

**HORRY COUNTY SCHOOLS
MONITORING REPORT – R-3 Science**

I certify that the information in this report is true.

Signed: _____ Date: _____
Cindy Elsberry, Superintendent

Disposition of the Board:

- _____ In compliance
_____ Not in compliance
_____ Compliance with exception

Signed: _____ Date: _____
Joe DeFeo, Board Chair

Comments: _____

R-3 – Science	Supt	Supt	Board	Board
	In compliance	Not in compliance	In compliance	Not in compliance
Each student will achieve mastery of performance standards in science.	✓			

Interpretation: I interpret this policy to mean that Horry County Schools will implement a course of study that is aligned with the South Carolina academic standards for K-12 for science that will prepare students in the areas of life, physical, earth science, and inquiry. In the area of science, the offerings at the high school level include courses in physical science, chemistry, biology, physics, marine science and environmental science, anatomy and physiology, forensic science and biology II.

I further interpret this to mean that the staff will regularly monitor and evaluate the instructional programs at each school as part of the ongoing efforts to improve student learning in the area of science. Staff will also provide ongoing support through professional development opportunities designed to build capacity by establishing exemplary science curriculum and assessments, developing content knowledge, and fostering strong literacy experiences for our K-12 science teachers.

Indicators of Evidence and Compliance:

We are in full compliance of this policy. Evidence is listed below:

- Horry County Schools curriculum and course offerings are aligned with the South Carolina Academic Standards for science.
- Instructional materials adoption processes comply with state requirements.
- Implementation of the South Carolina state support document has been an emphasis since its release in August of 2007. The support document outlines this information for South Carolina teachers: previous science knowledge; future knowledge; level of Bloom's Taxonomy; essential learning and non-essential learning; and assessment guidelines.
- Science kits and lab materials have been developed to support science instruction.
- The District opened and has continued to maintain a science kit distribution center since the 2010-2011 school year to supply science kits to elementary classrooms. It is housed in the old District Office.
- Additional science kits were added for intermediate grades to allow for a more flexible pacing schedule for the 2012-13 school year.
- Availability of online resources and instructional technology tools has increased in the last several years.
- The Discovery Education Science Techbook has been implemented as a resource to support grades 6-8 science teachers and students.
- Consensus maps (pacing guides), lesson plans, and assessments have been developed by our teachers and learning specialists to support improved teaching and learning.
- Eighth-grade honors science and high school honors physical science, biology, and chemistry curricula have been refined to utilize ACT's college-readiness standards. Advanced Placement (AP) assessment items and extended-response items are being implemented in middle schools
- Expanded teaching strategies such as content vocabulary, content-area literacy, interactive notebooking, problem-based learning, scientific modeling, and writing portfolios have been areas of focus.
- All high school biology classes have digital microscopes that will independently collect, organize and graph microscopic data and save the data for study or presentations.
- Project Lead the Way (PLTW) programs are offered at Conway High School and The Academy for Technology and Academics.
- The South Carolina FIRST Lego Robotics League held a qualifying event at Coastal Carolina University on Sat. January 11, 2014. Over 200 students aged 9-14 from Horry and Georgetown counties participated with original robot designs, challenges, and and research projects on how to deal with nature's fury. 13 out of the 23 participating schools hailed from HCS and were honored with numerous awards.
- Robotics teams have been expanded to grades K-12. At the First Palmetto Partners Robotics 2014 Competition, Carolina Forest High School placed sixth overall out of sixty-seven teams and chose Academy for Technology and Academics as a part of their alliance for the quarter-finals for the State championship. Horry County Schools was the only district in South Carolina to have a team entered from all of its high schools.
- Academy for Arts, Science & Technology's Aluminum Assault Robotics team comprised of pre-engineering students won the North Carolina's Regional's FIRST

Robotics competition and advances to the FIRST National Championship in St. Louis, Missouri.

- Science and mathematics majors are offered within the base high schools. Students utilize electives to enroll in higher level science courses.
- AP opportunities have continued to increase. HCS has increased enrollment in AP science courses by 76% since 2011-2012 and passing rates by 9.1% from 2012 to 2013. The district currently offers four science Advanced Placement (AP) courses, including AP Biology, AP Chemistry, AP Environmental Science, and AP Physics.
- Continued improvement in student learning is evidenced as measured by the assessment results available in the area of science. (See Science Monitoring Charts)
- District-developed benchmark assessments have been implemented in grades 3-8 in biology and are being used as tools to progress monitor mastery of standards and to assist teachers in making instructional decisions.
- A district plan has been developed to aid in the transition from the South Carolina Academic Standards (2005) to the South Carolina Science and Engineering Standards (2014).
- Horry County Schools has collaborated with Coastal Carolina University (CCU) to bring graduate science students into the PK-12 science classrooms (Science Fellows). This program also provides the opportunity for Horry County Science teachers to participate in the CCU graduate students' authentic scientific research.
- A District Science, Technology, Engineering and Math (STEM) program has been expanded since its opening in the fall of 2011 to serve students in grades 9-11 and will add a grade level next year.
- A S²TEM grant was awarded by the Coastal Pee Dee S²TEM Center to Green Sea Floyds High School. The grant is a continuation of a three year research project designed to test the effectiveness of specific literacy instructional strategies on student achievement.
- Horry County Virtual School has continued to offer an array of science courses.
- Teachers' expertise is recognized, and they are asked to share their knowledge with others at state and national conferences.
- Teachers serve on various state committees to include but not limited to standards-setting, curriculum teams, assessment, and textbook adoption.
- Fifth and seventh grade students participate in the Soil and Water Conservation-sponsored essay contest that requires students to research information on a science standard and then write an essay.
- Horry County Schools has continued its partnership with the South Carolina Governor's School for Science and Mathematics to offer Project Accelerate for tenth grade students interested in becoming engineers. The program is currently in its second year.
- Horry County Schools has also joined the South Carolina Governor's School for Science and Mathematics to offer an iTEAMS (Innovation, Technology and Entrepreneurship Among Middle Schoolers) summer camp for rising 7th and 8th graders.
- Exploration of digital content is ongoing.

