



SOUTH CAROLINA

Sciences & Life Sciences Achievement

STUDENT ACHIEVEMENT

NAEP Grade 8	SC	U.S. Avg.	State Rank
Science Average, 2005	145.1	147.1	29
Science, 2005 (% at or above "proficient")	22.8%	27.3%	34
Life Sciences Average, 2005	146.7	148.2	29

ACT	SC	U.S. Avg.	State Rank
Science Average, 2008	19.7	20.8	48
Biology, 2008 (% of students ready for college level)	19%	28%	49

AP	SC	U.S. Avg.	State Rank
Science Scores, 2008 (% with a score of 3 or higher)	56.9%	55.4%	21
Science Exams, 2008 (Exams as % of all H.S. grads)	7.4%	10.5%	33
Biology Scores, 2008 (% with a score of 3 or higher)	55.0%	49.8%	15
Biology Exams, 2008 (Exams as % of all H.S. grads)	3.8%	4.6%	26

SCIENCE TEACHER QUALITY and PROFESSIONAL DEVELOPMENT

	SC	U.S. Avg.	State Rank
Science Teachers with Major in Assigned Field, 2003–04 (% , Grades 7–12)	82%	77%	13
Science Teachers Certified, 2006 (% , Grades 7–8)	N/A%	N/A%	–
Biology Teachers Certified, 2006 (% , Grades 9–12)	N/A%	88%	–

Note: NAEP = National Assessment of Educational Progress, AP = Advanced Placement
N/A = Data not available.

Examples of Bioscience Education Activities

Teacher Preparation and Professional Development

Among its other educational programming, the **Greenwood Genetic Center** offers three separate 1-week summer courses on aspects of genetics for K-12 teachers. The Center also brings professional development workshops to school districts statewide.

SC STATE SCIENCE STANDARDS & REQUIREMENTS

STANDARDS PROFILE

- K-12 Science Standards were last released in **2005**, supplemented by specific "indicators" in **2008**. an end-of-course assessment in biology will be implemented in 2009

BIOSCIENCE-RELATED GRADUATION REQUIREMENTS:

Biology is not specified in science requirement

South Carolina is implementing an end of year assessment test in science for grades 3–8 as of 2009 and an end-of-course assessment test for biology in high school



Experiential Learning and Outreach

Clemson University is a licensee of the **Dolan DNA Learning Center program** of Cold Spring Harbor Laboratory. The Learning Center provides hands-on experience to K-12 student visitors and offers graduate courses in teaching methods to middle and high school teachers.

Bioscience-focused Schools and Programs

Fourteen high schools are offering the **Project Lead The Way Biomedical Science program** in 2009–2010.

Funded by the Duke Endowment, the **South Carolina Area Health Education Consortium** is working to increase the number of economically disadvantaged and underrepresented minority students in the health-career pipeline.



Basic Skills Achievement and Other Summary Metrics

STUDENT ACHIEVEMENT

NAEP Grade 8	SC	U.S. Avg.	State Rank
Math Average, 2007	281.5	280.2	29
Math, 2007 (% at or above "proficient")	31.9%	31.0%	29
Reading Average, 2007	257.4	261.0	41
Reading, 2007 (% at or above "proficient")	24.6%	29.2%	41
Writing Average, 2007	147.9	154.3	37
Writing, 2007 (% at or above "proficient")	22.5%	30.6%	39

ACT	SC	U.S. Avg.	State Rank
Percentage of Graduates Tested	44%	43%	27
Math Average, 2008	20.1	21.0	40
Reading Average, 2008	20.0	21.4	48
English Average, 2008	19.2	20.6	48

SAT	SC	U.S. Avg.	State Rank
Percentage of Graduates Tested	62%	48%	17
Math Average, 2008	497	515	47
Critical Reading Average, 2008	488	502	46
Writing Average, 2008	476	494	48

AP	SC	U.S. Avg.	State Rank
Math Scores, 2008 (% with a score of 3 or higher)	64.3%	65.2%	29
Math Exams, 2008 (Exams as % of all H.S. grads)	7.7%	8.7%	28
English Scores, 2008 (% with a score of 3 or higher)	59.9%	59.2%	32
English Exams, 2008 (Exams as % of all H.S. grads)	17.3%	18.9%	19

SUMMARY STATE EDUCATION METRICS

Selected Indicators	SC	U.S. Avg.	State Rank
High School Graduation Rate, 2005–06	61.0%	73.4%	49
Student/Teacher Ratio, 2006–07	14.1	15.5	21*
Low-income Students, 2006–07 (% of all students)	51.3%	41.6%	–
Expenditure per Student (\$), 2005–06	\$8,120	\$9,154	36

Note: NAEP = National Assessment of Educational Progress, AP = Advanced Placement
N/A = Data not available. * Lowest value receives highest ranking.

TABLE SOURCE NOTES:

NAEP Assessments, grade 8: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics (NCES), National Assessment of Educational Progress (NAEP), 2005; **ACT Exam:** ACT, Inc., 2008; **SAT Reasoning Test:** The College Board, 2008.

Advanced Placement (AP): Battelle analysis of data from the College Board, 2008; AP test takers as a share of high school graduates includes graduate data from U.S. Department of Education, NCES for both public (Common Core of Data) and private high schools (Private School Survey).

Science Teacher Indicators: Council of Chief State School Officers (CCSSO) analysis of State Departments of Education data on public schools, 2007; U.S. Department of Education, NCES Schools and Staffing Survey, 2003–04 as reported by CCSSO, 2007.

Summary State Education Metrics: U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data (CCD) on public elementary and secondary education.

Note: High school graduation rates are averaged freshman graduation rates—the rate is the number of graduates divided by the estimated count of freshmen 4 years earlier. U.S. figure for share of students eligible for free or reduced-price school lunch ("low-income" students) is available for 2005–06 only (state data are for 2006–07).

