

## Action Plan Implementation Status Report as of October 2010

**Note:** The information below describes the activities specific to implementing the recommendations provided in the [Higher Education Action Plan](#) (March 2009). The Commission also periodically requests that institutions provide reports on their activities specific to the recommendations. Information received from the institutions is included but because not all institutions provide reports, the updates may not fully reflect on-going activities at institutions statewide.

The first two sections of this report list the high priority recommendations, both those with and without additional costs associated with their implementation. The third section, "Other Recommendations," groups recommendations by subject area.

### High Priority – No Cost Recommendations

#### **2.2. Enact appropriate regulatory relief to enhance innovation and promote research.**

**Responsible\*:** Legislature; CHE; Colleges and Universities

Two bills were introduced during the 2009 session to provide regulatory reform for the public higher education institutions and remained under consideration in 2010. H.3365, the Higher Education Efficiency and Administrative Policies Act, was passed by the House and reported out of Senate Education with amendments, but failed to receive approval by the end of the session. H.3841, the Technical College Administrative Efficiencies Act, was also passed by the House, but was not approved as of the session's end.

*\* For each of the recommendations, bold indicates primary responsibility.*

#### **3.1. Align higher education programs to support statewide and regional clusters. Responsible: Colleges and Universities; CHE; SCTCS; and SC Council on Competitiveness**

Since FY 2007-08, the Committee on Academic Affairs and Licensing has approved new programs which support the following clusters:

##### **Advanced Manufacturing and Technologies**

- A.I.T., Mechatronics Technology, Piedmont Tech
- B.S.E., Engineering Science, USC-Columbia
- M.Engr., Industrial Engineering, Clemson

##### **Energy**

- A.I.T., Radiation Protection Technology, Aiken Tech
- A.I.T., Radiation Protection Technology, Spartanburg Community College

##### **Health Care Occupations**

- A.H.S., Cardiovascular Technology, Piedmont Tech
- A.H.S., Physical Therapy Assistant, Piedmont Tech
- A.H.S., Veterinary Technology, Piedmont Tech
- A.H.S., Occupational Therapy Assistant, Horry-Georgetown Tech

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- A.H.S., Dental Hygiene, Aiken Tech
- A.H.S., Emergency Medical Technology, Midlands Tech
- B.A. and B.S., Public Health, USC-Columbia
- B.S., Nursing (Completion), Coastal Carolina
- M.S.D., Dentistry, MUSC
- Ph.D., Health and Rehabilitation Science with concentrations in Pathology and Impairment, Functional Limitations, or Health Services, MUSC
- D.N.P., Doctor of Nursing Practice, MUSC

### **Tourism and Creative Industries**

- B.A., Studio Art, USC-Beaufort
- B.S., Music Industry, Francis Marion
- B.A., Graphic Design, Coastal Carolina
- B.A., Commercial Music, USC-Upstate
- B.A., Computing in the Arts, College of Charleston
- B.F.A., Theatre Arts with Concentrations in Acting, Design and Technology, and Physical Theatre, Coastal Carolina
- Ph.D., Hospitality Management, USC-Columbia

### **Education**

- B.S., Secondary Education, College of Charleston
- M.A.T. Middle Level Education, The Citadel and College of Charleston
- M.Ed., Teaching and Learning, Clemson
- Ph.D., Teaching and Learning, USC Columbia

The South Carolina Technical College System continues to encourage the colleges to align their programs with the statewide and regional clusters and is promoting a cluster focus through programs such as *competeSC*. For example, Midlands Technical College offered a new Nuclear Technology program for the Fall 2009 semester that was created, in part, at the request of South Carolina Electric & Gas Company to supply the company's expansion of the V.C. Summer Nuclear Station with qualified nuclear technicians.

In the area of health care professions and occupations, Francis Marion University (in cooperation with the University of South Carolina) implemented the "Pee Dee Health Education Partnership" (a consortium approved by the CHE in October 2008). The purpose of the partnership, which includes McLeod Health and Carolinas Hospital, is to support additional graduate programs in healthcare professions and occupations for the Pee Dee region and the state of South Carolina.

The College of Charleston has a number of initiatives that align education programs to clusters including:

- A Biomedical Commercialization course co-taught by a Management professor from Charleston and a Neurosciences professor from MUSC, providing hands-on experience in biomedical companies (located in the Charleston Innovation Center).
- A management course involving students in the review and construction of strategic plans for operating units of MUSC.
- The Tate Center for Entrepreneurship, which has been an active participant in the Charleston Creative Cluster, now named "Parliament."

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- The Department of Computer Science has worked with New Carolina to better align the B.S. in Computer Science and M.S. in Computer and Information Sciences with the Advanced Security regional cluster.
- An Arts Management fundraising and development course requiring students to develop a proposal, campaign, solicitation letter, special event, and other items to support a specific project of a not-for-profit organization.
- The Theatre Department's playwright program emphasizing the development of student writing skills has a history of recognition of our students' work by the Kennedy Center / American College Theatre Festival

### **1.2. Use and promote the *Knowledge and Skills for University Success* standards as a common standard of college readiness. - **COMPLETED** Responsible: SCDE; CHE; SCTCS; High Schools; and Colleges and Universities**

The implementation of this recommendation has been completed because CHE staff sent letters to high schools to reiterate the importance of the *Knowledge and Skills for University Success* standards and the *South Carolina College Readiness Reference Standards*, which were developed as part of the South Carolina Course Alignment Project and include the *Knowledge and Skills for University Success* standards.

### **3.21. Increase opportunities for relevant work experience as part of instructional programs. Responsible: Colleges and Universities and Business and Industry (Connect2Business)**

Internships, cooperative work experience and supervised comprehensive work experience are commonly included in the Technical Colleges' applied degree programs. For example, South Carolina Electric & Gas (SCE&G) holds a Boot Camp for Midlands Technical College's Nuclear Systems Technology students because the company believes it is important to successfully match a student's expectation of a career in the nuclear field with SCE&G's corporate culture. The Boot Camp is specific to training students to work at the V.C. Summer Nuclear Station after they complete the degree program. SCE&G also provides adjunct instructors for Midland Technical College's Nuclear Operator program and has collaborated with the college regarding the content of courses in that program.

USC-Columbia is assembling a comprehensive database of internship, fieldwork, and practical learning practices across all colleges, to be assimilated into the SACS Accreditation Report and into the Banner system database for the university. The database is expected to aid in decisions on future opportunities for incorporating work experience into instructional programs.

The College of Charleston expanded its efforts to increase opportunities for relevant work experience as a part of its instructional programs. The Center for Civic Engagement helps faculty and students link academic goals with community needs and service opportunities through unique academic experiences that link classroom learning to the Charleston community. See also Recommendation 1.35

Coastal Carolina University has expanded opportunities to explore internships in academic majors. The Career Services Center created the position of Internship Coordinator whose role is to work with all academic departments in assisting in the preparation and placement of students

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into internship positions. A formalized internship program has been developed that qualifies all internship providers and guarantees relevant major-specific internship experiences that students can easily access through the Career Services website. Students are required to maintain a specific work schedule and provide feedback on their learning experiences to their faculty course instructor. The employer site supervisor provides a mid-term and final student performance evaluation to the course instructor as well. During 2009-10, Coastal Carolina University successfully placed 708 students into internships for academic credit. In order to help insure that students are afforded as many internship options as possible, there is an ongoing effort to create partnerships with local and regional employers interested in offering new opportunities to our students. In addition to internship courses offered through the academic departments, a UNIV 395 Internship Experience course was adopted and offered to students who have completed at least 30 credit hours and are interested in more than one university supervised internship experience. Though this course, students are encouraged to explore career options, apply their academic knowledge, and develop marketable work skills.

Francis Marion University's Health Physics program has increased the number of internships for students majoring in Health Physics by working with partner organizations in various appropriate fields.

### **2.7. Establish a network of programs to encourage statewide technology transfer of South Carolina-derived technologies/patents (e.g., Maryland technology transfer consortium). [The text of Recommendation 2.7 was changed by approval of the oversight committee on September 2, 2009.]**

**Responsible: Colleges and Universities and Business and Industry**

Based on staff suggestions, Recommendation 2.7 was modified in September 2009 to reflect an emphasis on a technology transfer consortium which would work to align business and institutional research interests.

In October 2009, the first CoEE Council of Chairs convened on the USC Columbia campus. This conference included private and public sessions devoted to topics such as economic development, CoEE Program objectives (including technology transfer), and the consideration of a CoEE Council of Chairs Charter.

In December 2009, the FY 2009 *CoEE Program Annual Report* was released. Collective CoEE technology transfer activity includes 136 invention disclosures, 143 patent applications, 13 awarded patents, 18 active licenses, and nearly \$600,000 in licensing revenue.

In February 2010, the CoEE Council of Chairs released an Action Plan. The Action Plan includes the goal of the CoEE Endowed Chairs becoming a recognized science and technology advisory board which will provide leadership to the state and to South Carolina industry on economic growth through academic research and technology transfer.

On March 2-3, 2010, Health Sciences South Carolina hosted the Health Economy Advancement Legacy (HEAL) SC 2010 Conference devoted to "the discovery, development and delivery of new concepts, new sciences and new products emanating from the endowed chairs and CoEE scientific research of the HSSC-sponsored CoEE programs." The HEAL SC Conference included sessions on technology transfer and research commercialization from numerous healthcare CoEE Endowed Chairs and principal investigators, as well as from several prominent national

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technology transfer experts and venture capitalists. HEAL SC also included a legislative event that provided members of the General Assembly with information about the CoEE Program.

The CoEE Council of Chairs will convene a second CoEE Council of Chairs Forum in October 2010. The goals of this Forum are to begin implementing the CoEE Council of Chairs Action Plan, which was released in February 2010, and to create a steering committee for a CoEE Program national conference in 2011 where technology transfer will be a major theme.

See also Recommendation 2.22.

**4.3. To maintain a more accurate picture of higher education funding, state data reporting should clearly distinguish between restricted funds (e.g., funding which is limited to a specific auxiliary activity or by donors or external agencies to a specific purpose) and unrestricted funding (e.g., funding derived primarily from state appropriations for Educational and General [E&G] support and student tuition and fees).**

**Responsible: Legislature; Governor's Office; and CHE**

The Commission completed and disseminated to members and other interested stakeholders a document entitled "Project 17: An Analysis of State Support for Higher Education in South Carolina" which clearly distinguishes between restricted and unrestricted state appropriations and authorizations. This analysis will be replicated each fiscal year to provide a clear picture of state appropriated operating support for higher education.

### **CHE Cost Reduction Committee described under Goal Four**

**Responsible: CHE**

The Cost Reduction Committee has not yet been established. Of note, however, is a FY 2009-10 Part 1B budget proviso, 18.6 (TEC Financial and Human Resource Functions Consolidation Plan), that complements this objective. The proviso directed the technical college system to submit a plan which they did as requested to House and Senate finance committees related to the consolidation of financial and human resource functions at like institutions where possible. The technical college sector has formed two committees comprised of select board members, presidents, and area commissioners with support from state office liaisons and chief business officers (CBOs). These committees are charged with reviewing process modifications and potential collaborations that will lead to increased efficiencies.

CHE is moving forward with establishing a Cost Reduction Committee comprised of institutional leaders, members of the Commission, and others to complement and incorporate the efforts currently ongoing at the Technical Colleges.

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### **High Priority – With Cost Recommendations**

#### **1.21. Ensure affordability of higher education through increased state funding.**

**Responsible:** Legislature and Colleges and Universities

Given the state's present economic situation, additional state funding has not been possible. During FY 2008-09, state funding to agencies was reduced in October, December, and March. On average, funding for institutions dropped 24%. The FY 2009-10 budget (current fiscal year) included recurring state funding for institutions level with the FY 2008-09 levels, inclusive of the cuts experienced. During FY 2009-10, budgets were further reduced with the enactment of statewide across the board cuts in September 2009 and later in December totaling 9.04%. The FY2010-11 state appropriations for institutions were reduced on average by 21%. However, federal funds from the second and final year of the American Recovery and Reinvestment Act (ARRA) stabilization funds were included in the amount of the reduction. Inclusive of these federal funds, funding is down 15% or approximately \$95 million as compared to FY 2009-10 appropriations.

See also Recommendations 2.18, 3.3, and 4.2.

#### **3.3. Fund a bond bill to support necessary infrastructure and facilities renovation, maintenance and expansion.**

**Responsible:** Legislature

The General Assembly did not consider a bond bill during the 2009 or 2010 sessions. See also Recommendations 1.21, 2.18, and 4.2.

#### **4.4. Fund the Partnership Among South Carolina Academic Libraries (PASCAL) fully because it is a critically important partnership among South Carolina's academic libraries.**

**Responsible:** Legislature

PASCAL began FY 2008-09 with \$200,000 in recurring funds – a loss of \$1.8 million from funding provided annually in past years. As a result of budget cuts during FY 2008-09 and FY 2009-10, PASCAL has been reduced to its current (FY 2010-11) appropriation of \$169,674.

During 2009-10, an ad hoc subcommittee of independent and public institution chief academic officers developed an emergency funding proposal which included a one-time assessment for individual institutions to partially restore PASCAL services. The survival plan maintained the five most critical electronic resources and delivery service at three days per week. Using \$250,000 in one-time funds, the central office of the State Technical College System paid the institutional assessment for all of the technical colleges for FY 2009-10. In September 2009, the South Carolina Deans and Directors of Nursing Education approved use of one-time funds to subscribe to two cancelled nursing packages for the 2010 calendar year.

Although no institutions resigned as PASCAL members for FY 2009-10, many institutions made library resource cuts in order to maintain program participation. For example, many institutions lost permanent access to materials. Approximately 25% of PASCAL member institutions canceled other research materials in order to maintain former PASCAL resources at

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higher costs. In a PASCAL survey, 12 institutions reported the loss of \$341,000 worth of high value research materials directly attributable to losses from state budget cuts to PASCAL.

CHE included funding for PASCAL as a high priority item in its FY 2010-11 budget request to the Governor's Office, highlighting the program's cost-effectiveness and role as a governmental best practice and requesting the restoration of \$2 million. CHE and many institutional representatives cited the critical importance of PASCAL during January and February 2010 House Ways & Means Higher Education Subcommittee budget hearings.

The FY 2010-11 budget includes \$1.5 million in funding for PASCAL as part of a priority list for uncertified excess unclaimed lottery prize funds should the funds become available. Funds, if any, received by PASCAL from excess unclaimed lottery prize funds would not be expected to be received until near the end of FY 2010-11 and will be critical in FY 2011-12 as institutional budgets are expected to become further stressed with the loss of ARRA funding after FY 2010-11.

Given the uncertainties of FY 2010-11 revenue and ongoing licensing and operational requirements, PASCAL leadership is working on an emergency institutional assessment to maintain core services. Institutions will again be asked to pay an emergency assessment, which will likely derive from existing collection budgets and lead to further degrading of the permanent academic library resources statewide. PASCAL may also experience some membership attrition, which would result in loss of services to students and faculty.

### **1.1. Implement compulsory high school attendance until the age of 18 or high school graduation.**

**Responsible:** Legislature; SCDE; and Department of Juvenile Justice

Despite legislation being introduced (S.29) in 2009 and 2010 that would have raised the age for compulsory attendance to age 18, there were no changes approved as of the 2010 session end.

### **1.6. Develop a marketing campaign to promote college attendance and completion.**

**Responsible:** CHE

In 2009, CHE staff consulted David J. English, Director, CFNC Technology & Internet Services for the University of North Carolina General Administration, about North Carolina's higher education marketing plan. He recommended allocating between \$2 million and \$5 million dollars per year for a statewide campaign spanning multiple media formats and suggested speaking with a marketing firm to discuss specifics related to media buy prices for TV, radio, billboard, etc.

Editorials promoting college attendance and completion have been and will continue to be sent to the state's major newspapers by members of the Commission, the Higher Education Study Committee, and others. Editorials have already appeared in *The State* and *The Post and Courier* newspapers. In addition, several articles about the importance of higher education were published in newspapers around the state following the release of the study conducted by the Darla Moore School of Business on the return on investment in higher education. The study entitled, *The Economic Return on Investment in South Carolina's Higher Education*, is accessible at [www.che.sc.gov/InfoCntr/HESC\\_Files/EconReturnHigherEdAugust09.pdf](http://www.che.sc.gov/InfoCntr/HESC_Files/EconReturnHigherEdAugust09.pdf). Dr. Walters continues visits to rotary clubs and chambers throughout the state to discuss the knowledge economy and importance of higher education. Visits to colleges are also scheduled.

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### **College Access Media Campaign**

In addition to the efforts mentioned above, the SC College Access Network (SC CAN) Marketing Campaign contract was awarded in May 2009, to Ferebee Lane Brand Communications from Greenville, SC. The following activities have taken place:

- June – July 2009 - Initial planning and brand strategy meetings
- July – October 2009 - SCCAN Web site development and design
- August 20, 2009 - Brand standards and communications package finalized
- September – November 2009 – Media asset and web site development
- January 2010 – Official launch of the SC CAN Go web site and media campaign launched. The website ([www.sccango.org](http://www.sccango.org)) serves as a comprehensive resource for information regarding financial aid, college and career options, planning advice and much more. Supporting elements of the campaign include television and radio spots that began airing in early January, outdoor advertising and non- traditional efforts including in-school gym banners and social media.

SC CHE and the South Carolina Broadcasters Association (SCBA) entered into a collaboration to promote College Goal Sunday and the SCCANGO website. Television and radio spots promoting College Goal Sunday aired throughout the months of January and February 2010. From March through June 2010, television and radio spots aired promoting the SCCANGO website. The media campaign was highly successful as nearly 12,000 television and radio spots were aired across the state for a minimal investment.

### **School Counselor Resource Manual**

School counselors play an essential role in guiding students toward postsecondary education. As such, it is vital that they have the tools and resources necessary to help them advise students about the options available to them. To aid in this effort, a school counselor resource manual will be developed and distributed to counselors across the state.

The following content should be included in the manual:

- Financial Assistance Resources (types of financial aid, list of helpful Web sites)
- Scholarship-Specific Information (CHE, state scholarships, corporations who provide scholarship/grants, national grants/scholarships)
- College Admission Requirements (differentiating between requirements for each type of institution)
- College Awareness Lesson Plans
- State and national organizations promoting college awareness

The manual will also include sections specifically addressing the different types of conversations that middle school counselors have with students and parents versus high school counselors and their student/parent meetings.

As part of CHE's collaborative partnership with the Regional Education Centers, the manuals will be distributed by each of the 12 REC coordinators to the high schools within their service areas.

### **Winthrop Poll**

In 2010, the College Access Challenge Poll surveyed 806 South Carolina parents with a student between the ages of 13 and 19 in public school and oversampled households below the median household income. The results of the survey gleaned from preliminary data were that over 90% of parents surveyed have high hopes and expectations that their children will obtain a postsecondary degree. Students themselves also expect to attend college. The poll also showed

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that parents rely on schools for information and say that schools have been helpful, but that school personnel have to initiate the conversations. Most parents claim that they are saving money for college, but they are relying on traditional savings accounts, which implies that parents need more comprehensive information regarding the numerous financial aid opportunities available to South Carolina residents. In addition, many parents view two-year technical, community, and vocational schools as a cost-saving alternative. These data suggests that if low-income students are going to attend and complete college, then their parents will need significant help from educators, counselors and others.

### **Spartanburg County's "40/30 Plan**

USC Upstate was the leader in Spartanburg County for beginning the "40/30 Plan." This initiative has been embraced by the Chamber of Commerce and a task force has been formed to implement the recommendations in the plan, which calls for 40% of the residents of Spartanburg to hold at a minimum, the baccalaureate degree by 2030. The University has also developed a marketing campaign entitled, "Return to Learn" and the target population is adults who have some college credits but have not completed their baccalaureate degree.

See also Recommendations 1.4, 1.40, and 3.8.

### **1.35. Create a "New Front Door" that makes the transition to higher education vastly easier for adults.**

**Responsible:** CHE; SCTCS; and Colleges and Universities

The Commission on Higher Education is currently developing an implementation plan for the "New Front Door" concept. Oversight and Steering committees have been created to guide this initiative. The New Front Door Task Force first met on June 15, 2009, to discuss ways in which to implement the "New Front Door" concept. One outcome of the meeting was to form smaller groups to research existing models and to develop certificate levels that lead to a degree or job skills with assistance from the technical colleges. The task force also met on July 21, 2009, and continued the discussion regarding the number and content of stackable certificates, placement testing, and developmental education. The task force continues to meet regularly to discuss the content of the stackable certificates and how to use existing materials to the extent possible.

The College of Charleston's Admissions Office has an "adult student" component within its operation to address the special needs of non-traditional adults, providing assistance with academic planning, advising, and registration and, if necessary, referral to the Office of Career Services.

See also Recommendations 2.14, 3.10, and 3.21.

### **4.1. Fund higher education at the SREB average or above.**

**Responsible:** Legislature

Given the state's present economic situation, additional state funding in FY 2009-10 or FY 2010-11 has not been available, and the outlook in the subsequent year remains poor. Since FY 2007-08, institutions have lost approximately 45% or \$337 million in state base funding. The state appropriation for colleges and universities is \$429 million, a level not experienced for at least 25 years. The state's FY 2009-10 budget included for colleges and universities approximately \$100 million in one-time federal funds made available through the American

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Recovery and Reinvestment Act (ARRA). In FY 2010-11, \$110 million in the second and final year of the ARRA funds is included.

See also Recommendation 1.21.

### **4.2. Support routine and predictable capital funding of colleges and universities with a portion of funding directed at eliminating accumulated maintenance needs. Responsible: Legislature**

The Commission is responsible for advancing higher education recommendations for capital improvement bond funding and did so during FY 2008-09. However, no action was taken by the General Assembly. Part 1 of the CHE proposal submitted in FY 2008-09 for Capital Improvement Bond (CIB) funding for FY 2009-10 included an allocation of \$69,423,302 specifically targeted at reducing accumulated maintenance needs. The recommended allocation was based on reducing by 10% the building maintenance needs measured in the Fall 2007 survey of Educational and General (E&G) buildings across the Research, Comprehensive Teaching, and Regional Campus Sectors, as well as at Denmark Technical College and Technical College of the Lowcountry (the two technical colleges for which the state is responsible for maintenance). Under the proposal, the distribution of the funds was based on each institution's share of the total E&G square feet weighted for building age. See also Recommendations 1.21 and 3.3.

### **1.4. Create a South Carolina College Access Network (SC CAN) as a statewide network of local community-based college access programs. Responsible: CHE**

Throughout Fall 2008 and Spring 2009, CHE staff reviewed the field of literature and programs that address comprehensive approaches to college access, including motivating behavioral approaches, financial aid, and barriers to college access among a distinct population (elementary, middle, and early high school as well as adults). The findings revealed through research and direct source surveys (GEAR UP) include:

**Geography:** Certain urban and rural districts in SC support and value education and have made more significant strides in academic preparation and early college access opportunities than others.

**Lack of knowledge, Especially Among First Generation College-students:** Parental educational attainment has a critical influence on student experience and college access. There is a strong correlation between students' academic track and their parents' level of educational attainment, particularly among first-generation students attempting to pursue post-secondary education. Information about middle and high school course selection to prepare for college entrance and active participation/updates on students' progress toward high school graduation play a major part in college aspiration.

**Financial Aid:** Many students lack knowledge about the entire college process, including the selection and application process as well as available financial assistance. SC students and parents are often intimidated by the perceived arduous process of applying for any government-sponsored program.

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**Low-income, Minority:** Often, in lower-income, minority communities, seeking higher education is outside the norm and sometimes viewed negatively by peers. There is often a need (real or perceived) in lower-income, minority communities to forego education in order to get into the workplace quickly to help support the family. While they may understand the eventual monetary benefits of higher education, it is often difficult to look that far into the future when there are monetary needs that exist in their daily lives.

### **College Access Programs Survey**

South Carolina has a broad array of successful college access programs and initiatives; however, many low-income and minority families, and even educators, are unaware of their existence. To make these programs more visible, CHE is conducting a statewide college access programs survey. The survey began June 22, 2009, and will continue on an ongoing basis to facilitate the development of a comprehensive statewide college access programs directory.

### **Website Development**

To facilitate information dissemination, a SC CAN website was developed. This website is the definitive source for students, parents, educators, community members, and other stakeholders seeking information regarding postsecondary education in South Carolina. The website ([www.sccango.org](http://www.sccango.org)) serves as a comprehensive resource for information regarding financial aid, college and career options, planning advice, and much more.

In November 2009, the SC Higher Education Foundation adopted as one of its key initiatives a focus on the development of local college access programs and will work in collaboration with the Commission.

Also see Recommendation 1.6 for information about the SC CAN Marketing Campaign.

### **1.20. Expand statewide college application and financial literacy initiatives for high school students to assist in the preparation for college and the transition from high school to postsecondary education.**

**Responsible: Colleges and Universities; CHE; and SCDE**

CHE formed an advisory committee devoted to the proposed statewide College Application Week and the issue of financial literacy. On January 15, 2009, the committee reviewed existing college access programs and initiatives in SC and best practices from the NC College Application Week. On March 5, 2009, the committee reviewed existing and planned SC DOE initiatives relating to postsecondary access: 1) Personal Pathways to Success Common Portal; 2) E-IGP; and 3) e-Transcript. On April 2, 2009, the Director of North Carolina College Application Week presented to the committee and the committee discussed the SC College Application Week Pilot Project.

In May 2009, the College Application Week Advisory Committee created a plan and desired outcomes and selected pilot sites and pilot dates. In June 2009, pilot sites were recruited, selected, and visited (Wando High School & Colleton County High School). In July and August 2009, CHE staff members met with administrators from Anderson University in Anderson, SC, and Lander University in Greenwood, SC, to establish collaborations with CHE and College Application Week. Both universities were eager to participate in the College Application Week initiative and helped select pilot sites in their regions. In September 2009, site coordinators' were trained.

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In October 2009, College Application Days were held at Edisto High School (82 seniors served); T.L. Hanna High School (206 seniors served); and West Florence High School (80 seniors served). Of the three high schools visited, 41% of the senior population received assistance completing and filing college applications.

The following is a statistical breakdown of the first three College Application Week events:  
553 college applications were submitted  
25% of the seniors served would be first-generation college students  
42% of the students were male; 58% female  
49% of the student were African-American; 47% Caucasian  
90% of the students found the College Application Week Handbook helpful  
97% of the students required assistance from volunteers  
77% of the students requested additional information regarding financial assistance and scholarships

In November 2009, College Application Days were held at Lugoff-Elgin High School; Richland One Middle College; Lamar High School; Midlands Middle College; Wando High School; Colleton County High School; Emerald High School; and Greenwood High School.

### **Planning College Application Week 2010 and Beyond**

Commissioner Cynthia Mosteller and CHE staff presented the College Application Week concept to the Charleston County School District on January 15, 2010.

At its March 23, 2010, meeting, the Access & Equity and Student Services Committee hosted the College Application Week Planning Committee. Both groups reviewed the 2009 pilot program and began planning for College Application Week 2010.

The Access & Equity and Student Services Committee decided to rebrand the college completion initiative as College Application Month to more accurately reflect the mission of the program. Currently, approximately 60 high schools are scheduled to participate in College Application Month 2010 with events scheduled from September 30 – November 5, 2010. Under Commissioner Cynthia Mosteller's leadership, the College Application Month Committee sought, and successfully obtained, former U.S. Secretary of Education Richard Riley's endorsement of the College Application Month initiative. As a part of his commitment to the program, the Secretary recorded a College Application Month promotional video.

### **Collaborative Counselor Training Initiative (CCTI)**

This training initiative for middle and high school counselors includes twelve one-week sessions: introduction to the counselor's role in student career and academic planning; creating a college-going mission; understanding and working with diverse populations; communicating effectively with diverse student populations; engaging students in early career awareness and planning; using data to guide academic planning; academic planning part II; college/postsecondary choice; financial literacy; financial aid; completing the FAFSA and preparing college applications. These sessions are designed for school counselors to develop an understanding of their role in developing a college-going mission for all students, particularly students in poverty or facing other barriers in postsecondary planning. The sessions also help counselors develop approaches for communicating and working with high-poverty students and diverse populations to remove barriers to high aspirations and achievement. This training course, "College Access for All Students" was delivered via Moodle by SC ETV during spring 2010 (over 60 participants are registered for the course) and delivered in summer 2010 by the SC Department of Education.

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### **HEART Award**

CHE, in collaboration with the South Carolina Department of Education, announced the creation of the Higher Education Awareness Readiness Transition (HEART) Award. The HEART Award seeks to recognize excellence in school counseling by identifying South Carolina school counselors with proven records of accomplishment in promoting higher education awareness.

HEART Awards are given to an elementary, middle, and high school counselor who exemplify excellence in school counseling and the promotion of college awareness and access. Successful applicants demonstrate strong professional expertise and success in preparing students for postsecondary opportunities and should emphasize creating a college-going culture from elementary through high school to include career exploration, appropriate course selection and planning, and the college application process (financial aid, state scholarships, grants, etc.). Additionally, applicants must be employed as a full-time, fully certified school counselor, have a minimum of three consecutive years of counseling service at the level of nomination, and hold at least a master's degree in school counseling

HEART Award Winners receive cash (\$3,500) and grant (\$1,500) awards. On May 18, 2010, the second HEART Award Banquet was held at the Columbia Museum of Art to recognize the 2010 award winners.

### **College Goal Sunday**

For the fourth consecutive year, the CHE in collaboration with the South Carolina Association of Student Financial Aid Administrators (SCASFAA) sponsored a statewide college financial aid event, "College Goal Sunday" on Saturday, February 27, 2010, from 10 a.m. to 1 p.m. at eighteen locations around the state. This free event was hosted by Aiken Technical College, Anderson University, Central Carolina Technical College, Claflin University, Erskine College, Florence-Darlington Technical College, Greenville Technical College, Horry-Georgetown Technical College, Lander University, Midlands Technical College (Airport Campus), Richland County Public Library, Technical College of the Lowcountry, Tri-County Technical College, Trident Technical College, USC Beaufort, USC Lancaster, USC Upstate, and Williamsburg Technical College. More detailed information about College Goal Sunday can be found at [www.CollegeGoalSundaySC.org](http://www.CollegeGoalSundaySC.org).

In addition to the Saturday sites, the following high schools hosted College Goal Sunday events throughout the month of February: Bamberg-Ehrhardt High School; Wade Hampton High School; Allendale-Fairfax High School; and Colleton County High School.

College Goal Sunday brings together financial aid professionals from colleges and universities along with other volunteers to help college-bound students and their families complete the Free Application for Federal Student Aid (FAFSA) form. This form is required for any student seeking federal and state financial aid, including grants and loans at all colleges in the country.

Professional financial aid staff are on hand at each site to assist students and parents with completing the Free Application for Federal Student Aid (FAFSA). The FAFSA is the federal application that is required to receive federal financial aid including the Federal Pell Grant and student loans. Students and families participating are asked to bring their most recent tax information.

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College Goal Sunday South Carolina is made possible by a generous grant from the Lumina Foundation for Education. Thanks to this generous grant from the Lumina Foundation, nearly 2,700 families have been served.

### **Institutional Outreach**

During November 2009, the Francis Marion University Office of Admissions conducted application days at 24 high schools in the northeastern, midlands, and Lowcountry areas of South Carolina. High schools visited included Richland Northeast, Lower Richland, Spring Valley, Sumter, South Florence, Wilson, Mayo, Darlington, West Florence, Georgetown, Lake City, and Beaufort.

In Fall 2009, the College of Charleston's Admissions Office established a collaborative with the Admissions Offices at the University of South Carolina and at Clemson to host eighteen joint events, including nine state-wide guidance counselor informational meetings and nine student information sessions.

Coastal Carolina University's (CCU) Admissions Office presented admissions and financial aid overviews for 2010 enrollment to SC guidance counselors at four SC Educational Opportunity counselor forums. They also participated in the entire 10 weeks of the SC Educational Opportunity student recruitment tour and 78 programs across the state of South Carolina to provide information to and answer questions from over 3,700 high school seniors. A total of 230 students attended the SC Application Review Day for high school students and received application fee waivers. In addition, CCU Admissions hosted three student/parent receptions with 95 student and 180 parent attendees in South Carolina in 2009-2010 and hosted six South Carolina Counselor Luncheons with 150 counselors attending in 2009-2010. An online application fee waiver process was also initiated with 2,184 SC freshmen applicants receiving application fee waivers. The Office of Financial Aid annually conducts financial aid awareness sessions for seniors in both public and private high schools during January and February. In addition, CCU Financial Aid co-sponsored College Bowl Sunday with Horry-Georgetown Technical College to promote awareness of the Free Application for Federal Student Aid for Horry and Georgetown County students.

Francis Marion University's Office of Admissions conducts application days in the Northeastern, Midlands, and Lowcountry areas of South Carolina during the Fall semester.

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### Other Recommendations

#### Scholarships/Funding

**1.33. Explore how the higher education funding mechanism could be structured better to support student success more effectively.**

**Responsible:** CHE and Colleges and Universities

**1.34. Add a new component in the higher education funding model to increase support of college readiness services such as tutoring, coaching, math and reading labs, academic success/learning success centers, computer and technology labs, mentoring, and other supplemental instruction.**

**Responsible:** CHE and Colleges and Universities

**1.36. Provide state financial aid and/or state grants targeted to adult learners.** [See also 3.19.]

**Responsible:** Legislature and CHE

**3.19. Enact legislation to close financial aid gaps in order to make relevant education and training available for all adults.** [See also 1.35.]

**Responsible:** Legislature; CHE; SCTCS; Colleges and Universities; Chambers of Commerce; and Business and Industry

**1.44. Create a Fulbright-like scholarship program to attract international students in knowledge-based clusters.** [See also 2.20.]

**Responsible:** Legislature; CHE; and Colleges and Universities

**1.45. Increase higher education operating funding to allow institutions to offer graduate student stipends that are nationally competitive.**

**Responsible:** Legislature

At its meeting on July 30, 2009, the SC Graduate Professional Alliance assumed responsibility for developing a proposal to achieve this recommendation. An op-ed, "Keeping Our Best and Brightest," describing a proposed plan to fund graduate students was published in *The State* newspaper on December 28, 2009. SC Graduate Professional Alliance members met with Senator Leatherman on January 21, 2010, to discuss the "Keeping Our Best and Brightest" proposal. A SC Graduate Professional Alliance member presented the proposal to the Advisory Committee on Academic Affairs on March 18, 2010. The proposal was revised to incorporate suggestions made by institutional representatives at this meeting. The SC Graduate Professional Alliance continues to pursue implementing the "Keeping Our Best and Brightest" proposal, but efforts have been hampered by the current economy.

See also Recommendation 2.20.

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### **1.48. Increase opportunities for loan-forgiveness programs.**

**Responsible:** Legislature and CHE

See Recommendation 2.20.

### **2.20. Create innovative scholarship programs and pathways to attract and retain top-notch graduate students.**

**Responsible:** Legislature; CHE; and Colleges and Universities

The South Carolina Graduate Professional Alliance (SC-GPA) was created to examine this issue and other issues related to graduate education. The SC-GPA held its first meeting on March 26, 2009, where discussion focused, in part, on scholarship programs. The SC-GPA held its second meeting on July 30, 2009, and agreed to address this recommendation. The SC-GPA also met in September and November 2009 and February 2010. An op-ed, "Keeping Our Best and Brightest," describing a proposed plan to fund graduate students was published in *The State* newspaper on December 28, 2009, and SC Graduate Professional Alliance members met with Senator Leatherman on January 21, 2010, to discuss the proposal described in the op-ed. Because of the current economy, the SC-GPA decided to schedule meetings to coincide with exiting meetings held or attended by the graduate deans. See also Recommendations 1.41, 1.42, 1.43, 1.45, 1.46, 2.14, 2.17, and 3.28.

### **3.17. Conduct a comprehensive analysis of financial pathways and barriers.**

**Responsible:** CHE

## Alignment and Preparation

### **1.3. Identify a common, statewide assessment that high school students can take to identify and remedy gaps in their preparation for college.** [See also 1.16.]

**Responsible:** CHE; SCDE; Colleges and Universities; SCTCS; and High Schools

The longitudinal data system grant requires that scores on tests measuring whether students are ready for college; data on students' success in college, including whether they enrolled in remedial courses; and data on whether K-12 students are prepared to succeed in college be included in the system. See Recommendation 1.19.

### **1.16. Develop statewide policies for assessing college readiness levels.** [See also 1.3.]

**Responsible:** SCTCS; CHE; SCDE; and Colleges and Universities

Some statewide policies for assessing college readiness levels will be developed through the longitudinal data system grant because it requires that data on whether K-12 students are prepared to succeed in college be included in the system. See Recommendation 1.19.

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### **1.5. Develop a funding mechanism to expand and enhance offerings for college credit during high school.**

**Responsible: SCTCS; CHE; and SCDE**

While no state support for this initiative has been forthcoming, USC Aiken's Office of Enrollment Services hired a former public school guidance counselor to promote concurrent enrollment opportunities at USC Aiken to area high school students and their parents. She also worked with academic unit heads at the university to ensure class availability. In the past, virtually all students in the concurrent enrollment program at USC Aiken were earning credits through the Teacher Cadet program. In Fall 2010, in addition to Teacher Cadets, the institution had 25 high school students enrolled in general education courses.

### **1.11. Continue to support EEDA initiatives, including dual/concurrent enrollment, transfer and articulation, college course alignment, and other related projects.**

**Responsible: Legislature; CHE; SCDE; SCTCS; Colleges and Universities; Employment Security Commission; Dept. of Commerce**

CHE staff regularly attend EEDA meetings. CHE initiated and leads the South Carolina Course Alignment Project (SC CAP) designed to align the exit-level high school courses with entry-level college courses in English, mathematics, and science and to make students aware of the contextual skills and behaviors necessary for college-level success. (See [www.epiconline.org/south\\_carolina](http://www.epiconline.org/south_carolina) for additional information about this project).

SC CAP began in 2007 and is divided into three phases:

Phase I – Analyze Alignment Issues

Phase II – Create Materials

Phase III – Disseminate Materials and Explore Applications

Completed Phase I Activities include:

- An environmental scan (discrepancy analysis) which examined K-16 alignment issues in South Carolina.
- Creation of the Steering Committee charged with oversight and strategic direction for the project.
- Review of college readiness standards for use in the syllabus review portion of the project.
- Submission of course nominations for participation in the alignment study.

Completed Phase II Activities include:

- Submission of design team nominations by secondary and postsecondary institutions.
- Development of college readiness standards for use in paired courses. These South Carolina College Readiness Standards are accessible at [www.che.sc.gov/AcademicAffairs/EEDA/SC\\_College\\_Readiness\\_Standards.pdf](http://www.che.sc.gov/AcademicAffairs/EEDA/SC_College_Readiness_Standards.pdf)
- Creation of seventeen paired courses. The paired courses consist of a secondary course matched or "paired" with a postsecondary one.
- Recruitment of secondary and postsecondary faculty members to serve as pilot implementers to teach the paired courses during the 2009-2010 academic year. Pilot Implementers were grouped with each other in geographical clusters according to type of institution, with all clusters containing at least one high school and one institution of higher education.

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- Training sessions for pilot implementers held on August 5, 2009, and September 12, 2009.
- Pilot implementation of paired courses in South Carolina classrooms (academic year 2009 – 2010).

The pilot implementation of the paired courses resulted in some interesting activities including:

- Requests for higher education cluster partners to speak with high school classes about college expectations;
- Philosophical debates about best ways to approach teaching particular topics and in what order;
- Acknowledgement of opportunities for professional development with colleagues at other institutional levels to brainstorm and solve dilemmas;
- Scheduling of professional development activities with all faculty from respective departments;
- Requests to borrow equipment across institutions; and
- More detailed syllabi used in courses and posted on course websites.

CHE staff worked with Educational Policy Improvement Center (EPIC) staff to develop the scope of work for the third phase of the South Carolina Course Alignment Project. During this phase, the paired course materials will be revised based on the feedback received from pilot implementers. The revised course materials will be provided to new and returning implementers during a training workshop held in January 2011. The workshop will also promote common curricular guidelines and encourage local partnerships between secondary and postsecondary institutions. CHE plans to double the number of new implementers during the 2011-12 school year and CHE and EPIC staff are also currently planning for the statewide distribution of the paired courses.

CHE also began implementation of the course articulation and transfer system in March 2009 to create a statewide, web-based system that will facilitate student transitions and the portability of academic credits between and among South Carolina's institutions of higher education (see Recommendation 1.23 in the "Transfer and Articulation" section for additional information).

CHE also completed a transfer guide for dual enrollment students in February 2009 that lists only the courses that will transfer to any public institution in the state. This guide will help ensure that students take courses that will count toward a degree program rather than as electives.

### **1.12. Promote more rigorous high school coursework. Responsible: SCDE and High Schools**

The South Carolina Course Alignment Project will promote increased academic rigor. Paired courses (e.g., exit-level high school courses designed in tandem with entry-level college courses) were pilot tested in the 2009-2010 school year and are currently being revised. The revised paired courses will be taught during the 2011-12 school year.

As of 2010, USC Upstate is in the fourth year of a grant program entitled, "Scholar's Academy." High school freshmen apply to the program through a very competitive process and 25 students are chosen each year from all school districts in Spartanburg County. These students take selected courses at USC Upstate on campus and at their home high school. Each year in the Scholar's Academy, the students take more college level courses and may earn up to 60 hours of

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college credit while still in high school. This program is a good example of alignment and communication between high schools and college.

### **1.13. Align college course prerequisites with high school graduation requirements and sequence undergraduate general education requirements so that they are linked with appropriate high school senior-year courses.**

**Responsible: Legislature; SCDE; High Schools; CHE; SCTCS; and Colleges and Universities**

In terms of sequencing undergraduate general education requirements so that they are linked with appropriate high school senior-year courses, the South Carolina Course Alignment Project seeks to align exit-level high school courses with entry-level college courses in mathematics, science, and English. The success of this project will lead to the alignment of additional courses.

The Chancellor of USC Aiken, the President of Aiken Technical College, and the Superintendent of Aiken County Schools organized a team of public school mathematics teachers and college mathematics and mathematics education faculty members to work intensively on mathematics course alignment. The Aiken County Mathematics Alignment Project has included a series of ongoing professional development opportunities for middle and high school mathematics teachers. Most recently, a 2010 Algebra Summer Institute was offered as a three-hour graduate course focused on algebra content and technology support. The Algebra Institute course content incorporated the SC Course Alignment Project's (SC CAP) College Readiness Standards (see Recommendation 1.11 for more information about the SC CAP).

See also Recommendations also 1.17 and 3.26.

### **1.17. Foster a college-going culture in high school by developing and implementing activities such as senior seminars.**

**Responsible: High Schools; School Districts; and Colleges and Universities**

The College of Charleston Admissions Office conducted "Senior Project" in summer 2009 and invited high school students to on-campus workshops to prepare for college.

USC Beaufort developed a special UNIV 101 (The Student in the University) course for eight consecutive Saturdays for seniors and a few juniors from Jasper County Schools. This course is in the pilot stage with 16 enrollees; the result of the pilot will inform any future efforts. See also Recommendation 1.13.

Clemson University's Emerging Scholars Program has made higher education a reality for students who have not seen college in their future. The mission of the Emerging Scholars Program is to enhance South Carolina's economic prosperity by increasing the number of college graduates who come from economically disadvantaged areas and are first-generation college students. Students are taught that knowing the basics in reading, writing, and math are the most important factors in high school and college completion. These skills are emphasized throughout their participation in the program, along with more information on the basics of applying to any college or university. Even though the students attend summer sessions on the campus of Clemson University, the goal of college attendance is not limited to Clemson. The students are encouraged to apply and attend any college of their choice with an emphasis on schools in the state of South Carolina.

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The Emerging Scholars Program targets students in five different high schools in the Lowcountry. According to the US Census Bureau, the average poverty rate for the five high schools is 25.6%, meaning 1 in 4 people are in poverty (with an income of \$18,392 or less), which has strong implications for college attendance in these areas. According to Postsecondary Education Opportunity, college participation rates in families that make less than \$36,539 is only 40.2%, compared to a 71.1% college participation rate in families with income higher than \$64,109. This situation coupled with below average SAT scores makes it even harder for these students to find success in college.

### **1.14. Improve high school course-taking patterns and monitor results.**

**Responsible: SCDE; High Schools; and Colleges and Universities**

### **1.15. Expand and enhance student transition programs to reduce repetition of courses or course content and attrition.**

**Responsible: SCDE; High Schools; CHE; SCTCS; and Colleges and Universities**

USC Upstate is beginning a marketing campaign entitled “Upstate Direct Connect” that ensures a seamless transition from the local community/technical colleges to USC Upstate. Students will complete their Associate of Science, Associate of Arts, and selected Associate of Applied Science degrees at local community/technical colleges and then seamlessly transfer to USC Upstate to complete their baccalaureate degrees in the appropriate field.

Clemson University’s Tri-County Bridge Program is designed for a select group of academically talented freshmen. The program is a competitive academic-enhancement transfer program available by invitation only; students must first apply for freshman admission to Clemson to receive consideration for the program. Beginning with a strong academic freshman year at Tri-County Technical College, which is located two miles from the Clemson campus, the Bridge program includes intentional advising, academic support, and residential life components that facilitate a seamless transition to Clemson upon successful completion of academic requirements. Participants in the program enroll at Tri-County Technical College for their freshman year before transferring to Clemson. Faculty and advisers from both institutions assist students in selecting courses that will satisfy program requirements and allow for continued success after bridging to Clemson.

Coastal Carolina University (CCU) and Horry-Georgetown Technical College (HGTC) have an active Memorandum of Understanding and jointly administer the Bridge Program for select students who do not meet the qualifications for admission to CCU. In this program, students take classes at HGTC, live on the CCU campus, and have access to all of the CCU student activities. In Fall 2009, 150 students entered the program and 44 of those students (29%) registered for their sophomore semester at CCU. An additional 84 students entered the program in Fall 2010.

In August 2010, Spartanburg Community College was awarded a TRIO Student Support Services grant in the amount of \$285,418 per year (about \$1.4 million total) from the U.S. Department of Education to continue the Success Network program for an anticipated five years. The Success Network is an academic support program that focuses on students’ learning needs by offering a variety of services and activities, including tutoring, study-skills development, peer mentoring, career-oriented services, and transfer-related services that

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encourage students to further their education. To be eligible for the Success Network, students must be a first-generation college student, currently reside in an economically disadvantaged household, or have a documented disability.

### **Transfer and Articulation**

#### **1.22. Create incentives and requirements for seamless student transitions between and among two-year and four-year institutions, including the implementation of a statewide initiative to monitor transfer effectiveness.**

**Responsible:** Legislature; CHE; SCTCS; and Colleges and Universities

CHE began implementation of the course articulation and transfer system in March 2009 to create a statewide, web-based system that will facilitate student transitions and the portability of academic credits between and among South Carolina's institutions of higher education (see Recommendations 1.23 and 3.22).

Coastal Carolina University maintains a full-time transition coordinator in residence on the Horry-Georgetown Technical College campus to advise both the general student population inquiring to transfer to Coastal Carolina University and the cohort of students enrolled in the Bridge Program shared between both institutions. Eight 2+2 degree completion programs have signed memoranda of agreement, or are in the final stages of development, to provide seamless transfer from a variety of Associate of Applied Sciences degrees into related bachelor's degree programs at Coastal Carolina University. Additionally, the university facilitates the transition of students from two-year institutions by exempting core curriculum requirements for students who have earned an Associate of Arts or an Associate of Science degree from a regionally accredited institution.

#### **1.23. Implement the state-funded Course Articulation and Transfer System at the earliest possible opportunity in order to improve the efficiency and effectiveness of transfer processes, to reduce time-to-degree, and to monitor progress to degree completion.**

**Responsible:** CHE; SCTCS; Colleges and Universities

A kick-off meeting for the implementation of the Course Articulation and Transfer System project was held on March 31, 2009. During Phase One, institutions were provided with the following electronic tools by the developer, AcademyOne:

- the Transfer Agreement Management Center, which will enable institutions to publish their transfer agreements, codify them, and promote them to prospective students;
- the Course Equivalency Management Center, which will help institutions map their courses to equivalencies at other institutions, record them in the database, and provide updates; and
- the Transfer Profile Management Center, which will provide a summary of transfer attributes so that institutions can promote their programs and services with pictures and historical attributes.

Institutions participated in tool implementation webinars and sent equivalency data and course extract data to AcademyOne.

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During Phase Two, AcademyOne created a customized web portal that serves as the main interface for SC institutions to communicate with students about transfer policies, course equivalencies, and articulation agreements. Dave Stanley, from AcademyOne, was in South Carolina August 18-20, 2009, and worked with CHE staff to develop the custom portal which was presented for feedback at the October 2009 Advisory Committee on Academic Programs meeting and at the December Commission meeting. Student focus group sessions were also held on December 2 -3, 2009. A formal memo was sent to institutional representatives in February 2010 to solicit additional feedback. CHE staff also presented information about the portal at the state ACT conference on March 9, 2010, and received additional feedback. The portal, [www.SCTRAC.org](http://www.SCTRAC.org), was launched on April 1, 2010.

During Phase Three, AcademyOne created an interface for each institution's student information system so that information related to course articulation and transfer is easily added into the SC system which will display information via the customized SC portal.

AcademyOne continues to work with the institutions to manage course equivalencies and transfer information in the system. Plans for the current year include installing the equivalency synchronizer interface at two-year institutions that wish to take advantage of this functionality, adding equivalencies for Advanced Placement and International Baccalaureate exams, and ensuring that the equivalencies for all of the courses included in the Statewide Articulation Agreement, which transfer between and among all of the state's public two- and four-year institutions, are displayed on [www.SCTRAC.org](http://www.SCTRAC.org). In addition, CHE staff are working collaboratively with institutions to identify, design, and implement additional functionalities for the system. Subsequent phases of the project are currently being defined as implementation is expected to take several years.

**3.22. Develop a reverse bridge pathway from four-year to two-year institutions to provide students enrolled in liberal arts programs and liberal arts graduates access to practical, technical and hands-on training in order to match their range of skills with workforce needs.** [See also 1.21.]

**Responsible: SCTCS; CHE; and Colleges and Universities**

### **Workforce Development**

**1.8. Produce more and better prepared teachers in all critical needs areas, including more male and minority teachers.**

**Responsible: Colleges and Universities**

CHE established an Education Articulation Task Force to develop a transfer guide and a set of common general education courses applicable to all Education programs of study in an effort to recruit more students into the profession as well as promote degree completion and facilitate enrollment of transfer students in education programs. The transfer guide developed by the Task Force was approved by the Advisory Committee on Academic Programs on July 14, 2010, and is available online at:

[www.che.sc.gov/AcademicAffairs/TRANSFER/TransferGuideforEducationPrograms.pdf](http://www.che.sc.gov/AcademicAffairs/TRANSFER/TransferGuideforEducationPrograms.pdf).

See also Recommendation 2.4.

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Newberry College's Recruit and Engage Math And Science Teachers (RE-MAST) program is a five-year program funded by a grant from through the Robert Noyce Teacher Scholarship Program at the National Science Foundation. The grant award totals \$900,000. The RE-MAST program will recruit, prepare, and mentor 26 math, biology, and chemistry majors pursuing teaching in science, technology, engineering, and mathematics (STEM) content areas. In addition, RE-MAST will recruit 34 freshmen and sophomore STEM majors to participate in six-week, paid summer internships to investigate teaching through field experiences and two education courses for credit. Interns will be encouraged to apply for the 26 scholarships available during their junior, senior, or fifth years. The program will actively recruit and encourage STEM career changers interested in teacher certification to apply as well.

Winthrop University has been awarded a \$13 million Teacher Quality Partnership grant from the U.S. Department of Education. Winthrop is the only institution in South Carolina, one of only six institutions across the Southeast, and one of only 28 institutions nationally to be chosen to participate in the five-year grant program. The program funded by the grant, Network of Sustained, Collaborative, Ongoing Preparation for Educators (NetSCOPE), will focus on five goals: improving student academic achievement in targeted high-need schools; improving professional learning for school-university faculty and teacher candidates; strengthening the pre-baccalaureate education of teacher candidates; increasing support for new teachers in the high-need districts; and implementing ongoing, accessible school leadership programs. With NetSCOPE, Winthrop will work with five South Carolina school districts in Cherokee, Chester, Fairfield, Lancaster, and Union counties, as well as other partners, including the statewide Center for Educator Recruitment, Retention, and Advancement, which is headquartered at Winthrop.

Francis Marion University's Center of Excellence to Prepare Teachers of Children of Poverty focuses on improving the achievement of children of poverty by enhancing the quality of undergraduate teacher preparation, graduate teacher preparation, and the professional development of in-service teachers. During 2010-2011, the FMU Center of Excellence will extend its activities and services to additional teachers and school districts in South Carolina.

USC Columbia's College of Education is a member in an Association of Public and Land-Grant Universities initiative to recruit and support candidates to teach in critical need areas, particularly mathematics and science. USC Columbia representatives also state that the institution is also committed to doubling the number of teacher candidates recommended for certification in middle or high school mathematics and science.

The College of Charleston's Early Literacy Program is a partnership with the Charleston County School District (CCSD) in which minority teacher education candidates (primarily male) are employed to work as teaching assistants with first grade master teachers in low performing schools and simultaneously complete the Master of Arts in Teaching (M.A.T.) in Early Childhood Education. This program is supported by federal stimulus funding as well as private donors.

The College of Charleston hosted the annual conference in January 2010 for the Holmes Scholars Partnership. As a member of the partnership, the institution's goal is to recruit more minorities into the teacher education professoriate because one important component of recruiting more minority P-12 teachers is to have more minority faculty members at the university level.

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Clemson has expanded its teacher education program by offering more programs at off-site locations and through distance technology. In addition, the institution has added focus areas in science and mathematics at the elementary level and faculty encourage students to double-major, earning an undergraduate degree in education and an undergraduate degree in their discipline (history, biology, chemistry, mathematics, etc.). For current teachers, the institution has expanded the opportunity for graduates to major in their discipline through online programs such as the master's program in biological science.

In Fall 2010, the Spadoni College of Education at Coastal Carolina University admitted the first five students into its *Call Me Mister* program, which was originally started at Clemson University. The purpose of the program is to assist with the recruitment, training, and certification of teachers who are planning to teach in South Carolina schools, especially in the lowest performing elementary schools. The program seeks to help build a more diverse group of educators by providing academic, social, and financial support to individuals interested in entering the teaching profession.

USC Aiken has expanded its use of the Professional Development School model so that School of Education faculty deliver instruction in area schools rather than on the college campus.

### **2.4. Produce greater numbers of teachers in all critical needs areas, especially in Science, Technology, Engineering and Mathematics (STEM) disciplines, including more male and minority teachers.**

#### **Responsible: Colleges and Universities**

During FY 2008-09, new teacher certification and advanced programs have been created:

- B.A., Modern Languages, New Concentrations in Teaching German, French and Spanish, Citadel
- B.A., Chemistry, New Concentration in Teaching Secondary Chemistry and Broad Field Science, Citadel
- B.S., Biology, New Concentration in Teaching Biology and Broad Field Science, Citadel
- M.Ed., Secondary Education with New Concentrations in Mathematics, Science, English, and Social Studies, Clemson
- M.A.T., Secondary Education Mathematics and Science, Clemson
- M.Ed., Educational Leadership, Coastal Carolina
- M.Ed., Special Education, Winthrop at Charlotte
- M.Ed., Educational Leadership, Winthrop at Newberry and Charlotte

During FY 2009-10, new teacher certification and advanced programs have been created:

- M.Ed., Learning and Teaching with Specializations in Instructional Elementary Teaching Grades, Coastal Carolina
- M.A.T., Music Education with Specializations in Choral, Instrumental (Orchestra), and Instrumental (Band), USC-Columbia
- M.A.T. Middle Level Education, The Citadel and College of Charleston

USC Columbia's recently initiated B.S. in Engineering Science program has been approved as a preparatory major for the Master in Teaching (MT) certification degree for high school mathematics and science. In addition, the USC Columbia College of Education has joined in a partnership with the Center for Enterprise Systems Management in an effort to improve computer science and information technology curriculum in middle and high schools. The

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College has also launched a partnership with the College of Engineering's "Project Lead the Way," to offer a Master of Education (M.Ed.) degree for currently certified teachers with an area of inquiry in engineering education.

### **1.24. Increase alternative delivery methods of appropriate courses and/or programs to reach underserved students, especially non-traditional students, and create greater flexibility as to the time and location of the learning process.**

**Responsible: Colleges and Universities**

CHE is exploring the possibility of implementing a statewide online degree program, called *DegreeSC*. A task force of institutional representatives has been formed and mission and vision statements, bylaws, essential principles, organizational model, and other materials have been developed.

In addition, CHE regularly supports and approves programs using alternative delivery methods.

With the disappearance of the ETV satellite-assisted avenue for distance course delivery, some colleges at USC Columbia are experimenting with new technologies. The Darla Moore School of Business at USC Columbia is piloting the use of "telepresence" for global course delivery in its Master of Human Resources program.

See also Recommendations 1.32 and 1.38.

### **1.30. Create legislative incentives (tax credits, tuition rebates for degree completion, etc.) to encourage students to earn an academic certificate or degree, especially for students who remain in South Carolina for a certain period of time following degree completion.**

**Responsible: Legislature**

### **1.32. Increase availability of applied baccalaureate degrees to meet workforce needs and increase available pathways in order to bolster educational attainment for associate degree holders.**

**Responsible: Colleges and Universities and CHE**

The initial exploration of *DegreeSC* has included identification of several applied or 2+2 baccalaureate programs that will be considered by the newly formed task force. See also Recommendations 1.38 and 1.24.

USC's Palmetto Programs provide USC two-year campus students access to baccalaureate opportunities. Baccalaureate-level courses are offered through distance education to students whose family or employment obligations prevent them from relocating to complete a degree. Faculty members from USC Lancaster, USC Salkehatchie, USC Sumter, and USC Union, as well as Extended University at USC Columbia, use two-way interactive video and other technology-assisted delivery to teach students at multiple sites simultaneously. Two Palmetto Program degrees are available: the Bachelor of Arts in Liberal Studies, offered since Fall 2007, which draws on multiple disciplines and allows students to choose their focal areas; and the Bachelor of Arts in Organizational Leadership first available in Fall 2009, which focuses on preparing students for leadership roles in government, non-profit, and business settings.

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### **3.2. Develop or expand higher education programs to support cluster growth, especially in workforce shortage areas.**

**Responsible:** Colleges and Universities; Business and Industry; SCTCS; and CHE

See Recommendations 3.1, 2.4, 2.14, and 1.47.

### **1.38. Develop a coordinated set of blended online/on-campus degree programs delivered cooperatively through different institutions.**

**Responsible:** Colleges and Universities; CHE; and SCTCS

CHE is exploring the possibility of implementing a statewide online degree program tentatively titled *DegreeSC* targeted mainly to adults aged 25 and older. Loosely modeled after the Tennessee Board of Regents' Online Degree Program and AG\*IDEA (part of the Great Plain Interactive Distance Education Alliance (IDEA)), *DegreeSC* would coordinate and expand the offering of online degree programs with requisite student services and articulated credit agreements. This entity will allow students to select the institution of their choice for their admission, registration, and awarding of degrees, but also allow them to take coursework online from any participating institution.

A task force charged with planning and implementing *DegreeSC* held its initial meeting on September 15, 2009. Task force members agreed to pursue implementation of *DegreeSC*, and CHE staff, with input from task force members, developed a proposal to explain how the *DegreeSC* collaboration will work.

The task force met again on November 24, 2009, and a representative from the Institute for Academic Alliances discussed the Great Plains IDEA and AG\*IDEA programs at this meeting. The task force then met on January 19, 2010; this meeting featured two speakers: Dr. Robbie Melton, Associate Vice Chancellor of Strategic Planning for eLearning and Educational Technology Initiatives and Innovations, Tennessee Board of Regents and Dr. Tom Benberg, Vice President and Chief of Staff, Southern Association of Colleges and Schools. The task force held a conference call on February 23, 2010, to discuss the information presented at the January 19, 2010, meeting. During the conference call, the task force suggested using existing online courses as much as possible when considering programs for *DegreeSC* and identified Fall 2011 as the target start date to implement a pilot program.

The task force also decided *DegreeSC* should begin with programs that are in high demand and marketable to an adult audience. Baccalaureate degree programs currently being developed include: Organizational Leadership which has a business-oriented curriculum; Health Information Management, which combines health, business, and IT courses while emphasizing the management of electronic medical records; Criminal Justice; and American Studies, a multidisciplinary program including courses in history, political science, economics, literature, and African-American studies.

At its meeting on March 30, 2010, subcommittees for each prospective degree program were formed and the task force members in each subcommittee committed to holding additional meetings or conference calls to develop each respective degree program. Since then, the subcommittees for each prospective degree programs have held additional meetings or conference calls to develop each respective degree program. At its November 30, 2010, meeting, the task force decided that the first program offered through *DegreeSC* would be Criminal Justice. The Criminal Justice subcommittee and full task force continue to discuss the

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implementation of that proposed program. In addition, subcommittees for the other three proposed degree programs continue to meet to discuss their prospective programs.

See also Recommendation 1.24.

### **1.39. Create a web portal that serves as a clearinghouse of information for adult learners. - COMPLETED**

**Responsible: EEDA Coordinating Council; CHE; SCTCS; SCDE; and Colleges and Universities**

The EEDA portal provides educational and career planning information and resources for adults, including Kuder Journey and Connect2Business. See also Recommendation 3.24.

### **3.24. Develop a central website which interested persons or employers may use to find higher education programs, providers, instructions, links to helpful sites and other information relevant to workforce needs. - COMPLETED**

**Responsible: EEDA Coordinating Council / SCDE; CHE; SCTCS; SCICU; and Colleges and Universities**

The EEDA portal ([www.scpathways.org](http://www.scpathways.org)) is a central website that provides educational and career planning information as well as resources for students, parents, adults, and businesses. All EEDA entities will continue to suggest additional content as needed. The portal is now operational although refinements are being made and content added. See also Recommendation 1.38.

### **1.42. Implement a cooperative, statewide initiative to reduce gaps in technological literacy among potential adult learners.**

**Responsible: Colleges and Universities; CHE; SCTCS; and SCDE**

### **1.43. Create multiple, diverse internships, cooperative work programs, and registered apprenticeship programs for students.**

**Responsible: Department of Commerce; Business and Industry; Colleges and Universities; SCTCS; and EEDA Coordinating Council**

As of July 2010, the South Carolina Technical College System's Apprenticeship Carolina™ Division has increased the number of employer-sponsored registered apprenticeship programs by 201% since its inception. For example, Northeastern Technical College has been a key player in the Apprenticeship Carolina program and has worked with INA with machine tool technology, Baldor with maintenance, Agape Senior with nursing assistant advanced training, and WIX with maintenance.

Security Federal Bank of Aiken provides five banking fellowships to exceptional USC Aiken Business Administration students. Students participate in paid internships that allow them to gain applied experience in each of the principal areas of banking. See also Recommendation 2.20.

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**1.46. Create a low cost online program to develop proficiency in at least four important foreign languages (e.g., Mandarin, Spanish, French, German, etc.) to promote economic development, cultural knowledge, and tolerance.**

**Responsible:** CHE; Colleges and Universities; Business and Industry; and Chamber of Commerce

This recommendation will be considered by the *DegreeSC* task force in due course.

**1.47. Initiate new graduate programs to support new clusters and to attract talented individuals from other states and countries to South Carolina.**

**Responsible:** Colleges and Universities and CHE

New graduate programs approved since FY 2008-09 that support clusters are:

- M.Engr., Industrial Education, Clemson
- M.I.B., Master of International Business, USC-Columbia
- Ph.D., Health and Rehabilitation Service, MUSC
- Ph.D., Economics, Clemson
- M.A. and Ph.D., Photonic Science and Technology, Clemson

The South Carolina Graduate Professional Alliance (SC-GPA) was created to examine this issue and other issues related to graduate education. The SC-GPA held its first meeting on March 26, 2009, and outlined a series of tasks related to this objective. At its meeting on July 30, 2009, President Bill Mahoney, SCRA, shared his perspectives related to the kinds of graduate students needed to support business and industry. The SC-GPA also reviewed the list of current graduate degree certificate programs in the state and aligned them to the New Carolina Clusters. At its July 30, 2009, September 30, 2009, and November 24, 2009, meetings, the SC-GPA discussed developing a plan to implement both the Higher Education Study Committee Goals and Graduate Professional Alliance Goals, including developing proposals to fund graduate stipends and creating a webpage focused on graduate education. The SC-GPA agreed to take at least partial responsibility for Recommendations 1.38, 1.44, 1.45, 1.47, 1.48, 2.20, and 3.1.

An op-ed, “Keeping Our Best and Brightest,” describing a proposed plan to fund graduate students was published in *The State* newspaper on December 28, 2009, and SC Graduate Professional Alliance members met with Senator Leatherman on January 21, 2010, to discuss the proposal described in the op-ed. The SC Graduate Professional Alliance continues to pursue implementing the “Keeping Our Best and Brightest” proposal, but efforts have been hampered by the current economy.

**2.5. Integrate entrepreneurship into curricula at colleges and universities (especially in programs in the liberal arts and STEM disciplines).**

**Responsible:** Colleges and Universities

In January 2009, Francis Marion University unveiled its Center for Entrepreneurship. The purposes of the Center are to foster and promote new business opportunities, and advance the teaching, study, and practice of entrepreneurship and new venture creation.

At USC Upstate, concepts of entrepreneurship have been integrated into many of the courses within the George Dean Johnson College of Business and are likewise integrated into coursework for the non-profit major.

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The mission of Clemson's Arthur M. Spiro Institute for Entrepreneurial Leadership is to support educational, research, and outreach programs that promote entrepreneurial activity and economic development of the region, state, and nation. The Spiro Institute promotes entrepreneurial leadership by:

- Assisting inventors and entrepreneurs with market analyses and business planning
- Conducting a mentoring program to link entrepreneurs with experienced business executives.
- Overseeing the development and administration of academic and executive education courses in entrepreneurship and new venture creation.
- Conducting the South Carolina Collegiate Entrepreneur Awards to recognize undergraduate students who start and operate businesses while in school.
- Collaborating with both on-campus and external organizations to support and promote entrepreneurial activities in the region through seminars and awards programs for inventors and entrepreneurs as well as sponsored grant programs to evaluate and stimulate entrepreneurial opportunities.
- Providing research grants and supporting a working paper series to encourage high quality research in entrepreneurship topics.

In addition, an undergraduate minor in entrepreneurship for non-business majors is available for Clemson students and the Technology Entrepreneurship Certificate is available to graduate students in engineering and science disciplines across campus. The certificate is intended to serve those students who: envision an entrepreneurial career as their long range career goal, want to be involved in new product and new business activities within a corporate setting, or seek a better understanding of the process of commercializing inventions.

### **2.17. Recruit and retain more students in the state's existing science, technology, engineering, and mathematics (STEM) programs to facilitate increased enrollment.**

**Responsible: Colleges and Universities** and Business and Industry

One strategy to accomplish this goal has been implemented in the funding of LIFE and Palmetto Fellows scholarship enhancements. Reports are available and published on the Commission on Higher Education (CHE) website, [www.che.sc.gov/New\\_Web/Rep&Pubs/Schol\\_Stats.htm](http://www.che.sc.gov/New_Web/Rep&Pubs/Schol_Stats.htm), for the fall terms 2007 and 2008 with the number of enhancements and the percentage of students who received the award. Baseline data will be produced for students enrolled in those programs designated as eligible for the enhanced awards. See also Recommendations 2.14, 2.20, and 3.28.

### **3.28. Increase the participation of underrepresented populations in science and technology fields.**

**Responsible: Colleges and Universities; CHE; SCTCS; and SCAMP**

Francis Marion University sponsors a Women and Minorities in Science and Mathematics initiative that encourages women and minority students to pursue majors in Biology, Chemistry, Physics, Health Physics, and Mathematics. See also Recommendations 2.14, 2.17, 2.19, and 2.20.

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**3.26. Develop an innovative and flexible mathematics curriculum that makes it easier for undergraduate students and entering adults to consider scientific and technical majors.** [See also 1.13.]

**Responsible: Colleges and Universities**

**3.4. Develop sources of funding to hire additional and replacement faculty, especially in fields that produce graduates for occupations in key clusters and critical areas.**

**Responsible: Legislature; Colleges and Universities; and Business and Industry**

The College of Charleston's Howard Hughes Medical Institute grant provides initial-year funding for some faculty positions. See also Recommendation 2.3 for more information about the College of Charleston's grant.

USC Upstate has current health care organizational partners who help fund additional faculty positions in nursing, including Spartanburg Regional Hospital System and Mary Black Hospital.

Local hospitals continue to provide funding for some clinical nursing faculty at USC Aiken; however, the support has been reduced in 2010 due to budget constraints. The Nursing School also continues to receive donations of equipment, most recently a delivery bed.

See also Recommendation 2.24.

**3.5. Improve student recruitment into high demand occupations which support targeted clusters.**

**Responsible: Colleges and Universities; K-12; and Business and Industry**

On November 5-7, 2009, Francis Marion University sponsored the South Carolina Physics Scholars Institute. The Institute allowed thirty competitively-chosen, high-achieving science students from South Carolina high schools to participate in a university-level program focusing on nuclear physics, astronomy, laser physics, and computational physics. The Institute is designed to recruit students into majors such as Health Physics, for which there is a high occupational demand.

**3.6. Identify and implement ways for higher education and industry to communicate about workforce needs.**

**Responsible: Business and Industry; Colleges and Universities; CHE; SCTCS; SCICU; SCDE; Dept of Commerce; and SC Council on Competitiveness**

Technical colleges are required by policy to establish advisory committees for all approved curricula. Each advisory committee is comprised of representatives from businesses, industries, and other appropriate persons from a college's service area. Advisory committees provide appropriate input and advice to college administration and faculty regarding curricula and student preparation for the workforce. They also provide some input on local demand for that occupation. This input is one tool for aiding colleges in aligning programs with changing industry requirements. These advisory committees meet at least once a year. See also Recommendations 2.12 and 2.13.

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The Chancellor of USC Aiken is an active member of the Nuclear Workforce Initiative (NWI). The NWI has over forty members representing nine nuclear employers, K-12 education, higher education, and economic developers and its goal is to determine the projected need for nuclear industry workers over the next ten years and develop a comprehensive plan for educating and training those workers.

**3.10. Implement fully the certificate system as proposed in the “New Front Door” CHE white paper for adults seeking to gain higher level employment skills.** [See also 1.34.]

**Responsible: CHE; SCTCS; and Colleges and Universities;**

**3.11. Implement fully the South Carolina Technical College System’s Adult Pathways initiative.**

**Responsible: SCTCS**

The South Carolina Technical College System (SCTCS) continues to look for funding to implement this initiative. Due to the unusual economic climate, the SCTCS has not been successful to date in securing an appropriation for this program. However, there has been progress on implementing part of the QuickJobs Carolina program which is one aspect of Adult Pathways. A more complete description can be found in Recommendation 3.12.

**3.12. Implement fully both components of the South Carolina Technical College System’s competeSC initiative: QuickJobs Carolina and Retool Carolina.**

**Responsible: SCTCS**

The South Carolina Technical College System (SCTCS) has made significant progress in implementing QuickJobs Carolina because of a \$4 million grant from the State Workforce Investment Board. This grant will fund the establishment of QuickJobs Programs at most, if not all, of the technical colleges. For example, Midlands Technical College and Fairfield County received funds to build a QuickJobs training center in Fairfield County.

SCTCS continues to look for additional and permanent funding to fully implement the entire competeSC initiative. SCTCS submitted funding requests on both the state and federal levels. Due to the unusual economic climate, the SCTCS has not been successful to date in securing an appropriation for this program.

**3.13. Support the timely implementation of the Kuder Journey system. -**

**COMPLETED**

**Responsible: SCDE; SCTCS; and SC Student Loan Corp.**

Kuder Journey is now available on the EEDA portal ([www.scpathways.org](http://www.scpathways.org)) and allows users to identify occupational background and current needs; plan for educational options; connect with local employers and career opportunities; and save and share career history, progress, and accomplishments.

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**3.14. Develop and implement a comprehensive statewide education plan to facilitate the reentry into society and the workforce of those who have been incarcerated.**

**Responsible:** Legislature; SCTCS; CHE; Department of Corrections; Probation, Pardon and Parole; and Colleges and Universities

**3.15. Support the statewide implementation of the Department of Commerce's WorkReadySC, including the WorkKeys credentialing program.**

**Responsible:** Department of Commerce and SCTCS

**3.16. Determine whether the state's higher education institutions have the necessary capacity to satisfy the expanding need for adult career counselors.**

**Responsible:** CHE and Colleges and Universities

USC Columbia recently established a Graduate Certificate in Counselor Education with a focus on Career Development Facilitation.

**3.18. Construct a model indicating categories of students entering postsecondary education and the types of training that they will need to meet the state's workforce demands.**

**Responsible:** CHE; SCTCS; SCDE; WIA Boards; Vocational Rehab; SC Student Loan Corp.; and Others

### **Economic Development**

**2.1. Create opportunities for communication and "cross-fertilization" between and among institutions of higher education and the state's major industries to encourage idea sharing, on-site explorations, and formal partnership agreements.**  
**Responsible:** Business and Industry and Colleges and Universities

The collaboration between the admissions offices at the College of Charleston, the University of South Carolina, and Clemson creates opportunities for communication and idea sharing. (See Recommendation 1.20)

The Lowcountry Partnership for Biomedical Innovation (LPBI), initially funded by the Partnerships for Innovation program at the National Science Foundation is explicitly designed to increase cross-fertilization between the College of Charleston's business programs and the Medical University of South Carolina's science programs. The LPBI involves a formal agreement between the College of Charleston and the Medical University of South Carolina; the work takes place in the Charleston Innovation Center recently established by the South Carolina Research Authority, MUSC, and the City of Charleston. This program has both biomedical technology commercialization and workforce development elements.

The charter of the College of Charleston/The Citadel Joint Industrial Advisory Board for Computer Science specifically targets cross-fertilization.

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### **2.10. Establish Enterprise Campuses at technical colleges statewide.**

**Responsible:** Legislature and SCTCS

Legislation has been enacted to provide select technical colleges with Enterprise Campus Authority at Midlands Technical College, Trident Technical College, Aiken Technical College, Greenville Technical College, York Technical College, Orangeburg-Calhoun Technical College, and Spartanburg Community College. During 2010, Technical College of the Lowcountry and Horry-Georgetown Technical College were also given the authority to create Enterprise Campus Authorities.

### **2.11. Increase communication, shared programs, and formal partnerships among institutions of higher education.**

**Responsible:** Colleges and Universities

One of the goals of *DegreeSC* is to develop shared online programs among institutions of higher education.

### **2.12. Create or use existing local higher education/industry advisory boards to identify potential research, collaboration, and consulting opportunities.**

**Responsible:** Colleges and Universities; Business and Industry; and other Economic Development Entities

The College of Charleston's Department of Music collaborates with the Charleston Symphony Orchestra, Spoleto Festival USA, and the City of Charleston's Department of Cultural Affairs.

Clemson's five colleges have Advisory Boards composed of industrial and community partners who serve to assist the deans, chairs, and faculty in identifying opportunities for research, education, and service. Through these Boards, Clemson works closely with industry partners and seeks advice as appropriate and students have opportunities for co-operative experiences, internships, and field work in a variety of settings. Industry partners provide opportunities for service learning and community service as well.

See also Recommendation 3.6.

### **2.13. Provide creative incentives to industries to collaborate with SC research institutions.** [See also 3.6.]

**Responsible:** Legislature; Dept. of Commerce; Research Institutions

### **2.14. Expand existing and/or develop new STEM programs which reflect the economic needs of the state.**

**Responsible:** Colleges and Universities and CHE

New STEM programs approved since FY 2008-09 are:

- A.I.T., Mechatronics Technology, Piedmont Technical College
- B.S.E., Engineering Science, USC-Columbia
- B.S. Environmental Science, USC-Columbia

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- M.Engr., Industrial Engineering, Clemson
- B.S., Electrical Engineering Technology, South Carolina State University extended to Aiken Technical College
- B.S., Mathematics, New Concentration in Statistics, College of Charleston
- B.S. Biochemistry , Coastal Carolina University
- B.S., Environmental Engineering, Clemson
- M.S. and Ph.D., Photonic Science and Technology, Clemson
- B.S., Computational Science, USC-Beaufort
- B.S., Biochemistry and Molecular Biology, USC-Columbia

In September 2010, the SC Department of Education signed a formal agreement to work with technical colleges and public universities to promote engineering and mechatronics education after receiving a Rigorous Programs of Study grant from the US Department of Education to establish two pathways designed to positively impact the education of Science, Technology, Engineering, and Mathematics (STEM) professionals in the state. The partners include Aiken Technical College, Denmark Technical College, Orangeburg-Calhoun Technical College, Piedmont Technical College, Spartanburg Community College, and Tri-County Technical College for Project Lead the Way, and Aiken Technical College, Central Carolina Technical College, Orangeburg-Calhoun Technical College, Piedmont Technical College, Tri-County Technical College, and Williamsburg Technical College for mechatronics. The University of South Carolina College of Engineering and Computing serves as the Project Lead the Way (PLTW) University Affiliate for the state for the grant.

Both PLTW and mechatronics are programs that begin in high school and allow students to take classes in which they receive dual credit. PLTW focuses on engineering or engineering technology, biomechanics, manufacturing, and other applied math and science areas. PLTW is nationally recognized and students can continue their studies at technical colleges as well as at The Citadel, Clemson University, the University of South Carolina, and South Carolina State University. For mechatronics, students can continue their studies at a technical college or at South Carolina State University which has the only industrial technology program in the state.

See also Recommendations 2.17, 2.20, and 3.28.

### **2.15. Encourage businesses, colleges, and universities to apply for more Small Business Innovation Research (SBIR) and Small Business Technology Transfer Program (STTR) grants through the South Carolina Department of Commerce.**

**Responsible:** Colleges and Universities; Dept. of Commerce; Business and Industry

### **2.16. Establish a South Carolina Energy Independence Consortium to promote collaboration and the sharing of energy-related expertise and to research and develop innovative energy systems through the South Carolina Energy Office.**

**Responsible:** Legislature; Colleges and Universities; and SC Energy Office

There are two bills (S.208 and a companion bill H.3147) that would create an Energy Advisory Committee for the Office of State Energy, which may relate to this Recommendation. These bills can be accessed at: [www.scstatehouse.gov/sess118\\_2009-2010/bills/208.htm](http://www.scstatehouse.gov/sess118_2009-2010/bills/208.htm) and [www.scstatehouse.gov/sess118\\_2009-2010/bills/3147.htm](http://www.scstatehouse.gov/sess118_2009-2010/bills/3147.htm). S.208 remains in a Senate committee, whereas, and H.3147 has been approved by the House and awaits consideration in a Senate committee.

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Also, of possible interest relating to state energy issues is a report released by a Senate Committee that studied energy issues; this report is available at: [www.scstatehouse.gov/citizensinterestpage/EnergyIssuesAndPolicies/EnergyIssues.html](http://www.scstatehouse.gov/citizensinterestpage/EnergyIssuesAndPolicies/EnergyIssues.html) (see the last link on the webpage for the Energy Policy Report).

**2.18. Revitalize and expand the universities' research infrastructure.** [See also 1.20, 3.3, and 4.2.]

**Responsible:** Legislature; Research Institutions

**2.22. Build upon the SC Centers of Economic Excellence (CoEE) Program to stimulate research and innovation.**

**Responsible:** Legislature; CoEE Review Board; Colleges and Universities

In November 2008, the Kauffman Institute 2008 State New Economy Index was revealed. This report reveals that between 2007 and 2008, South Carolina has increased its overall national rank from 39th to 34th place. South Carolina also ranked highly in many categories that reflect positively on the state's knowledge-based economic development. (The study measures 29 different indicators, including factors for knowledge jobs, technological innovation and globalization. The index is regarded as one of the top national benchmarks for state economic transformation.) CoEE Review Board Chair Paula Harper Bethea commented, "As South Carolina builds its knowledge economy, I am thrilled for what it means to the people of our state—the creation of well-paying jobs and enhanced economic opportunities. I am also very pleased that South Carolina's CoEE Program, which enables our state to recruit top scientists and establish cutting-edge research centers, has been a major factor in knowledge-economy growth. Through the CoEE program and similar proactive efforts, South Carolina can reinvent its economy, improve quality of life, and become nationally and globally competitive."

Health Sciences South Carolina representatives discussed a variety of CoEE-related organizational initiatives at the April 2009 CHE meeting. Health Sciences South Carolina leverages the CoEE Chairs with Duke Endowment funds to promote additional initiatives such as the South Carolina Healthcare Quality Trust, a voluntary, statewide hospital and research university performance partnership that will employ research to identify causes of and solutions to preventable healthcare-associated infections and then share the results with all 65 of the state's acute care hospitals.

In March 2009, the City of Columbia sponsored the National Hydrogen Association Conference at which two prominent USC CoEE Chairs were keynote speakers. In April 2009, the SC Academy of Science held its annual meeting, including a Biomedical Symposium, at which time CoEE biomedical researchers presented.

In July 2009, MUSC announced that it is the recipient of a highly coveted, five-year \$20 million Clinical Translational Science Award (CTSA) grant awarded by the National Center for Research Resources at the National Institutes of Health (NIH). MUSC President Ray Greenberg noted that this grant would not have been possible without the CoEE Program and that many of the key scientists in the application were recruited through the CoEE Program. MUSC will lead the research efforts of a statewide collaboration involving all three research universities, Health Sciences South Carolina, and other partners. The award provides infrastructure support, better training for researchers, and greater access to top clinical trials and promising new treatments.

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In July 2009, international medical device company Smith and Nephew recently announced a \$5 million non-state matching pledge for USC's Rehabilitation and Reconstruction Sciences CoEE. The research partnership will work to develop new orthopedic therapies and products.

At its meeting on September 14, 2009, the CoEE Review Board awarded one new CoEE proposal in the amount of \$3 million for the 2008-09 proposal cycle: Healthful Lifestyles (USC/MUSC, \$3 million). This award brings the 2008-09 award total to \$14 million. The other 2008-09 awards include Tissue Systems Characterization (Clemson, \$3 million); Lipidomics, Pathobiology and Therapy (MUSC, \$5 million); and Nuclear Science Strategies (USC, \$3 million).

In October 2009, the Health Care Quality CoEE (USC/MUSC/Clemson) announced it was the recipient of a two-year, \$4.8 million National Institutes of Health grant to establish a statewide, Internet-based network for seriously ill patients looking for help through clinical trials. According to *The State*, "Patients will be able to volunteer for clinical trials, get notification of new research related to their condition and give consent to have their tissue used for research. The network, expected to be available in two years at no cost to patients, will have built-in security checks to protect patient privacy."

In October 2009, the first CoEE Council of Chairs convened on the USC Columbia campus. This conference included private and public sessions devoted to topics such as economic development, CoEE Program objectives (including technology transfer) and the consideration of a CoEE Council of Chairs Charter.

According to its FY 2009 annual report released in December 2009, the CoEE Program has brought more than one-quarter billion dollars in non-state investment into the state's economy and has led to the creation of 3,200 high-paying jobs. The CoEE Program has also resulted in 11 start-up companies and 13 awarded patents. To date, 24 of 81 awarded CoEE Chairs have been appointed. Other FY 2009 highlights include:

- National Cancer Center designation of MUSC's Hollings Cancer Center; MUSC's president stated that the designation could not have occurred without CoEE Chair participation.
- CoEE Endowed Chairs were instrumental in helping MUSC win two \$20 million grants, one from the National Science Foundation and the other from the National Institutes of Health.
- CoEE Endowed Chair Dr. Kenneth Reifsnider and his team were awarded USC's single largest federal grant ever, a \$12.5 million U.S. Department of Energy award for advanced energy research; the grant will create one of 31 national Energy Frontier Research Centers (EFRC) sponsored by the U.S. Department of Energy.
- Global medical giant Smith & Nephew announced a \$5 million investment in USC's Rehabilitation and Reconstruction Science CoEE to develop tissue-engineered materials and implantable devices.
- The Healthcare Quality CoEE partnered with IBM and Siemens to develop information technology infrastructure across South Carolina; this infrastructure is designed to improve health care, increase research, enhance access to clinical trials, and ultimately reduce medical costs. In addition, the Healthcare Quality CoEE has partnered with Columbia-based Collexis Holdings to form the nation's first biomedical research database.
- American Titanium Works (ATW) announced that it would invest hundreds of millions of dollars in the Upstate to locate facilities near Clemson's four CoEE Endowed Chairs in automotive engineering. The company is building a world-class titanium mini-mill in

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Laurens County and will invest an estimated \$422 million, creating 320 new jobs. ATW also announced it will establish its applications development and engineering technical center at the Clemson University International Center for Automotive Research (CU-ICAR) campus. This technology center will create 40 additional engineering jobs.

- Scientists at Clemson's Optical Materials CoEE developed a practical optical fiber, which could have a profound impact on efficiency in electronic devices worldwide.
- Because of the CoEE Program and CU-ICAR, Clemson was the first institution of higher education in the nation to offer a Ph.D. in Automotive Engineering. In FY 2009, that program graduated its first class. Since its creation, the program has doubled in size every year and currently includes students from across the U.S. and countries such as China, India, Italy, Germany, and Malaysia.
- Also at CU-ICAR, CoEE Endowed Chairs have been involved in creating an innovative educational concept called Deep Orange. The project will allow CU-ICAR graduate students to create a vehicle from scratch over the course of two years.

In December 2009, California-based fuel cell generator company Trulite announced the relocation of its manufacturing and administration operations to Columbia. The company will create 100 jobs in 2010, and could create several hundred additional jobs during the next few years. USC's four fuel cell-related Centers of Economic Excellence were major selling points for Trulite. Trulite's president stated that one of the principal reasons for the relocation is the opportunity to work closely with CoEE Endowed Chairs Dr. Brian Benicewicz (Polymer Nanocomposites CoEE) and Dr. Kenneth Reifsnider (Solid-Oxide Fuel Cells CoEE).

In February 2010, automotive manufacturer Proterra announced that it will employ at least 1,300 people developing and manufacturing buses and electric/battery drive systems at Clemson University's International Center for Automotive Research. The company made its decision to relocate to South Carolina in part because of CoEE Program research at Clemson University and the University of South Carolina.

In February 2010, the CoEE Council of Chairs released an Action Plan. The Action Plan includes the goal of the CoEE Endowed Chairs becoming a recognized science and technology advisory board which will provide leadership to the state and to South Carolina industry on economic growth through academic research and technology transfer.

In March 2010, German company The IMO Group announced it was locating a new facility in Dorchester County which will result in the creation of 190 jobs and \$47 million in investment in the state economy. IMO manufactures parts for wind turbines, construction machinery, and tunneling equipment. Company officials say that the CoEE Program was a key factor in the decision to develop a South Carolina presence.

Chair appointments for 2010 include Dr. Steven Kresovich as the CoEE Endowed Chair in Marine Genomics at USC (June 2010); Dr. George Simon, formerly with the Fox Chase Cancer Center, as the Burtschy Family Distinguished Endowed Chair in Lung Cancer Research at MUSC for the Tobacco-Related Malignancies CoEE (July 2010); Dr. Louis J. Guillette, Jr., formerly with the University of Florida, as the Molecular Genetics Chair at MUSC for the Marine Genomics CoEE (July 2010); Dr. Zihai Li, formerly with the University of Connecticut, as the Cancer Cellular Research Chair at MUSC for the Cancer Stem Cell Biology CoEE (July 2010); Dr. Frank Treiber, formerly with the Medical College of Georgia, as the CoEE Chair at MUSC in the Healthful Lifestyles CoEE (August 2010); Dr. Xuejen Wen as the Hansjörg Wyss Endowed Chair Professor in Regenerative Medicine at Clemson University for the Regenerative Medicine CoEE (August 2010); Dr. Scott Mason, formerly with the University of Arkansas, as the Fluor

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Endowed Chair in Supply Chain Optimization and Logistics at Clemson University for the Supply Chain Optimization and Logistics CoEE (August 2010); and Dr. Joseph Helpern, formerly with New York University School of Medicine, as the Brain Imaging Chair at MUSC for the Brain Imaging CoEE (September 2010).

On June 23, 2010, the South Carolina Economic Development Competitiveness Act was signed into law. The new law enacts revisions to the South Carolina Research Centers of Economic Excellence Act, the authorizing statute for the CoEE Program, and assigns one-quarter of all future CoEE Program appropriations and accrued program interest for endowed professorship awards at the three research institutions to be made in concert with the South Carolina Department of Commerce. Such CoEE Commerce Awards do not require matching funds if a significant capital investment is made by a qualified project or industry sector. The revisions become effective on January 1, 2011; the CoEE Review Board is currently drafting guidelines for the issuance of the first round of CoEE Commerce Awards.

At its meeting on June 7, 2010, the CoEE Review Board awarded three new CoEE proposals in the amount of \$11 million for the 2009-10 proposal cycle: Sustainable Development (Clemson, \$5 million); Data Analysis (USC, \$2 million); and Inflammation and Fibrosis Research (MUSC, \$5 million).

By the end of FY 2009-10, the CoEE Review Board had awarded a total of \$197.6 million in CoEE grants. The institutions have also received \$170.4 million in non-state matching pledges, of which \$149.5 million has been received. To date, state funds totaling \$133.4 million have been drawn down by the institutions.

At the September 20, 2010, CoEE Review Board meeting, CHE staff released a financial report that showed the three senior research institutions received \$28.8 million in non-state matching pledges and that the institutions also received matching funds of \$38.8 million and drew down \$41.2 million in state award funds during 2009-10.

The CoEE Council of Chairs is convening a second CoEE Council of Chairs Forum in October 2010. One of the Forum goals is to begin implementation of the CoEE Council of Chairs Action Plan as well as the creation of a steering committee for an Early Winter 2011 CoEE Program national conference; technology transfer will be a major theme of this conference.

The FY 2010 CoEE Program Annual Report will be released in November 2010. Collective CoEE Program jobs data and technology transfer activity through FY 2010 will be included in this report.

See also Recommendations 2.7, 2.8, and 2.20.

### **Marketing**

#### **1.7. Create outreach programs to target ninth graders.**

**Responsible:** CHE; SCTCS; SCDE

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### **1.10. Restore matching funding and expand services for HEAP, GEAR UP, and other related early awareness and readiness programs.**

**Responsible:** Legislature; CHE; Colleges and Universities

### **1.40. Develop coordinated outreach programs that focus on adults without college degrees.**

**Responsible:** Colleges and Universities

Midlands Technical College launched the “Learn to be Competitive” outreach campaign to focus on career preparation. In a comprehensive marketing campaign that included electronic media, billboards, print outlets, and college publications, Midlands Technical College advanced the theme “Learn to be Competitive.” The compelling and timely message reinforced the need to pursue education that leads to careers. The visual component of campaign incorporated diverse individuals engaged in jobs made possible by programs at the technical college level. Response mechanisms were included so that the college can continue communicating with interested prospective students.

USC Upstate launched a “Return to Learn” marketing campaign aimed at having adults with some high education courses returning to college to complete baccalaureate degrees.

USC Beaufort recently developed weekend programs in Business to attract adults without college degrees.

Northeastern Technical College (NETC) formed a partnership with Coker College to offer Coker College courses at the NETC Cheraw Campus so that students who remain in Cheraw after completing their two-year degree at NETC may continue to take selected courses that will fulfill requirements for a bachelor’s degree.

See also Recommendation 1.6.

### **2.19. Develop or expand programs to increase the number of women and minorities in engineering, math, and science.**

**Responsible:** Colleges and Universities

Francis Marion University sponsors a Women and Minorities in Science and Mathematics initiative that encourages women and minority students to pursue majors in science and mathematics. See also Recommendations 2.14, 2.17, 2.20, and 3.28.

### **3.7. Implement an aggressive public relations and communications plan targeted to both the policymakers who would support and fund the Action Plan and the citizens who would benefit directly from the successful implementation of the Action Plan.**

**Responsible:** CHE; SCTCS; SCICU; Colleges and Universities; SC Council on Competitiveness; External Marketing Agency

See the status report entry for Recommendation 1.6.

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**3.8. Develop a compelling united message from all institutions of higher education to the targeted stakeholders to ensure broad understanding of the critical relationship between education and the state's economic future.**

**Responsible:** CHE; SCTCS; SCICU; Colleges and Universities; SC Council on Competitiveness; External Marketing Agency

See the status report entry for Recommendation 1.6.

**3.25. Create a branding/marketing plan for the purpose of attracting citizens and employers to the workforce and for communicating the direct and indirect value of these services to communities and a strong workforce.**

**Responsible:** External Marketing Agency

### Policy Development

**3.9. Allow the state's technical colleges to provide an additional path for adults seeking to obtain a General Education Development (GED®) diploma.**

**Responsible:** Legislature; SCTCS; Technical Colleges; SCDE

**1.18. Create a P-20 council.**

**Responsible:** Governor's Office; Legislature; SCDE; CHE; SCTCS; SCICU; K-12; Colleges and Universities; EOC; Chamber of Commerce; Others

While no statewide P-20 council has been created to date, the Charleston Metro Chamber of Commerce's Education Foundation, in collaboration with local secondary and postsecondary partners and area stakeholders, established a regional P-16 council which is working to help students navigate key transition paths from middle to high school and subsequently to postsecondary education and the workforce. The Lowcountry P-16 Council is focusing its initial efforts on the lack of curriculum alignment between the secondary and postsecondary levels as well as the level of rigor and the quality of assessments which often differ significantly between secondary and postsecondary institutions. The group is currently engaged in developing strategies of how best to address problems of curricular alignment locally. Toward this end, the Lowcountry P-16 Council hosted a symposium at Trident Technical College organized around the theme of bringing the "two cultures" of secondary and postsecondary education together in order to discuss how the benefits of curriculum alignment can help ease students' transitions from high school to college and to the world of work. Local representatives from both two- and four-year institutions, the Commission on Higher Education, and Dr. Jim Rex, the State Superintendent of Education, delivered presentations at the symposium on June 17, 2009.

**1.25. Promote timely degree completion by establishing appropriate credit hour maximums.**

**Responsible:** Legislature; Colleges and Universities; CHE

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**1.26. Promote additional options for timely degree completion such as expanding the use of test-out provisions (including College Level Examination Program examinations) and awarding credit based on life experience.**

**Responsible:** Colleges and Universities

**1.37. Create statewide policies for assessing prior knowledge, on-campus residency requirements, and course credit expiration.**

**Responsible:** CHE; SCTCS; and Colleges and Universities

**2.9. Broaden the scope of the South Carolina Research Authority (SCRA) and SC Launch! to encourage and support research and technology transfer across all South Carolina institutions of higher education.**

**Responsible:** Legislature and SCRA

**2.21. Ensure that faculty entrepreneurial activities and industry-related research are recognized in the tenure and promotion process.**

**Responsible:** Colleges and Universities and CHE

**2.23. Enact a statutory change to authorize tuition relief for faculty dependents and tuition reciprocity with peer institutions in order to increase competitiveness in recruiting and retaining faculty.**

**Responsible:** Legislature and CHE

Specific legislation on this recommendation has not been filed. However, the regulatory relief bills for the institutions would increase an institution's ability to provide for waivers of tuition and expand authority to do so to include graduate students. If enacted, institutions could use the authority to provide such relief. See Recommendation 2.2 for more information about the regulatory relief bill.

**2.24. Improve faculty pay and compensation.** [See also 3.4.]

**Responsible:** Legislature and Colleges and Universities

**2.8. Review and/or revise industry-institutional technology transfer models based upon successful models in other states (e.g., University of California Technology Transfer System) and at other research institutions (e.g., Emory University).** [The text of Recommendation 2.8 was changed by approval of the oversight committee on September 2, 2009.]

**Responsible:** Colleges and Universities

Representatives from all three senior research institutions, including research vice presidents and technology transfer management, convened for a CoEE Program Technology Transfer Forum on May 13, 2009. Forum representatives pointed out that faculty-institution IP agreements are not within the administrative purview of the technology transfer offices. Based on staff suggestions, Recommendation 2.8 has been modified to reflect an emphasis on

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successful state technology transfer models similar to ones in California and at Emory University.

In October 2009, the first CoEE Council of Chairs convened on the USC Columbia campus. This conference included private and public sessions devoted to topics such as economic development, CoEE Program objectives (including technology transfer) and the consideration of a CoEE Council of Chairs Charter.

In December 2009, the FY 2009 CoEE Program Annual Report was released. Collective CoEE technology transfer activity includes 136 invention disclosures, 143 patent applications, 13 awarded patents, 18 active licenses, and nearly \$600,000 in licensing revenue.

In February 2010, the CoEE Council of Chairs released an Action Plan. The Action Plan includes the goal of the CoEE Endowed Chairs becoming a recognized science and technology advisory board which will provide leadership to the state and to South Carolina industry on economic growth through academic research and technology transfer.

On March 2-3, 2010, Health Sciences South Carolina hosted the Health Economy Advancement Legacy (HEAL) SC 2010 Conference devoted to “the discovery, development and delivery of new concepts, new sciences and new products emanating from the endowed chairs and CoEE scientific research of the HSSC-sponsored CoEE programs.” The HEAL SC Conference included sessions on technology transfer and research commercialization from numerous healthcare CoEE Endowed Chairs and principal investigators, as well as from several prominent national technology transfer experts and venture capitalists. HEAL SC also included a legislative event that provided members of the General Assembly with information about the CoEE Program.

See also Recommendations 2.7, 2.20, 2.22.

### **Retention**

#### **1.27. Redesign academic programs to improve student results while reducing costs through the exploration of course redesign initiatives.**

##### **Responsible: Colleges and Universities and CHE**

A conference call was held on April 8, 2009, with Carol Twigg, Director of the Redesign Alliance, to explore ways to involve SC in the course redesign work she has led which has enhanced retention, improved quality, and reduced costs. CHE is seeking funding to host a conference for institutions to learn about this work, interact with redesign participants from member Alliance institutions, and initiate planning for their own institutional efforts.

USC Aiken sent a team of faculty members from the math department to a course redesign conference in March 2010 to gather ideas for their ongoing work in redesigning introductory mathematics courses.

See also Recommendation 3.27.

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### **3.27. Increase the productivity of gateway science and mathematics courses.**

**Responsible: Colleges and Universities**

The College of Charleston is establishing initiatives to improve placement and student success rates in critical science and mathematics courses. The college has selected a new mathematics placement tool and will be expanding efforts in Supplemental Instruction, math- and science-based learning communities, and other learning support. See also Recommendation 1.26.

Faculty at Coastal Carolina University have begun teaching a new one credit course, Math 159-Calculus Calisthenics, which is a week-long intensive course which meets four consecutive days for three hours and 25 minutes each meeting prior to the start of classes each semester. The main purpose of this course is to help students succeed in passing calculus their first time taking the course. Students work in groups on a series of worksheets designed to promote a deeper understanding of certain topics, including algebra and trigonometry. In addition to learning mathematics, a portion of class time is devoted to advising students about how to succeed in calculus, e.g., explaining the resources available at the University to help students with math, describing how to build a math community, and providing time management tips.

### **1.28. Provide more effective developmental education.** [see also 1.2, 1.3, 1.12, 1.14, and 1.16.]

**Responsible: Colleges and Universities**

### **1.29. Develop and monitor institutional retention plans for student success.**

**Responsible: Colleges and Universities and CHE**

A committee has been created to identify and analyze potential statewide initiatives, programs, and policies that would strengthen the retention of first-generation and low income students. This committee will also address freshmen-to-sophomore and sophomore-to-junior retention.

In Fall 2009, USC Upstate implemented a new retention plan. Preliminary analysis of this plan indicates that the projected retention rate would increase by 2-3%.

Clemson has several programs designed to facilitate student success:

- The Academic Success Center (ACS) provides students with Personalized Academic Assistance to allow students the opportunity for one-on-one interaction with a professional to address their specific academic issues.
- The FIRST Program assists first-generation college students in reaching their career goals in science, technology, engineering, or mathematics (STEM) majors.
- The Early Success Program (ESP) is a year-long, structured academic support program that provides participants with the tools and support needed to achieve academic and personal success during their first year at Clemson. ESP is not a remedial program, but rather a foundational program geared at easing the transition from high school to college.
- New Student and Sophomore Programs developed by Clemson's Student Affairs division support students by facilitating transition and retention programs for the first two years of the undergraduate experience. The division works collaboratively with academic affairs staff, faculty, and various offices across campus to provide engaging learning opportunities that foster student success.

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- Clemson Connect is designated for new Clemson students and is an integral part of the transition to Clemson life and the Clemson family. Clemson Connect is a series of activities and programs taking place before the first semester classes start to help students make academic and social connections, which will contribute to their success at the institution.
- TigerWire is an online community designed to help students connect with each other and with the campus. There are two exclusive communities within TigerWire for students, one for freshmen and one for sophomores and transfer students. Students can create a profile, post discussions, connect with peers, and view videos from upperclassmen who give tips on how to be successful at Clemson.

Coastal Carolina University's Retention Committee represents a deliberate strategy of student engagement and involvement. The Committee is dedicated to researching best practices and ongoing student needs, recommending plans of action, and monitoring the progress of all proposed activities. As such, the Retention Committee developed and monitors the progress of the University Academic Advising Seminar designed to help the faculty become more fully attuned to student academic advising needs. The Retention Committee also recommended and succeeded in increasing the number of scholarships available to returning Coastal Carolina students. From a student life perspective, the Committee has been instrumental in the creation of an Outdoor Adventure Center that promotes building student self-esteem, trust, and compassion for others. Finally, the Committee has lead the integration efforts of new student living-learning environments, seeking to create student-centered living areas designed for effective studying and safe recreation.

### **1.31. Create an early warning system at institutions of higher education to prevent student withdrawal during first semester of first year.**

**Responsible: Colleges and Universities**

The College of Charleston administers the College Student Inventory, an early alert instrument, to selected incoming freshmen to gauge strengths and weaknesses and to measure drop-out proneness. Additionally, Faculty and Staff Assisting Students in Trouble is an online reporting tool that allows faculty and staff to report students to Undergraduate Academic Services who seem to be having academic or personal difficulties. Several offices on-campus also monitor midterm grades and intervene with students in academic difficulty.

USC Upstate has an early warning system in which 67% of all faculty teaching 100 and 200 level courses participate. As the faculty notify the Center for Student Success about possible students who may need additional support, members of that center contact each student and offer in-depth counseling, career counseling, tutoring, and mentoring. Over 75% of students who participate in those activities as a result of the early warning system improve their course grades for the semester.

Coastal Carolina University has a two-tiered early warning system for students. The first-tier is an Early Alert Report that faculty complete within the first 2-3 weeks of class if they have concerns about a student. The Early Alert system notifies the student that a concern has been reported and the student is asked to attend a meeting with the Dean of University College, the Director of Academic Advising/First Year Experience and his/her advisor where they discuss and help the student develop an "action plan" for the rest of the semester. The advisor follows up with the student at periodic intervals throughout the semester. If the issues are seen to be multiplying or persisting, then the student is sent to the second-tier of the system, the Students

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at Risk Committee. The purpose of this committee is to identify and assist students who are at risk of failing academically or leaving the university for behavioral, psychological, or health reasons.

The USC Aiken Center for Academic Success has an Early Warning System for identifying students whose attendance record or academic performance in the first half of a semester suggests that they are academically at risk. The program has been more aggressively promoted since Fall 2009, with a resulting increase in the faculty participation rate.

### **Other**

#### **2.3. Engage more undergraduates in research.**

##### **Responsible: Colleges and Universities**

USC Columbia offers undergraduates the option of graduation “with Distinction” in a growing number of disciplines. In this program, undergraduate students actively engage in significant research, scholarship, and/or performance activities within their major in collaboration with a faculty mentor. “With Distinction” options are currently available in Anthropology, Chemical Engineering, English, International Studies, Music, Performance, Philosophy, Political Science, Religious Studies, and Sport and Entertainment Management. USC’s Magellan Scholar Program competitively awards grants of up to \$3,000 to support faculty-mentored undergraduate research projects and is administered by the Office of Undergraduate Research. The program has hit the \$1 million mark in research awards to students with nearly 400 Magellan Scholars named since spring 2006.

USC Aiken holds a campus Research Day each April to provide a forum for students to present their research and creative endeavors. USC Aiken has secured private funding for its annual Research Day and for student academic travel, enabling the university to increase support for undergraduate research.

During 2009-2010, Francis Marion University’s Quality Enhancement Plan increased the number of undergraduates engaged in faculty-mentored research in Biology, Chemistry, Physics, and other fields. During 2010-2011, Francis Marion University is expanding its Quality Enhancement Plan, which will further increase the number of undergraduates engaged in faculty-mentored research in Biology, Chemistry, Physics, and other fields.

The College of Charleston has a campus-wide Undergraduate Research and Creative Activities program. In 2009, this program supported approximately 100 undergraduates in creative and scholarly efforts undertaken in collaboration with faculty members. The College of Charleston also participates in the SC NIH-INBRE (Infrastructure for Biomedical Research) grant, among a group of seven state institutions, in which the focus is on preparing undergraduates for graduate level research in areas relating to human health. The College of Charleston also holds a Howard Hughes Medical Institute grant for \$1.5 million. Among other things, it provides research opportunities for students, creates research and inquiry-based laboratory courses, and connects incoming freshmen to faculty and upperclassmen doing research.

The Center for Undergraduate Research and Scholarship (CURS) at USC Upstate publishes the *Annual USC Upstate Undergraduate Research Journal*. The journal is a compilation of outstanding papers submitted by undergraduate students who have been involved in faculty-

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mentored research projects and creative activities. This multidisciplinary journal is distributed to regional high schools, colleges, business, and organizations and provides a snapshot of the types of research activities at USC Upstate that involve undergraduate students.

Clemson University's Creative Inquiry Program combines engaged learning and undergraduate research. Creative Inquiry is available to every undergraduate student and anyone can suggest a new project. Students take on problems that spring from their own curiosity, from a professor's challenge or from the pressing needs of the world around them. Team-based investigations are led by a faculty mentor and typically span three to four semesters. Students take ownership of their projects and take the risks necessary to solve problems and get answers because "We want all of our graduates to be thinkers, leaders and entrepreneurs...We want them to be able to approach a task or problem and figure out how to solve it," says Provost Dori Helms. This program was recognized in *The College Solution: A Guide for Everyone Looking for the Right School at the Right Price*, by Lynn O'Shaughnessy, who says that "Unfortunately, the experiences that Clemson students enjoy are not nearly common enough among undergraduates elsewhere."

Coastal Carolina University created the Undergraduate Research (UGR) Office in 2008 in order to foster initiatives to increase participation in, and spotlight, student accomplishments in undergraduate research. The first year of the Undergraduate Research Competition in 2009 yielded 33 Undergraduate Research oral presentations, compared to this year's 2010 event which included 44 in addition to a dozen poster sessions. A project begun in 2009 to collect Coastal undergraduate students' citations from department chairs and faculty mentors of undergraduate researchers produced a listing of 224 presentations or publications in 2008-2009 from 201 students. For 2009-2010, presentations and publications from undergraduates total 232 from 192 students.

### **3.20. Encourage further use of best practices in learning-centered teaching including community and problem-based research, service learning, interdisciplinary course models, study abroad integration, intensive writing, and creative inquiry.**

#### **Responsible: Colleges and Universities**

Coastal Carolina University continues to develop study abroad opportunities and make the university population aware of these offerings. Several initiatives are in place to increase the accessibility of study abroad opportunities including the following: (1) centralizing the promotional offerings of all these courses across all colleges with standardized formats available on a centralized website, thereby allowing better comparability of the offerings, their academic and programmatic plans, and their cost components; (2) initiating standardized training programs for all study abroad program leaders, in which interdisciplinary conversations are guided by best practices in legal, student services, health services, student judicial process, and faculty development; ultimately standardized protocols have been adopted for all programs offered throughout the university; (3) initiating a faculty peer mentoring program for study abroad program development to assist faculty interested in developing and leading short-term study abroad program offerings to learn through mentoring with experienced program leaders to develop experience in the country of focus and/or program leading and familiarity with the standardized protocols developed above; and (4) creating an online application form so that it is now possible for students to select any one of 14 short-term programs and then apply, significantly improving accessibility. In support of these initiatives, Horry County Higher Education Commission allocated \$20,000 to fund the Horry County Higher Education

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Commission International Awareness Award scholarship beginning in 2009-10. A total of \$12,000 was awarded to six students who graduated from a Horry County high school to participate in programs in Europe and Asia.

### **3.29. Develop a statewide undergraduate minor in computational science. Responsible: Colleges and Universities and CHE**

#### **1.9. Increase the amount of information shared with high schools concerning how their students perform in college.**

Responsible: Colleges and Universities

##### **1.19. Create a longitudinal data system.**

**Responsible: SCDE; CHE; SCTCS; K-12; and Colleges and Universities**

The South Carolina Department of Education (SCDE) staff and CHE staff collaborated to apply for a second longitudinal data system (LDS) grant which was submitted in December 2009. In May 2010, the U.S. Secretary of Education Arne Duncan announced that South Carolina was awarded \$14.9 million for the design and implementation of a statewide longitudinal data system. The statewide longitudinal data systems (SLDS) grant, funded through the American Recovery and Reinvestment Act (ARRA) of 2009, supports the development and implementation of data systems to enable the state to examine student progress from early childhood into career, including matching teachers to students, while protecting student privacy and confidentiality consistent with applicable privacy protection laws. Last year, Congress expanded the program to include not only K-12 data systems, but also provide links with pre-K, postsecondary, and workforce data. This grant also requires that the state provide an assurance that it will establish a longitudinal data system that includes the 12 elements described in the America COMPETES Act, which are:

1. An unique identifier for every student that does not permit a student to be individually identified (except as permitted by federal and state law);
2. The school enrollment history, demographic characteristics, and program participation record of every student;
3. Information on when a student enrolls, transfers, drops out, or graduates from a school;
4. Students scores on tests required by the Elementary and Secondary Education Act;
5. Information on students who are not tested, by grade and subject;
6. Students scores on tests measuring whether they are ready for college;
7. A way to identify teachers and to match teachers to their students;
8. Information from students' transcripts, specifically courses taken and grades earned;
9. Data on students' success in college, including whether they enrolled in remedial courses;
10. Data on whether K-12 students are prepared to succeed in college;
11. A system of auditing data for quality, validity, and reliability; and
12. The ability to share data from preschool through postsecondary education data systems.

CHE has been working in collaboration with SCDE to develop a scope of work for the longitudinal data system that will include all required elements.

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**1.41. Create a centralized transcript repository.**

**Responsible: CHE**

**3.23. Develop a comprehensive listing of credit and non-credit academic programs, services, and resources of South Carolina higher education institutions that assist in addressing the diverse needs of a developing workforce.**

**Responsible: Colleges and Universities; CHE; SCTCS; and SCICU**

**1.49. Develop a system scale-up plan.**

**Responsible: CHE**

**2.6. Develop a system of "Research Sabbaticals" for faculty from comprehensive teaching institutions.**

**Responsible: Colleges and Universities**