South Carolina State University
Institutional Effectiveness Summary

Introduction

South Carolina State University's 2001 institutional effectiveness summary includes three components this year. The components are Majors or Concentrations, Academic Advising, and Library Resources. The Institutional Effectiveness Assessment Reporting Process at South Carolina State University is a comprehensive process, which is coordinated by the Office of Institutional Research and involves extensive input from constituents across the entire campus.

The University's schedule for August 2002 reporting is delineated in Table 1.

Table 1.
Individuals/Offices involved in Institutional Effectiveness Assessment reporting and Reporting Cycle.

Component	Individual/Office	Reporting Cycle
General Education	Associate Vice President for Academic Affairs, Office of Institutional Research Assessment Committee, University Computing and Information Technology Services	August 2002
Majors or Concentrations*	Chairs/Deans	August 2002

The assessment process for South Carolina State University's academic and administrative programs and services focuses on the development of annual program plans. These plans include the following: 1) a description of the programs' relationship to the University's mission statement; 2) identification of program outcomes and assessment criteria; and, 3) identification of how the assessment results will be used to improve the program and service.

1. MAJORS OR CONCENTRATION

Following the timeline of program reviews established by the Commission on Higher Education, this reporting cycle the University is reporting on the assessment of the following majors: Computer Science, Civil, Mechanical, Electrical and Industrial Engineering Technology Programs.

COMPUTER SCIENCE

The philosophy and direction of the computer science program have changed at the University since the last program review. The computer science faculty and staff implemented yearly activities involving program assessment and self-study in preparation for initial accreditation.

ASSESSMENT RESULTS

In 1995,an internal assessment of program was made by the Computer Science Accreditation Support Committee of the Industrial Advisory Council of the School of Engineering Technology and Sciences. Results of the assessment revealed that, the students are well prepared for the program, however, there is a need to improve the curriculum, labs/resources, hire more faculty and gain full institutional support.

Because of the assessment, the curriculum was revised and approved. The new curriculum was effective fall 1999 semester. The new curriculum is aligned with the restructured General Education Curriculum. Specifically, the number of credit hours in the curriculum was reduced from 136 to 125. The courses CS205, CS209 and CS210 were deleted from the curriculum. Two new required courses were added to the curriculum CS300 (Computer Logic) and CS350 (Social and Ethical Implications of Computing). Students are now required to take science courses from science options for science majors (Zoology, Botany or Chemistry) and the calculus-based physics. This provides students more insight in the scientific method, allows them to better apply mathematics in the sciences, and allows students to take computer sciences courses that provide a broader base of computer science knowledge. The curriculum meets the requirements of an undergraduate curriculum as required by the Association of Computing Machinery and the Computing Sciences Accreditation Board. New computer equipment was purchased, and efforts were made to hire two new Ph. D. faculty.

The Department also conducted an external assessment of the program in spring 1999. One purpose of the assessment was to assess the program readiness as a candidate for program accreditation by the Computer Science Accreditation Commission of the Computing Science Accreditation Board. The external evaluator reviewed faculty credentials, curriculum, facilities, library resources, and institutional support. The findings were as follows. The strengthens of the program are:

1. The computer science program attracts the best student at the University as it relates to GPA, SAT/ACT Scores and other relevant factors.
2. The faculty provides quality instruction and is committed to developing an excellent program.
3. The computer science graduate placement rate is 96 percent.
4. The curriculum has been revised to meet accreditation standards.

The weaknesses of the program are:

1. The program needs to hire three Ph. D. Faculty to reduce heavy teaching loads and to have adequate faculty with appropriate credentials for computer science.
2. There is a need to reduce the number of introductory level courses that count as senior electives for graduating students.
3. The library resources are dated and sparse. There is a need to increase the number of computer science resources. Specifically, there are no journals in computer science. The Journals from the Association for Computing Machinery IEEE Computer Society should be included in the collection.

In addition, to the internal and external assessment, the computer science program utilized student data and input to assess the program during this period. Other data used includes student enrollment and placement profiles, surveys, and exit exams. For example, the Computer Science program admitted 82 computer science majors in the Fall 1999, and 13 of these students had SAT scores that exceeded 1,000. The average SAT score for this entering class of computer science majors was 880, which exceeded the University’s score of 865. In an effort to measure exit competencies acquired by the graduating students, the senior comprehensive examination of computer science knowledge was administered to graduating seniors. The level of performance considered satisfactory is eighty percent. Of the sixty-three graduating seniors, 75% of the students met or exceeded the performance level. Study Guides are being developed to assist future students who do not meet or exceed the performance level.

The student satisfactory surveys (senior exit and continuing students surveys) revealed that 95% of the student are satisfied with the faculty and program offerings. The major weaknesses identified by the students appeared on the alumni survey. The graduates identified the need for more relevant programming courses integrated in the computer science major. A follow-up survey will be developed by the computer science faculty to ascertain specific what graduates are finding in the workplace. This data will be reviewed and curriculum revision will be made, if necessary.

USE OF RESULTS/ACTION TAKEN

The annually assessment process of the computer science program will continue. The following plan of action is being implemented.

1. Curriculum revisions have been implemented and the faculty will continue to monitored and evaluated the curriculum.

2. Three new Ph.D. faculty positions have been approved for Fall 2001. Currently, the University is in the recruitment process.
3. A follow-up survey to identify workplace skill needs will be developed and administered. Data from the survey will be used in curriculum revisions.
4. The program will seek accreditation by 2002.

ENGINEERING TECHNOLOGY PROGRAMS

The Civil, Mechanical, Industrial and Electrical Engineering Technology Programs were assessed during this review cycle. Engineering programs are offered at off-campus extension sites. These sites are Midland Technical College, Trident Technical College, Greenville Technical College, and Piedmont Technical College.

ASSESSMENT TOOLS

Assessment tools used are as follows: the Fundamental of Engineering Technology (FETE), as a senior comprehensive examination to assess the competency of graduating engineering technology majors, the senior project-during the senior project the student must complete a project of a practical nature requiring the use of knowledge and skills obtained from various engineering technology courses, feedback from the Advisory Council –the council reviews curriculum and assessment data from the programs and provide feedback for curriculum revision, employer surveys, alumni survey, and student evaluations.

ASSESSMENT RESULTS

These results revealed the following:

Program Strengths: The faculty members are highly qualified and dedicated to providing quality education. Student survey revealed that students are very satisfied with faculty available and instructional quality.

Program weaknesses:

1. The engineering technology program curricula exceeded the TAC of ABET in general education coursework;
2. Lecture and Lab courses should be clearly identified in the course schedule;
3. Students in MET design courses should be assigned open ended exercises and projects which require the use of catalogs and design manuals;
4. Student reports in engineering programs must be graded for English and technical content; and,
5. The facilities need to be updated.

USE OF RESULTS/PLAN OF ACTION

Curriculum revisions were made in the following areas:

The program credit hours for Civil, Electrical, Industrial and Mechanical Engineering Technology have reduced from 143 to 131, 131, 128 and 131, respectively. The new general education requirements have been finalized and implemented into four programs credit requirements. The faculty have modified course requirement to ensure students in MET design courses used catalog and design manuals to complete appropriate designs.

Faculty office spaces are being upgraded during the Summer 2001. Additional renovations of the Engineering building are in the Campus Master Plan.

ACADEMIC ADVISING

South Carolina State University defines academic advising as an established system that provides individual student guidance designed to promote and ensure successful academic progress. In practice, the system has three components. The first component of the system encompasses a faculty/student relationship in which a faculty member (advisor) helps a student (advisee) to select, plan and complete his/her academic goals without unnecessary delays and expenses. The second component of the system includes training for advisors so that they perform their duties effectively and efficiently. Advisor training procedures include receiving relevant, updated information on curricular and advisement procedures during scheduled departmental meetings, paring new faculty with experienced faculty during scheduled advisement periods, and conducting needs-specific workshops designed to improve the advisement system. Such workshops have included training on computerized advisement. A third component of the advisement system includes an Academic Advisement Committee. This is a working committee that receives, on an on-going basis, many suggestions for improvement in the area of academic advisement.

ASSESSMENT TOOLS

Assessment tools used are as follows: The NOEL-LEVITZ Student Satisfactory Inventory. The NOEL-LEVITZ SSI was administered in the Fall 2000. The Noel-Levitz survey in the area of academic advising effectiveness assesses the comprehensiveness of academic advising program. The academic advisors are evaluated based on their knowledge, competence, and personal concern for student success as well as on their approachability.

The University Academic Advisement Survey is administered in the spring of each academic year. It was administered in Spring 2000. This survey contains one-item which assess the student level of satisfaction with the availability of academic advisors via office hours, e-mail, Internet and other mean.

ASSESSMENT RESULTS

The survey results revealed that: that 96.2% of the student surveyed identified Academic Advising as extremely important. When asked how well was the University meeting their needs and expectation in the area of academic advising 88.1% indicated they were satisfied. The area receiving the lowest rating was major requirements are clear and reasonable only 68% of the students indicated that the major requirements are clear and reasonable.

USE OF RESULTS/PLAN OF ACTION

To address the major weaknesses in the academic advising program major requirements are clear and reasonable. The University in the process of implementing an on-course audit as part of the Student Information System to be used by advisors. The major requirements for the School of Business, School of Applied Professional Sciences, and the School of Engineering Technology and Sciences program offerings were completed this summer. The School of Education and School of Arts and Humanities are schedule for completed by December 2001. This will help advisor to identified all major requirements and electives based on the student matriculation data.

LIBRARY RESOURCES

The mission of the Miller F. Whittaker Library is to provide access to and delivery of information resources to support research methodology and critical thinking, instruction, self-development, lifelong learning skills, and the mission of the university. The library staff strengthens the intellectual environment of the academic community by developing, organizing, and preserving multi-formatted collections for information retrieval. The library staff focuses on meeting user needs and provides innovative and creative learning opportunities, fosters relationships with faculty, provides outreach services to students and the community, supports academic disciplines in the research process, and participates in the teaching process by facilitating information access.

ASSESSMENT TOOLS

The library uses collection data and user satisfaction survey to assess it effectiveness in delivering services.

ASSESSMENT RESULTS

The assessment results revealed the following:

1. There is a need to update library facilities.
2. There is a need to upgrade hardware and software in the computer labs.
3. The Bibliographic Instruction Program continues to be revised to generate more faculty involvement in the scheduling of classes for instruction.

4. Ninety percent of the students who completed the users survey are satisfied with the availability and support of library staff; however, they requested extended library hours.

USE OF RESULTS/PLAN OF ACTION

1. The Library space needs have been included in the President's Legislative Agenda for 2000. Funds are being sought from the State to expand and renovate Miller F. Whittaker Library.
2. The Library has been equipped with wireless network to support 10 laptop computers.
3. A faculty lab for research purposes was equipped with computer Fall 2000.
4. Library has extended it services to students during the Fall and Spring semester. The library is open until 12:00 AM. The Computer lab is open from 8:30 AM until 2:00 AM.