Federal Research Investment from NSF:
SOUTH CAROLINA

About NSF
As the federal agency charged with the advancement of scientific progress across all of the fields of science and engineering, the National Science Foundation (NSF) is the cornerstone of America’s basic scientific research enterprise. NSF’s seven directorates fund research in diverse disciplines as well as interdisciplinary, cross-cutting initiatives. Support for education research comes primarily from the Education and Human Resources Directorate and also from the Social, Behavioral and Economic Sciences Directorate.

Examples of NSF-funded Education Research in South Carolina

- **Maplets for Calculus (M4C):** Researchers at the University of South Carolina have developed a student oriented electronic study guide collection of over one hundred applets for precalculus, single and multivariable calculus. These applets balance the development of understanding and technical skills by posing questions, guiding the student through the solution process, checking intermediate results, and providing timely hints. Instructors use the applets as lecture demonstrations, as a source for quiz questions, or in a lab setting where students can talk to each other about solving them.

- **Enabling Field Experiences in Introductory Geoscience Classes Through the Use of Virtual Reality:** Clemson University researchers are increasing access to studying geological forms through using virtual reality technologies to create virtual field experiences for introductory geosciences classes. This project is addressing a lack of opportunities to provide physical world experiences to many undergraduate students due to access, logistical, and financial constraints. The virtual reality experiences will also create a pathway for a diverse audience of students to encounter the earth sciences, particularly those from underrepresented groups, resource-limited institutions, and majors traditionally not directly involved in the earth sciences.

Top 5 NSF-funded Universities in South Carolina

1. Clemson University ($18,609,000)
2. University of South Carolina at Columbia ($14,131,000)
3. Naval Electronics Systems Engineering Center ($12,164,000)
4. Florence-Darlington Technical College ($2,383,000)
5. Medical University of South Carolina ($2,000,000)

NSF in South Carolina

- South Carolina received 201 awards in FY 2015.
- South Carolina ranks 28th overall in NSF funding.
- South Carolina received almost 1% of the total NSF award budget in 2015.

South Carolina Funding

- **SBE**
  - 483,000
  - Number of Awards: 7

- **EHR**
  - 11,450,000
  - Number of Awards: 19

- **OTHER AWARDS**
  - 46,665,000
  - Number of Awards: 175

- **TOTAL**
  - 58,598,000
  - Number of Awards: 201
About IES

The Institute of Education Sciences (IES) is the federal research agency within the U.S. Department of Education that builds knowledge and informs understanding of education from early childhood through postsecondary to adult workforce.

Research, statistics, and evaluations funded by IES provide policymakers and practitioners with reliable information on the condition and progress of education, educational practices that support learning and improve academic achievement, and the effectiveness of education programs.

IES Resources for Schools and Educators in South Carolina

- The South Carolina Longitudinal Center for Education (SLICE) is intended to pull a variety of data together in one place and to allow them to be easily combined and viewed online. The data will be presented in dashboards and used by districts as an additional way to see current status, to monitor trends in their data, and to identify potential opportunities for improvement and interventions.

- Researchers at the University of South Carolina are developing and testing a high school vocabulary intervention building on the DictionarySquared vocabulary tutor. Through iterative development, the new version of DictionarySquared will be designed to adapt to student knowledge, use high-quality contexts, encourage active processing and student engagement, and assess student learning.

- The Southeast Regional Educational Laboratory serves the applied educational needs of Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina. The Office of Virtual Education and VirtualSC at the South Carolina Department of Education is a member of the Blended and Online Learning Research Alliance, which is seeking to understand participation, course attrition, and course-outcome success of rural vs. non-rural students in blended and online learning in Florida and South Carolina.

IES Online Resources

- Education Resources Information Center: http://eric.ed.gov