?
- 5. If the answer to question 4 is NO, please explain.
- 6. How much time did your students receive for physical activity (PA) opportunities per week?

Were the following physical activity opportunities offered to your students during the 2011-12 school year?

- 7. Recess
- 8. Structured walking programs, walking track or walking clubs
- 9. National or local walking events (Walk to School, or Walk Across America)
- 10. Special school events such as May Day or Field Day
- 11. Aerobic video programs such as jazzercise, deskercise and FitKids
- 12. Morning exercise programs such as morning stretch or CORE exercise
- 13. Classroom activities led by the classroom teacher
- 14. Jump Rope for Heart
- 15. Low organized games such as kickball
- 16. Before or after school programs
- 17. Family events
- 18. Structured programs such as Geo Mat or CATCH
- 19. Dance
- 20. Other Please list.

Which of the following did your students benefit from during the 2011-12 school year, as a result of your school's implementation of the Students' Health and Fitness Act? Please choose yes for all of the applicable benefits.

- 21. Programs were offered that were devoted to increase student physical activity levels
- 22. Increase in student health and nutrition awareness.
- 23. Increase in recess time
- 24. Increased support and advocacy for equipment and space
- 25. Increased support from parents
- 26. Integration of physical activity into the classroom
- 27. More physical education teachers added or hired
- 28. Increased assessment of students in physical education
- 29. Increased student skill development in physical education
- 30. Healthier, more physically fit students
- 31. Decrease in discipline problems
- 32. Increase in student alertness and attention in class
- 33. Increase in student attendance
- 34. Academic benefits
- 35. Other Please list.

Which of the following challenges did you experience during the 2011-12 school year as a result of your school's implementation of the Students' Health and Fitness Act? Please choose yes for all of the applicable challenges.

- 36. Scheduling problems, such as time
- 37. Space or facilities limitations
- 38. Class size (too many students in a class to adequately instruct)
- 39. Time taken away from other academic subject instruction
 - 40. Equipment
 - 41. Funding
- 42. Low student motivation or cooperation
- 43. Administration of the Fitnessgram assessment
- 44. Fitnessgram software problems
- 45. Nutrition issues such as party food and unhealthy snacks
- 46. Removal of recess as a discipline measure and the need to find alternative discipline methods
- 47. Added classroom and record keeping responsibilities
- 48. Lack of support from parents
- 49. Other Please list.

Physical Education-School Level Administator or Physical Activity Director

District

School

Name of the person completing this survey

Title of the person completing this survey

Email address of the person completing this survey

Please answer each question related to your school's implementation of the Students' Health and Fitness Act during the 2011-12 school year.

- 1. Was your student to teacher ratio in physical education classes equal to or lower than 28:1 (28 students to 1 teacher)?
- 2. If the answer to question 1 is NO, please indicate your school's student to teacher ratio.
- 3. At any time, did the number of students in physical education classes exceed 40 students?
- 4. If the answer to question 3 is YES, please explain.
- 5. Did your school reduce or replace time dedicated to visual or performing arts instruction as a result of the Students' Health and Fitness Act?
- 6. Was the student to certified physical education teacher ratio in your school equal to or less than 600:1 (600 students to 1 PE teacher)?
- 7. If the answer to question 6 is NO, please indicate your school's ratio.
- 8. Did your school report fitness status to parents or guardians of 5th grade students?
- 9. Does your school withhold recess as punishment?
- 10. Does your school provide students time for physical activity each week?
- 11. Does your school employ a certified dance education specialist?
- 12. Does your school have adequate, age-appropriate equipment for the effective implementation of the physical education standards?
- 13. Does your physical education teacher receive a planning period every day that is equivalent to other classroom teacher planning time?
- 14. Did your school have more than three special needs students in any physical education class?
- 15. If the answer to question 14 is YES, please explain.
- 16. Is physical education instruction in your school based on the South Carolina Academic Standards for Physical Education 2008? (available at http://ed.sc.gov/agency/pr/standards-and-curriculum/documents/OfficialEditedPhysicalEducationStandards2008.pdf)
- 17. Did your school provide all K-5 students with a weekly nutrition lesson?
- 18. Were Physical Education classes canceled at any time due to school functions, such as picture day or school assemblies?
- 19. If the answer to the previous question is **YES**, please explain.

Please indicate which of the challenges listed below occurred during the 2011-12 school year as a result of your school's implementation of the Students' Health and Fitness Act? Please choose YES for all of the applicable challenges.

- 20. Scheduling problems, such as time
- 21. Space or facilities limitations
- 22. Class size (too many students in a class to adequately instruct)

23. Time taken away from other academic subject instruction 24. Equipment 25. Coordination/cooperation with classroom teachers 26. Funding 27. Low student motivation or cooperation 28. Administration of the Fitnessgram assessment 29. Fitnessgram software problems 30. Nutrition issues, such as party food and unhealthy snacks 31. Removal of recess as a discipline measure and the need to find alternative discipline methods 32. Added classroom teacher responsibilities 33. Record keeping 34. Lack of support from parents 35. Other – Please list. Which of the following did your students benefit from during the 2011-12 school year, as a result of your school's implementation of the Students' Health and Fitness Act? Please choose YES for all of the applicable benefits. 36. Programs were offered that were devoted to increase student physical activity levels 37. Increase in student health and nutrition awareness 38. Increase in recess time 39. Increased support and advocacy for equipment and space 40. Increased support from parents 41. Integration of physical activity into the classroom 42. More physical education teachers added or hired 43. Increased assessment of students in physical education 44. Increased student skill development in physical education 45. Healthier, more physically fit students 46. Healthier, more physically fit faculty 47. Decrease in discipline problems

48. Increase in student alertness and attention in class

49. Increase in attendance50. Academic benefits51. Other – Please list.

Appendix B: Non-Reporting Schools by Districts

T=Classroom Teacher Survey A=School Administrator Survey

District	School	T	A
Abbeville	Calhoun	X	
Aiken	Jefferson	X	
	Aiken	X	
	Belvedere	X	
	Byrd	X	
	Clearwater	X	X
	Busbee Corbett	X	
	Gloverville	X	
	Greendale	X	
	Hammond	X	
	Millbrook	X	
	North Aiken /Pinecrest	X	X
	North Augusta	X	
	Warrenville	X	
	Oakwood-Windsor	X	
	Redcliffe	X	
	Chukker Creek	X	
	Mossy Creek	X	X
	Lloyd-Kennedy		X
	Midland Valley		X
Anderson 1	Palmetto	X	
	Cedar Grove	X	
	Spearman	X	
	Wren	X	
	Powdersville		X
Anderson 5	Centerville	X	
	Concord	X	
	Homeland Park	X	
	Nevitt Forest	X	
	New Prospect	X	
	Varennes Academy	X	
	Whitehall	X	
	Calhoun	X	
	Midway		X
Allendale	Allendale	X	
Bamberg 1	R. Carroll Elementary	X	
	R. Carroll Primary	X	
Barnwell 19	Macedonia	X	

Berkeley	J. K. Gourdin	X	X
	St. Stephen	X	
Charleston	Oakland	X	X
	Sanders-Clyde	X	X
	Simons	X	
	Springfield	X	X
	Stono Park	X	
	Ashley River Arts	X	X
	James Island	X	X
	Charleston	X	X
	Developmental	X	X
	Orange Grove	X	X
	Apple	X	X
	Pattison	X	X
	Hughes	X	
	Mt Zion	X	X
	St James Santee	X	
	Jennie Moore	X	X
	James Edwards	X	X
	Buist Academy	X	X
	Corcoran	X	
	Hunley Park	X	X
	Midlland Park	X	X
	West Charleston	X	
	Dunston	X	X
	Charleston Progressive	X	X
	Ellington	X	X
	Frierson	X	
	Stiles		X
	North Charleston		X
	Sullivan's Island		X
	Whitesides		X
Chesterfield	Cheraw Primary	X	
	Edwards	X	
	Jefferson	X	
	Petersburg Primary	X	X
	Pageland	X	X
Colleton	Cottageville	X	
	Forest Hills	X	
	Edisto Beach	X	
	Northside	X	
	Hendersonville	X	
	Black Street		X
	Belles		X

Dillon 4	Lake View	X	X
	East	X	X
	South	X	X
	Gordon	X	X
	Stewart Heights	X	X
Edgefield	Douglas	X	X
	Johnston	X	X
	W. E. Parker	X	X
	Merriwether	X	X
Darlington	Brunson-Dargan	X	
	St. John	X	X
	Thornwell	X	
	Washington Street	X	
Dorchester 2	Reeves	X	
Florence 1	Moore	X	
	Beck	X	
	Palmetto Youth	X	
	Delmae		X
Florence 4	Brockington	X	
Georgetown	Andrews	X	
	Brown's Ferry	X	
	Kensington	X	
	Maryville	X	
	Plantersville	X	
	Waccamaw Intermediate	X	
Greenville	Berea	X	X
	Lake Forest	X	
	Stone Academy	X	
	Cherrydale	X	
	Gordon	X	
Greenwood 51	Ware Shoals	X	
Hampton 1	Brunson	X	
Horry	Palmetto Academy	X	
	Forest Brook	X	
	Socastee	X	
	Burgess	X	
	Bridgewater	X	X
	Aynor	X	X
	South Conway	X	X
	Ocean Bay		X

Jasper	Hardeeville	X	X
	Ridgeland	X	X
	Washington Park	X	X
Laurens 55	Hickory Tavern	X	
	Gray Court Owings	X	X
Lee	Lower Lee		X
Lexington 1	Oak Grove	X	
Lexington 2	Saluda River Academy	X	
	Springdale	X	
	Brookland Cayce		X
	Davis		X
Lexington 4	Mack		X
Marlboro	Bennettsville Primary	X	X
	Bennettsville Elementary	X	X
Marion 2	North Mullins Primary	X	X
Newberry	Little Mountain	X	
	Pomaria-Garmany	X	
	Ruben	X	X
	Prosperity-Rikard	X	
Oconee	Northside	X	
	Westminster	X	X
Orangeburg 3	Holly Hill	X	X
	St. James-Gaillard	X	X
	Vance-Providence	X	X
Orangeburg 5	Marshall	X	X
	Mellicamp	X	X
	Brookdale	X	X
	Rivelon	X	X
	Sheridan	X	X
	Whittaker	X	X
	Dover	X	X
Pickens	Lewis	X	
	Pickens	X	
	West End	X	
	McKissick	X	X
	Hagood		X
Richland 1	Caughman	X	
	Gadsden	X	
	Hyatt Park	X	
	Horrell Hill	X	
	Mill Creek	X	
	Satchel Ford	X	
	Brockman	X	

	Midlands Math/Business	X	
	Carolina Inquiry	X	
	Hall Institute	X	
	Pendergrass Fairwold	X	
	Hopkins		X
Saluda	Saluda Primary	X	X
	Hollywood	X	X
Spartanburg 4	Woodruff	X	
Spartanburg 5	Reidville	X	
	Wellford Academy	X	
	River Ridge	X	
	Berry Shoals	X	
	Lyman	X	
	Beech Springs	X	X
Spartanburg 7	Cleveland	X	X
	Morgan	X	
	McCarthy-Teszler	X	X
	Chapman		X
	Wright		X
Sumter	Millwood	X	
	Willow Drive	X	
Williamsburg	Gardner	X	
	Hemingway Youth	X	
	Hemingway Career	X	
	Youth Academy	X	
York 2	Bethel	X	
York 3	Ebenezer Avenue	X	X
	Ebinport	X	X
	Finley Road	X	X
	Lesslie	X	X
	Northside	X	X
	Oakdale	X	X
	Richmond Drive	X	X
	Rosewood	X	X
	Sunset Park	X	X
	Children's-Sylvia Cir.	X	X
	York Road	X	X
	Independence	X	X
	Mt. Gallant	X	X
	Old Pointe	X	X
	Children's Attention	X	X
	Central Child Develop	X	X
	Applied Technology	X	X

York 4	Fort Mill	X	X
	Gold Hill	X	X
	Orchard Park	X	X
	Springfield	X	X
	Sugar Creek	X	X