

## Consideration of Centers of Excellence Annual Report, FY 2000-01

### Background

The Education Improvement Act of 1984 provided for the establishment of a contract program to foster the development of Centers of Excellence in teacher education in public or private colleges in South Carolina. Program *Guidelines* stipulate annual reporting requirements for ongoing Centers and the constitution of a review panel that includes external reviewers to make recommendations concerning the funding of any new Centers should funds be appropriated by the General Assembly.

This report summarizes the annual reports submitted by each of the five Centers that received State funding in FY 2000-01. These summaries also include the overarching goals for each of the five Centers. If you wish to receive a complete annual report for any or all of the Centers, please let the staff know and these will be made available to you.

The summaries of the achieved goals from the annual reports for each Center funded during FY 2000-01 are included as **Attachment 1**. **Attachment 2** summarizes the impact Center activities have on various components of the K-16 system.

**Center of Excellence in Educational Technology  
University of South Carolina-Aiken  
FY 1997-98 through 2000-01**

The Center completed its fourth and final year of state funding during FY 2000-01. The primary purpose of the Center is to incorporate educational technology into K-16 classrooms. To achieve this objective the Center focused on two components: 1) the preparation of teachers for South Carolina schools who are able to include technology as a fundamental component of the curriculum; and 2) the training of in-service teachers in order to enhance their abilities to incorporate technology into classroom teaching. The Center has four main goals:

- Develop and model exemplary teacher preparation and campus-based and school-based faculty development programs that (a) are collaborative, (b) field-based, (c) use state-of-the-art technology, and (d) include instruction on the assessment of student learning.
- Develop an influential constituency for the CEET composed of stakeholders who will work with the CEET's activities and will support the CEET's continuance when State funding is complete.
- Achieve a position of leadership in the State within four years such that the CEET is a State resource in the use of educational technology.
- Develop a detailed research agenda related to educational technology that will enable higher education and K-12 faculty statewide to improve the effective use of educational technology in the classroom.

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**Summary of Activities  
Center of Excellence in Educational Technology  
FY 2000-01**

- Established a Faculty Training Support Center within the Center to provide training for all faculty at USC-Aiken.
- Provided technology training and support for faculty who teach pre-service methods courses.
- Developed a Faculty Training Mentoring Program to support faculty incorporation of technology into courses.
- Developed and offered "Resources for Teaching" course for pre-service students to provide technology training.

- Developed electronic portfolios as an assessment method of pre-service student learning.
- Developed a program where pre-service students function as educational technology teaching assistants in courses. Sixteen pre-service students have participated in the program.
- Developed the “Technology to Enrich Mathematics and Science” program which is a multi-visit program to K-12 classrooms to incorporate technology into K-12 science and mathematics curriculum.
- Conducted research analysis to determine the type of support faculty require to ensure successful incorporation of technology into the classroom.
- Conducted research by surveying teachers who participated in CEET programs while pre-service students. The objective of the study was to determine technology use by graduates who had completed the Center’s technology programs and activities. Results showed that these teachers had a heightened use of technology in their classrooms.
- Completion of the CEET suite within the Ruth Patrick Science Education Center. The suite includes: offices, computer classrooms, a multimedia classroom, the Faculty Technology Support Center, a distance learning studio, an editing/production facility, a conference room, a general workroom, and a student workroom.
- USC-Aiken established a \$10,000 Faculty Technology Support fund to support faculty training by CEET.
- Provided two educational technology training workshops for faculty from seven institutions of higher education
- Provided three graduate-level courses for practicing teachers in the USC-Aiken and USC-Beaufort areas.
- Had three K-12 teachers participate in the master teachers program which provides support and training for teachers to become technology leaders in their schools.
- Offered 18 educational technology workshops to K-12 school personnel. A total of 337 teachers from 12 school districts participated.
- Submitted a new program proposal to the Commission to establish a Master of Education degree in Educational Technology. This program has been developed collaboratively with USC-Columbia. The program will be jointly delivered and will incorporate web-based and two-way interactive video for delivery of several of the required courses.
- A closer look at Center activities can be seen at the web site: <http://rpsec.usca.sc.edu/CentersOfExc/CEET.html>

**Center of Excellence in Instructional Technology Training  
Clemson University  
FY 1998-99/2001-02**

The Center completed its third year of state funding in FY 2000-01. The Center was established to develop and promote effective strategies for training teachers to use technology in the classroom. The Center's two areas of focus are pre-service teacher preparation and in-service teacher training and support. A cornerstone of the Center's programs is that it will provide technology training and instruction that is flexible and customizable rather than the traditional lockstep, one-size-fits-all approach to technology training. The Center has five main goals:

- To develop and model exemplary teacher preparation (pre-service) and professional development (in-service) practices in the area of instructional technology.
  - To develop an influential constituency for the Center that will work with the Center and support its continuation once State funding ends.
  - To achieve a position of leadership in the State.
  - To exploit the research opportunities Center activities offer in order to develop and refine methodology of instructional technology preparation.
  - To establish a funding plan that will allow the Center to continue to flourish after State support has stopped.
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**Summary of Activities  
Center of Excellence in Instructional Technology Training  
FY 2000-01**

- Twelve instructional technology courses were taught for approximately 300 pre-service and 25 graduate students during the academic year.
- Service Learning web site has led to more than 150 technology services performed and has been cited by AOL as the best utilization of technology under its funded projects.
- Developed software guides for 15 weeks of classroom training for pre-service courses.
- Developed seven CD-ROM disks for training in technology.
- Developed a CD-ROM for training in using digital imaging in classrooms. The CD will be released Fall 2001.
- Provided support to School of Education Faculty on integrating technology into their courses.

- Elementary Education program revising curriculum (with Center's assistance) to integrate technology requirements into all methods classes and field experiences.
- Provided two free off-campus courses to in-service teachers.
- Sponsored technology training classes for middle and high school math teachers from across the country. The training was co-sponsored with \$15,000 in funding from Casio, Inc.
- Trained in-service teachers from schools in the Clemson area on how to use digital cameras in instruction.
- Revised the required education course EdF 315, *Integrating Computers into the Classroom*, to correlate with field experiences and methods classes.
- Provided two technology courses via videotape and CD-ROM for pre-service students to allow students self-paced courses.
- Worked with Educational Technology leaders in SC to establish an information and collaboration network.
- Received over \$200,000 worth of software from companies in order to acquaint teachers with products.
- Center is a central partner in a \$1.2 million implementation grant from the U.S. Department of Education titled Project Jericho. With partners, the project is matching technology-integrated projects with the K-16 curriculum in social studies and language arts.
- Awarded \$1.9 million Catalyst Grant from the U.S. Department of Education with partners from school districts and business. Project Circuit will develop a model for preparing pre-service teachers to use technology in support of inquiry-based instruction and will develop a collaborative/reflective community of practitioners to support their continuing professional development. Project Circuit information may be obtained at <http://circuit.clemson.edu>.
- Conducted research on student acquisition of technology skills; ways to integrate technology into methods classes; and how best to assist K-12 teachers in incorporating technology into their curriculum.
- The Center's web site serves as an online focal point for the numerous projects and can be accessed at: <http://itcenter.clemson.edu>.

**Center of Excellence for the Study of Standards-Based Educational Reform  
Coastal Carolina University  
FY 1999-00/2002-03**

The Center completed its second year of state funding during FY 2000-01. The Center has been developed to improve the abilities of teachers to facilitate optimum learning by South Carolina K-12 students. The focus of the center is threefold: 1) to identify through research the factors contributing to the success of students in meeting local, state, and national educational standards; 2) to apply what is learned through the research to the teacher education program at Coastal Carolina University at both the undergraduate and graduate level; and 3) to disseminate this attained knowledge to all teacher education programs in South Carolina. The Center has identified five main goals:

- To develop a research agenda relative to standards-based educational reform in the State.
  - To facilitate the implementation of effective and appropriate practice in instruction in courses and programs in teacher education at Coastal Carolina University.
  - To develop and disseminate models and materials for the preparation of teachers.
  - To provide a base of support for the Center by networking with school districts, state department personnel, business leaders, teacher education institutions, and other entities involved in standards-based educational reform.
  - To develop additional sources of funding.
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**Summary of Activities  
Center of Excellence for the Study of Standards-Based Educational Reform  
FY 2000-01**

- Undertook a study of eight middle schools to examine the standards implementation process including the PACT assessment.
- Developed a library/clearinghouse of materials related to standards-based education.
- Hosted the first “Standards-Based Reform in Teacher Education” Conference Spring 2001. More than 100 attended the two-day conference.
- Offered an undergraduate research course to pre-service students participating in Center’s research projects.
- Received \$55,300 grant from Education Oversight Committee to develop model syllabi for content courses for middle-level teachers.
- Center formed four teams of faculty and teachers to develop model syllabi in four content areas as part of the EOC project.
- Piloted model syllabi in summer 2001.

- As part of the modification of the teacher education program, seminars have been planned for education and content faculty to begin process of program modifications based on research findings.
- Received \$27,000 grant from Title II Teacher Quality Grant of the S.C. Department of Education.
- Completed research project with a local school district related to middle-level mathematics achievement and socio-economic status.
- Offered five content area courses for 30 in-service teachers in districts served by Coastal Carolina University.
- Center has funded three faculty/student research projects to examine standards-based reform. These projects involve 17 pre-service students in action research.
- Center is working with six Renaissance schools to conduct research on alternative certification and standards-based reform.
- Center has provided funding support for faculty to conduct a pilot study for the S.C. Budget and Control Board on middle-level standards.
- The Center's activities and programs can be viewed at its web site: <http://www.coastal.edu/education/standardsreform/>.

**Center of Excellence: South Carolina Earth Physics Project**  
**University of South Carolina-Columbia**  
**FY 1999-00/2002-03**

The Center (SC-EPP) completed its second year of state funding during FY 2000-01. The Center's overall goals and objectives are to serve as a resource, training, and curriculum development center for South Carolina teachers that facilitates an increase in the quality and quantity of interdisciplinary, inquiry-based learning so that students will be better able to meet or exceed appropriate subject matter and technology-related standards in the South Carolina Science Achievement Standards for grades 9-12. The Center has identified four objectives and six primary activities to meet these objectives:

- Through Center actions, high school science teachers will have an increased knowledge and perceived importance of earth physics so as to be better prepared to utilize SC-EPP resources to address appropriate standards.
- Through Center actions, high school science teachers will have an increased knowledge of, and confidence in their ability to use state-of-the-art instructional and research technology.
- Through Center actions, high school students will have an increased knowledge of natural science concepts so as to be able to meet or exceed the appropriate standards.
- Through Center actions, high school students will have an increased knowledge of and ability to use research technology so as to be able to meet or exceed the appropriate standards.
  - Develop high-quality, academically sound, seismology-based instructional materials.
  - Install seismometers at one high school in every county of S.C. and operate an on-line resource center at USC-Columbia.
  - Offer courses and workshops in seismology to pre-service teachers.
  - Assist pre-service teachers in the use of the instructional materials and instrumentation in their supervised teaching experience.
  - Offer workshops to assist in-service teachers in the implementation of the seismology-based instructional materials.
  - Provide on-going assistance to maintain the hardware, software, and instructional material resource center for the SC-EPP program.

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**Summary of Activities**  
**Center of Excellence: South Carolina Earth Physics Project**  
**FY 2000-01**

- Developed four modules emphasizing wave phenomena and one module focused on the energy standards.



- Sixteen high schools have operational seismograph systems. Twenty-one other high schools have requested the systems.
- Offered “Earth Science for Teachers” for six pre-service students at USC-Columbia.
- Eleven teachers participated in the Second Annual SC-EPP workshop.
- Provided ongoing assistance to teachers in 16 high schools implementing SC-EPP materials, including installation and support for Carolina Earthquake Explorer, the software basis for the project.
- Developed and assisted high school teachers in the use of assessment materials related to the project modules. This project has been the main area of research for the Center.
- Presented several invited talks on earthquake education including presentations at Charleston Southern University’s Earthquake Education Advisory Board, the American Geophysical Union, S.C. Science Council, AP Physics teachers, among others.
- Visited 20 high schools to present the SC-EPP program.
- Project director has been appointed to the Steering Committee on Educational Seismology at Indiana University.
- The SC-EPP-developed software Carolina Earthquake Explorer was presented to the Executive Committee of the Incorporated Research Institutions for Seismology (IRIS).
- As a result of the IRIS presentation, IRIS awarded the Center \$93,539 to hire a full-time software developer to accelerate the development of the Carolina Earthquake Explorer into a nationally-distributed package for K-16 and general public access to earthquake data.
- During the first year of the grant, Sun Microsystems provided a \$70,820 donation for equipment.
- Project director was invited to join the Digital Library for Earth System Education Data Access Working Group. This is a National Science Foundation-funded project to facilitate web-based access to research data resources for K-16 applications.
- Project director was a contributing author on a white paper for the U.S. Educational Seismology Network entitled *Shaking Up America’s Classrooms: A Vision for Educational Seismology in the United States*.
- The Center, representing USC, is a founding partner of the U.S. Educational Seismology Network (USES). The project director serves as a member of the Steering Committee of the USESN along with representatives from Indiana University, Princeton University, and the University of Arizona.
- The Center’s activities and programs can be viewed at: <http://www.seis.sc.edu/scepp>.

**Center of Excellence in Early Childhood Professional Development  
Winthrop University  
FY 2000-01/2003-04**

The Center completed its first year of funding during FY 2000-01. The Center has been created jointly by Winthrop University (lead institution) and the Institute for Families in Society at USC-Columbia (USC-IFS) to provide leadership and professional development in the area of early childhood education and childcare. The Center's purpose is to better prepare early childhood professionals and childcare workers to work effectively with diverse families in their efforts to enhance school readiness of children, birth to six years. The Center has developed the following four overarching goals:

- Develop and model exemplary teacher preparation and campus-based and school-based faculty development programs that are: a) family-centered, b) collaborative, c) field-based, and d) use state-of-the-art technology.
- Develop an influential constituency for the Center composed of stakeholders who will work with the Center's activities and will support the Center's continuance when State funding is complete.
- Achieve a position of leadership in the State within four years such that the Center is a State resource in selected critical issues facing the training of early childhood professionals.
- Develop a detailed research agenda related to the families and the education of young children that will enable higher education and K-12 faculty statewide to improve teacher preparation training at the two and four year colleges. This agenda will address other critical issues, including recommendations for development of a policy and advocacy plan for changing licensure regarding early childhood teacher education in the state, as related to a family-centered approach.

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**Summary of Activities  
Center of Excellence in Early Childhood Professional Development  
FY 2000-01**

- Established an Advisory Committee composed of representatives from Winthrop University, York Technical College, the Alliance for South Carolina's Children, Pilgrims Inn, Head Start, Communities and Schools, York County School Districts and parents.
- Met with effective practice experts in the State to gain input into the Center's activities. This included representatives from the S.C. Department of Health and Human Services, Office of First Steps, Center for Careers in Child Care, Rock Hill School District III, and York County Success by 6.

- Conducted site visits to nine exemplary early child care and education programs in Greenville, Spartanburg, Newberry, Lexington, Charlotte, Rock Hill, and Columbia.
- Participated in a two day in-service on effective practice in mobilizing early care and education community efforts.
- Staff have designed the following surveys for research into best practices: Parent Focus Group, Student Focus Group, Early Care and Education Teacher/Caregiver, Two and Four-year Colleges, College Curriculum Review.
- Conducted a statewide survey of two and four-year institutions that provide early care and education training. The survey assessed the current level of family-centered early care and education course content. Preliminary results were presented at the S.C. Early Childhood Workforce Summit.
- Conducted a curriculum review by assessing the family-centered content in early childhood development textbooks used by Winthrop University.
- Staff taught four classes at Winthrop to inform pre-service students and faculty about efforts to enhance curriculum at two and four-year institutions.
- Co-sponsored WestEd Infant and Toddler Responsive Curriculum training on cultural diversity with Department of Health and Human Services and USC-Columbia.
- Co-sponsored the Effective Black Parenting training with Lancaster County First Steps Partnership.
- Co-hosted the SC Early Childhood Leadership Summit and the follow-up Summit. Attendance was 125 and 120, respectively.
- Staff met with international children's advocate and Nobel Peace Prize Winner Betty Williams and discussed the work of the Center and received input into its mission.
- Staff was selected as an effective practice expert to guide the efforts of the SC First Steps initiative.
- Conducted focus groups with pre-service students, parents of pre-school children, and Head Start and child care professionals regarding family-centered childcare.
- Provided leadership with the Office of First Steps in the newly formed Early Childhood Effective Practice Network.
- Established an Early Childhood Development Research Network in collaboration with USC, Clemson, S.C. State, and MUSC.
- Submitted three federal grants, two to the National Science Foundation and one to the U.S. Department of Education.
- Staff developed the research agenda related to the status of early childhood care and educational articulation in S.C. and have developed the framework design.
- Center staff made numerous presentations and conducted several meetings across the state to coordinate its efforts and activities with those working in the area of early childhood education. For example, the Center is partnering with Success By 6 to begin a process of getting Family Resource Centers in York County.

**SUMMARY OF  
SERVICE TOP-16 COMMUNITY  
FY 2000-01**

Number of teachers served	1,616
Number of students served (P-12)	12,199
Number of pre-service students served	1,411
Number of districts served	85
Number on in-service activities	70
Number of schools served (P-12)	185
Number of faculty (higher education served)	512
Number of higher education institutions served	34
Number of state and national presentations	28