

**CLEMSON UNIVERSITY**

**SUMMARY REPORT  
ON  
INSTITUTIONAL EFFECTIVENESS**

**SUBMITTED TO  
COMMISSION ON HIGHER EDUCATION**

**AUGUST 2008**

## **CHE COMPONENT 2 MAJORS OR CONCENTRATIONS**

In the late 1980's and early 1990's Clemson University reported to the SC Commission on Higher Education pursuant to the comprehensive planning document prepared in response to SC legislation. At that time, as it is today, Component 2 addressed the review of major or concentrations of selected academic degree programs. Over the years, Clemson's model for program review has been modified as best practices of assessment emerged.

Currently, the systematic review of academic programs is being revised to incorporate the electronic assessment reporting system, WEAVEonline. The modified system has not been completely implemented; however, many of the reporting programs have incorporated portions of the system. This annual report draws from that electronic resource as well as the traditional process for the full review process. In addition to the full review of programs, interim reports are included as submitted in WEAVEonline. In the next few years, Clemson University should fully implement the electronic program review process.

In order to strengthen the current process of program review and academic program assessment, the staff of the Office of Assessment identified 49 program contacts who are either department chairs or the primary coordinator for several programs. The staff attempted to schedule a meeting with each of the academic program contacts during the summer of 2008 with the intention of reviewing in detail the 2006-2007 assessment records for each academic program in the area of responsibility. As of July 16, 2008, all but 12 of the coordinators had met with the staff.

To be of maximum service and enhance the program assessment processes, the staff evaluated the current assessment reports regarding the quality of the written student learning outcomes, the use of direct measures/student artifacts to collect data demonstrating the student learning, and to provide feedback on other assessment practices. The expectation is that the quality of the next cycle of assessment records will incorporate suggestions made by the staff to strengthen general assessment activities. Documents provided to the departments can be found on the Office of Assessment website:

<http://www.clemson.edu/assessment/assessmentpractices/referencematerials/index.html>

The documents regarding Assessment Practices include:

1. Developing A Unit Assessment Record: This booklet provides guidance in writing a unit assessment record and gives an overview of assessment.
2. Model of Assessment Record: This two page handout is a condensed version of the Developing A Unit Assessment Record booklet. It focuses on 6 steps of an assessment record: mission, outcomes/objectives, measures, findings, action plan, and analysis.
3. How to Write Student Learning Outcomes: This document describes the purpose, the characteristics, and the model of Student Learning Outcomes. It supplements the Developing A Unit Assessment Record in developing Student Learning Outcomes.
4. Bloom's Taxonomy Action Verbs: Bloom's Taxonomy is describe on this worksheet with examples of action verbs that match the definitions.
5. General Education Summary Assessment: This describes the annual assessment of General Education Competencies : Detailed Rubric for each General Education Competency

It must be noted that the information in this report was collected prior to the meetings with the department contacts and does not necessarily reflect the current standard of practice.

### **Synopsis Assessment Review of Selected Majors or Concentrations**

#### **COLLEGE OF BUSINESS AND BEHAVIORAL SCIENCE**

The mission of the School of Accountancy and Legal Studies is to create a learning-centered environment that provides distinct career advantages for students and to perform scholarly research and public service. The faculty and staff of the School are guided by the following values of

- Ethics, integrity, and openness as the cornerstones of actions.
- The mutually supportive roles of teaching, research, and outreach.
- Collegiality and interdisciplinary collaboration.
- Students as the primary constituency.
- Support for faculty and staff in their academic, professional, and personal development.
- Diversity in the students, faculty, and staff, as well as in ideas, roles, and responsibilities.
- Excellence and continuous improvement in all programs and processes.
- Academic freedom.
- Preparation for life-long learning and an active learning environment.

It is upon this foundation that the programs in the school are delivered.

#### **Accounting, B.S. and M.P.A.C.C.**

A departmental Assessment Committee was formed and directed to redefine each programs' mission and learning outcomes. These missions and learning outcomes were approved by the faculty as a whole. The committee spent the remainder of the year designing direct measures of learning and the process necessary to obtain those measures. These are now in place for use in the 2007-2008 assessment cycle.

#### **Accounting, B.S.**

The student learning outcomes for 2006 - 2007 are:

1. Communication skills: Demonstrate the ability to write clearly, the ability to speak effectively to groups, and the ability to listen effectively.
2. Analytical skills: Demonstrate comprehension of quantitative techniques for problem solving, and the ability to apply appropriate tools to solve business problems.
3. Decision-making skills: Demonstrate comprehension of uncertainty in decision making, and a knowledge of negotiating skills and techniques.
4. Technological skills: Demonstrate an ability to effectively use word processing, spreadsheet, database and multi-media technologies.
5. Business practices: Demonstrate comprehension of a market-based economy, comprehension of the global business environment, knowledge of interdependence of business practices, comprehension of different leadership styles and requirements for successful leadership. and knowledge of cultural and economic differences in international business.
6. Interpersonal skills: Demonstrate comprehension of differences and an ability to relate to people with diverse cultural differences. Demonstrate an ability to apply team building and conflict resolution skills.

7. Ethics Demonstrate comprehension of ethical responsibilities of business entities, organizations, and individuals.
8. Financial reporting: Demonstrate knowledge and understanding of the accounting process, external reporting requirements, interpretation of financial information, and uses of accounting information.
9. Internal reporting: Demonstrate a knowledge and understanding of the nature and behavior of cost and cost accumulation, the uses of internal accounting information, and planning, control and decision making.
10. Information systems: Demonstrate a knowledge and understanding of information systems, system design and application, and internal controls and security.
11. Taxation: Demonstrate a knowledge and understanding of feral income tax laws, regulations, and court decisions, and the tax implications of business forms.
12. Auditing: Demonstrate a knowledge and understanding of the nature, concepts and procedures related to assurance services, and professional standards

### **Accounting, M.P.A.C.C.**

The student learning outcomes for 2006 - 2007 are:

1. Knowledge, judgment professional responsibility: Graduates will demonstrate the application of knowledge, judgment, and an understanding of professional responsibilities to questions in their fields of study by:
  - summarizing issues correctly.
  - documenting their research and decision processes.
  - identifying and ranking viable solutions.
  - making recommendations that reflect consideration of the appropriate professional literature and demonstrate an understanding of ethical and legal responsibilities of the profession.
2. Communication skills: Graduates will demonstrate effective communication skills through:
  - their ability to plan, prepare, and deliver written, oral, and visual presentations that recommend easily understood solutions to professional problems.
  - their ability to respond to the speech and actions of presenters at an appropriate time, manner, and level which demonstrate they comprehend the problem or subject being discussed.
3. Teamwork: Graduates will demonstrate their ability to work effectively as part of a team.

### **Financial Management, B.S.**

The department's mission is that Financial Management Undergraduates will have developed the necessary skills in gathering, analyzing, and communicating financial data as required for a successful career within the discipline. It continues to improve the quality of the B.S. in Financial Management. This can be seen in several factors. Student placement has had another very strong year. The senior exit and alumni surveys indicate that the students also feel they are getting good value. Finally, the assessment committee indicates that the instructional mission appears met. The satisfaction of the students with the product, and their willingness to share these thoughts, helped move the College of Business to a record ranking in Business Week. IBM, Sun Trust, and ATD join the list of active recruiters this year. The Clemson Trading Room, Financial Modeling class, and the Portfolio Management class, continue to be top hitters among the students and recruiters. In a period of time where tuition rates are spiraling, and differential tuition is present, service to the students will continue to require attention. The department continues to face challenges, and come up with new methods, of getting a higher level of student participation on the departmental surveys, including Senior Exit, Advising, and Placement surveys.

### **Industrial Management, B.S.**

The mission of the Department of Management at Clemson University is to create and disseminate knowledge pertaining to management theory and practice through teaching, research, and service endeavors. Specifically, the Department strives to: • produce graduates who possess the knowledge and capability to achieve success as managers and/or pursue advanced degrees, • achieve national and international recognition for research, and • serve the community of management practitioners through service and outreach efforts. Management programs are very popular. Enrollments are up and the trend is positive. Need additional faculty positions to meet the growing demand. Advising needs some improvement. Contributions to undergraduate research and scholarly activities are delivered by the Creative Inquiry Projects. International activities include the Study Abroad to China during summer session.

The student learning outcomes for the Industrial Management, B.S. are

1. Students will possess the requisite knowledge and skills (technical, quantitative, computer, and communications) to be successful in occupations that require industrial (operations) managerial skills.
2. Students will have the ability to solve problems and make operations managerial decisions in the context of an organization and its environment.
3. Students will possess the knowledge, skills, and abilities to manage people effectively.
4. Graduates will find employment opportunities that are commensurate with their educational and employment background.
5. Graduates will be prepared to engage in life-long learning activities that ensure both personal and professional development.
6. The Department will provide information to prospective students about the baccalaureate programs so that they will be able to make informed choices about their educational objectives.

There are specific aims of the department to ensure that these outcomes are achieved to the best ability of the students. The department endeavors to

1. admit highly qualified students to the programs.
2. ensure that an adequate number and variety of departmental courses are scheduled to meet student needs, and to assist students who are having difficulties with class scheduling.
3. ensure that students receive appropriate levels of advising support so that they can make intelligent decisions about the selection of courses, areas of concentration, and majors.

### **Management, B.S.**

The assessment of the 2006-2007 cycle shows that the program is popular as evident from number of students enrolled in the major. Continued attention needs to be paid to improve management of advising and course enrollment / request log. There is also a need for additional faculty to cover classes. Advising is a bottleneck and needs improvement.

### **Management, M.S.**

Student learning outcomes for the Management M.S. program include:

1. Students will be exposed to rigorous graduate-level coursework, readings, cases, and problems.

2. Students will have the ability to research and solve complex industrial management problems, and make managerial decisions in the context of an organization and its environment. These problems and decisions will be similar to those faced by upper-level managers and executives.
3. Students will acquire an in-depth knowledge of state-of-the art management practices, especially as these practices apply to the manufacturing sector and to information technology.
4. Graduates will find employment opportunities that are commensurate with their educational background and level of managerial experience.

Based on the annual assessment, the department stated that although the enrollment is very low, the students are top notch. M.S. program is suffering due to low enrollment caused by total absence of financial support. Securing funds for attracting qualified top students by offering competitive support package is critical to grow the program. Furthermore, the curriculum is not strong since it depends on MBA courses. Therefore, the curriculum needs to be made stronger.

### **Management, Ph.D.**

The student learning outcomes for this program include:

1. Graduates will be well prepared to plan and teach undergraduate and graduate-level courses in their academic specialty area.
2. Graduates will be well prepared to conduct rigorous and original research in their academic area.
3. Graduates will be well prepared to assume (1) tenure-track faculty positions at major institutions of higher learning, (2) research associate positions in private or governmental research organizations, or (3) positions of responsibility in research-based consulting firms.
4. Recruit students with superior GMAT/GRE scores and academic qualifications.

The department outlined several actions to enhance the program:

1. Recruit better qualified students: The program is getting attention of other scholars around the nation. Additional resources are needed, particularly competitive assistantship and fellowship packages, to attract qualified and top students.
2. Incoming students under estimated the rigor of the program requirements. Due to higher standards, the graduation rate is likely to be lower for the next two or three years.
3. Contributions to the Institution: By placement of students and publication of top quality articles in major journals that the program contributes to Clemson's march towards top-20.
4. Highlights: The Department recruited seven new students with excellent record and high test scores.
5. Teaching Activities: The graduate teaching assistants compete and win teaching awards at the university level.
6. Research and Scholarly Activities: Students and faculty continue to publish in top journals in their respective fields and win university and national awards and recognition.
7. Challenges: Need additional funding to be able to attract, support, and retain qualified students

### **Marketing, B.S.**

The student learning outcomes for the Marketing, B.S. program include:

1. Development of student critical thinking skills and marketing driven knowledge paradigms.
2. Prepare students for marketing and business careers

Analysis for this year's assessment cycle indicated the following:

1. Student are highly satisfied with their preparation for careers, usefulness education, and quality of education.
2. If the department can allocate resources to developing more job placements, then satisfaction will improve.

### **Marketing, M.S.**

Student learning outcomes for the Marketing MS program include:

1. Prepare students for careers in marketing analysis, research, management, and scholarship.

The department reported that it wished to attract a mix of students with a mix of backgrounds including high quality undergraduate degrees, experience in the profession, and strong scores on GMAT. It reported that the applications have been increasing over time including degrees from AACSB accredited institutions, at least 50 % of students with work experience and the matriculated students with GMAT scores at or above 600. Benchmark in first year of degree program: Applications = 18. For Matriculated Students: AACSB accredited = all domestic students; 50 % international students. Work Experience = 87.5 % of all students. GMAT score = 589

Also, the department wants to facilitate students placement into positions within industries, nonprofit, or academic careers. It is hoped that all students (100 %) will be in appropriate positions within 6 months of graduation. However, the time frame is not yet passed, so all findings are preliminary. - Students who sought employment were placed or are in advanced stages of interviews. Salaries ranged up to \$100,000. - 3 students are continuing with their second degree program on campus (dual degrees). - 2 students are continuing with added education in preparation for entry into Ph.D. programs at other universities.

Finally, the department wishes to engage students in basic and applied research in the discipline including manuscripts for submission to journals/conferences as well as industry specific reports. The report notes that there have been: presentation and publication in international conference (American Marketing Association); acceptance for publication at national conference (Society for Marketing Advances); submission under review for national conference (Society for Consumer Psychology); two (2) industry reports completed; and two (2) proprietary reports for Clemson University

The general analysis is that for the first year of program (06-07) high quality students were attracted; students were placed in high quality jobs, continued in MBA program on campus, and are interviewing for top level PhD programs in Marketing. Research generated was excellent quality. It was noted that resources are needed to expand the program and maintain high quality of output. Although the enrollment is very low, the students are top notch. The curriculum is not strong since it depends on MBA courses. The department reported that it needs to secure funding to be able to be competitive in attracting strong applicants.

### **DEPARTMENT OF LANGUAGES**

The Department of Languages at Clemson University offers B.A. degrees in Chinese, French, German, Japanese, and Spanish. Language students may choose from three bachelors degree tracks: (1) The B.A. Language and International Trade track is available in Chinese, French, German, Japanese, and Spanish; (2) the B.A. Modern Languages track is available in French, German, Japanese, and Spanish, and (3) the B.S. International Health track is available only in Spanish at this time. Through the School of Education, students may also pursue the B.A. Secondary Education degree track available in French and Spanish. The B.A. Secondary Education track in French and Spanish is NCATE-accredited.

All tracks stress substantive upper-level study in the humanities. In addition, the B.A. Language and International Trade track includes rigorous study in one of the following professional options: (1) Applied International Economics, (2) International Trade, (3) Textiles, or (4) Tourism. Courses for these options are taught in colleges other than the College of Architecture, Arts, and Humanities (AAH) that houses the Department of Languages. The B.S. Spanish and International Health degree track is jointly administered by the Spanish section and the College of Health, Education, and Human Development.

Regardless of the degree track pursued, all language majors are required to study abroad prior to graduation. Students of Chinese, French, German, or Japanese are expected to study abroad for at least one academic year, and students of Spanish for at least one semester.

Students may choose a minor in the following areas: American Sign Language, Chinese, East Asian Studies, French, German, Japanese, and Spanish. The Department of Languages also offers courses in Italian and Russian. By this coming academic year, the American Sign Language Studies program will have completed its gradual move to the University Center in Greenville, a process initiated in fall 2006.

The mission of the Department of Languages is to develop people who have a sensitivity to and a true understanding of global diversity as a necessary factor in society, to assist in enhancing cross-cultural communication through facilitating the acquisition of foreign languages and the cultures that underlie their proper use, and to make the “foreign” familiar enough to people so that it does not constitute a source of fear and strife among them. This mission is directly in line with the University’s stated goals of “developing students’ communication and critical thinking skills”, and sense of “global awareness.” It aligns with the broader goal of providing a quality “general education” to the Clemson student. The Department of Languages upholds this mission through the Language and International Health program by collaborating with the Department of Public Health Sciences to offer a cross-disciplinary program that engages the faculty and students in productive cutting-edge research in the humanities and health sciences, teaching international languages and cultures, and actively serving the general and academic community, as well as participating in the governance and growth of the Colleges of AAH and HEHD, and Clemson University.

### **Language and International Health, B.S.**

Students completing the baccalaureate program in Language and International Health will demonstrate competence in the five language skills (listening, speaking, reading, writing, and culture); read and analyze texts in the target language on topics related to the chosen area of specialization; and demonstrate knowledge of literature and civilization. They will also demonstrate



knowledge and use of Spanish relevant to public health. Graduates of the Language and International Health program will be successful, as demonstrated either by enrolling in higher-level degree programs or by being employed in education or business

The Department has developed two instruments to evaluate the language skills and cultural knowledge of graduating seniors. The first, the Exit Exam, has undergone extensive revision to remedy problem areas and has been standardized in format and grading across all the languages. The exam currently contains four sections: grammatical knowledge, listening comprehension, speaking (narrating what is happening in a series of pictures), and writing (writing an essay on a topic that includes cultural knowledge).

The second assessment tool is a senior thesis paper followed by an interview. Each major writes a paper in the target language. Language and International Health majors write a senior paper based upon the model of the L&IT 400 paper. Each major is assigned a faculty advisor to supervise the writing of the paper. Upon completion, the student and the faculty member meet and discuss the paper in the target language and the student is awarded a grade based on Pass/Fail. Two other assessment strategies are feedback from 1- and 3-year out alumni by telephone and a mailed survey.

During the visit to each of the academic departments throughout summer 2008, there were discussions about modifications to current assessment practices. In discussing this program, Clementina Adams and Lee A. Crandall agreed to strategies to improve the program. Performance objectives and measurement alternatives will be obtained from the Public Health Department to be incorporated in the Language evaluation process. It was noted that the L and IH program is unique because it involves two different colleges. Being very unusual and probably the first program of this kind, it is attracting National Scholars. Continued coordination of the program between the two departments is critical to “keep the value and basic principles of the program.”

### **Language and International Trade, B.A.**

This program has SC Commission on Higher Education’s approved concentrations in the B.A. program for Applied International Economics, International Trade, Textiles, and Tourism. Clemson University's pioneering Language and International Trade program provides a Bachelor of Arts degree which integrates formal language training with real-world international business education. As the global marketplace expands, there is a dire need for individuals capable of communicating effectively in today's multi-cultural environment.

Students completing the baccalaureate program in Language and International Trade (International Trade) demonstrate competence in the five language skills (listening, speaking, reading, writing, and culture); read and analyze texts in the target language on topics related to the chosen area of specialization; and demonstrate knowledge of literature and civilization. They also demonstrate knowledge and use of language relevant to international trade. Graduates of the Language and International Trade (International Trade) program will be successful, as demonstrated either by enrolling in higher-level degree programs or by being employed in education or business.

The Department has developed two instruments to evaluate the language skills and cultural knowledge of graduating seniors. The first, the Exit Exam, has undergone extensive revision to remedy problem areas and has been standardized in format and grading across all the languages. The

exam currently contains four sections: grammatical knowledge, listening comprehension, speaking (narrating what is happening in a series of pictures), and writing (writing an essay on a topic that includes cultural knowledge).

The second assessment tool is a senior thesis paper followed by an interview. Each major writes a paper in the target language. Language and International Trade majors write the L&IT 400 paper. Each major is assigned a faculty advisor to supervise the writing of the paper. Upon completion, the student and the faculty member meet and discuss the paper in the target language and the student is awarded a grade based on Pass/Fail.

Findings reported here cover the period from December 2005 through August 2006. Fifty-six graduating seniors earned the baccalaureate degree during this period and all of them did a senior thesis and took the Exit Exam. All passed in order to be able to graduate. The senior thesis assessment results did not spell out how many rewrites occurred, and some effort will be made in the next assessment cycle to obtain that level of detail. On the Exit Exam, all passed with 60 % or higher except five. The results did not differentiate by concentrations in the L&IT and Modern Languages programs. An effort will be made in the next assessment cycle to maintain the results by program type.

### **Modern Languages, B.A.**

This program has SC Commission on Higher Education's approved concentrations in the BA program for Modern Languages in French, German, Japanese, and Spanish.

The student learning outcomes associated with this degree are

1. Students completing the baccalaureate program in Modern Language (specific concentration) will demonstrate competence in the five language skills (listening, speaking, reading, writing, and culture); read and analyze texts in the target language on topics related to the chosen area of specialization; and demonstrate knowledge of literature and civilization.
2. Graduates of the Modern Languages program (specific concentration) will be successful, as demonstrated either by enrolling in higher-level degree programs or by being employed in education or business.

The Department has developed two instruments to evaluate the language skills and cultural knowledge of graduating seniors. The first, the Exit Exam, has undergone extensive revision to remedy problem areas and has been standardized in format and grading across all the languages. The exam currently contains four sections: grammatical knowledge, listening comprehension, speaking (narrating what is happening in a series of pictures), and writing (writing an essay on a topic that includes cultural knowledge). Findings reported here cover the period from December 2005 through August 2006. Fifty-six graduating seniors earned the baccalaureate degree during this period and all of them took the Exit Exam. All passed with 60 % or higher except five. The results did not differentiate by concentrations in the L&IT and Modern Languages programs. An effort will be made in the next assessment cycle to maintain the results by program type.

The second assessment tool is a senior thesis paper followed by an interview. Each Modern Languages major writes a paper in the target language on the model of the L&IT 400 paper but bearing on a literary topic. Each major is assigned a faculty advisor to supervise the writing of the

paper. Upon completion, the student and the faculty member meet and discuss the paper in the target language and the students are awarded a grade based on Pass/Fail. Findings reported here cover the period from December 2005 through August 2006. Fifty-six graduating seniors earned the baccalaureate degree during this period and all of them did a senior thesis. All passed in order to be able to graduate. The senior thesis assessment results did not spell out how many rewrites occurred, and some effort will be made in the next assessment cycle to obtain that level of detail.

## **SCHOOL OF NURSING**

The mission of the School of Nursing is to provide a scholarly center of learning that prepares nurses at the baccalaureate and graduate levels who can advance scientific nursing knowledge and evidenced-based nursing practice through research and outreach. The academic culture of the school values intellectual curiosity, personal accountability, diversity, interdisciplinary collaboration, and the art and science of human caring.

### **Nursing, B.S.**

The student learning outcomes identified for the program include:

1. B.S. Nursing Graduates will compare favorably in their knowledge of nursing with graduates of other baccalaureate programs across the nation Measure: Pass rate on the NCLEX-RN above national levels Graduates will be prepared at the generalist level in behaviors (nursing therapeutic intervention, critical thinking, & communication) established by national nursing accreditors. Measure: Percentage of graduates scoring above national passing composite score on Critical Thinking and RN-Assessment Tests
2. To develop innovative nurse leaders with diverse experiences who engage in service that improves the health and quality of life of people of South Carolina and the global community.

To assess these outcomes based on selected standards, the graduates as a whole will consistently achieve a pass rate on the NCLEX-RN above national levels. • As part of the capstone course, N410, during the final semester, at least 90 % of students will score above national passing composite scores on the Critical Thinking and RN-Assessment Tests • At least 80 % of the graduates will report their level of preparation as fully or almost completely prepared to meet the following criteria: nursing therapeutic interventions, critical thinking, communications ability (exit survey) • 100 % of graduates will be employed as nurses within 6 months of graduating in multiple settings in health care facilities & the community (alumni survey). • At least 85 % of the employers will consistently rate graduates as at least adequately prepared for nursing practice (survey sent every 3 years).

The assessment results are:

\*NCLEX Pass Rate for 2006-7 was 95.57 % exceeding state \*88.4 % and national (88.32 %)  
\*Critical Thinking: 98.39 % scored about national passing score \*Graduates will report their level of preparation as fully or almost completely prepared to meet the following criteria: nursing therapeutic interventions (96.6 %), critical thinking (94.8 %), communications ability (98.3 %)(exit survey)  
\*100 % of graduates will be employed as nurses within 6 months of graduating in multiple settings in health care facilities & the community (alumni survey)(100 %) \*Employers will consistently rate graduates as at least adequately prepared for nursing practice (survey sent every 3 years)(not applicable this year).

R.N. to B.S. graduates will have been involved in at least one community-based, outreach and/or service-learning project within the past year (exit survey). Service learning experiences will demonstrate collaboration with health care agencies. At least 80 % of all graduates will have been involved in at least one community-based, outreach and/or service-learning project within the past year (exit survey)(100 %). • At least 4 service learning experiences will demonstrate collaboration with health care agencies (7+ experiences)

The following items will be tracked: NCLEX Pass Rate, Kaplan RN Assessment and Critical Thinking Tests, Exit Survey: BS grads % fully or almost completed prepared, Nursing therapeutic interventions, Critical thinking, Communication, Alumni survey: Job placement within 6 months, Employer survey: indicating level of preparation

### **Nursing, M.S.**

Student learning outcome for the Nursing MS program includes:

1. Graduates will utilize research processes to develop and evaluate advanced nursing practice
2. Community Collaboration and Service Learning Nursing Administration: To develop innovative nurse leaders with diverse experiences who engage in service that improves the health and quality of life of people of South Carolina and the global community. MS Nursing Graduates will serve as leaders of community-based, outreach and/or service-learning projects.

NP graduates will maintain a pass rate on the national certification exam above the national average. Target is above the national average for the specialty. During 2006-7 100% of NP Graduates took and passed the national certification exam within 6 months of graduation. The ANCC combined pass rate for all exams for 2006 was 76.6%.

Other measures include that at least 80% of MS graduates will report their level of preparation as full or almost complete for the following skills: identify researchable problems, conduct research, and/or integrate research findings into their specialty practice computer-related competencies to locate research information.

100% of those responding to the Exit Survey reported (1) being involved in at least one community-based, outreach and/or service-learning project, (2) their level of preparation as full or almost complete.

On the Oral Comprehensive Exam, 100% of MS graduates reported incorporating findings from nursing research into their own nursing practice. 90% reported that their level of preparation as full or almost complete to utilize leadership, management, and teaching knowledge and competency to influence nursing practice, participate as a leader to influence health policy and improve the health care delivery system. The department is currently revising its assessment practices to incorporate The Essentials of Master's Education for Advanced Practice Nursing as prepared by the American Association of Colleges of Nursing.

### **Interim Reports**

## **Performing and Visual Arts**

Art and artists thrive on the campus of Clemson University. Clemson is a comprehensive university with the resources and facilities to offer students excellent educational opportunities in the visual arts. The Department of Art is housed in the College of Architecture, Arts and Humanities (AAH) and offers the Bachelor of Fine Arts (BFA) and the Master of Fine Arts (MFA) professional degrees. The Department is also contributing to a new Ph. D. program in Rhetoric, Communication and Information Design (RCID).

There are approximately 100 undergraduates and 18 graduate students enrolled in the visual arts programs. Uniquely, this size allows frequently conducted team faculty critiques, which maximizes the exchange of ideas and methods that arise within individual studio disciplines. The curricula are accredited by the National Association of Schools of Art and Design. Students work and learn in well-equipped studio facilities, and benefit from an ideal average student-to-teacher ratio of 12-to-1 or better.

The Department of Art awards the Bachelor of Fine Arts undergraduate degree and the Master of Fine Arts at the graduate level. Within each degree students can specialize in any of the studio disciplines offered at Clemson; Paintings, Ceramics, Drawing, Printmaking, Sculpture, or Photography/Digital. The Visual Arts Department also contributes to two new degrees at the graduate level. The Master of Fine Arts in Digital Production Arts is a technical and artistic animation degree that has been pioneered between Computer Sciences and Art. The Art department also contributes to the Ph.D in Rhetoric, Communication and Information Design. All degrees are explained in greater depth below.

### **Visual Arts, B.F.A.**

Clemson is a place where skills can be refined and minds enriched. Students are encouraged to explore, achieve and create. The BFA program is small enough to allow the close interaction and free exchange of ideas that are so vital to art. With no more than 15 students enrolled in a studio course, individual instruction is a high priority. Students have direct contact with faculty work in the studio, which allows them to share both technical and conceptual processes.

The BFA program places strong emphasis on skill development in relationship to creativity. Students gain hands-on experience in facilities for bronze casting, metal fabrication, gas and electric firing, lithography, etching, basic paper-making, photography and digital imaging. An excellent woodworking facility is available to all students in AAH, and the ceramic program has a large wood-fired Anagama Kiln, the only kiln of its kind in South Carolina.

The faculty educate artists through a curriculum of academic course work balanced with studio art and art history courses. Students are encouraged to use their elective classes to expand their curriculum into disciplines that will enrich their total education. The freshman and sophomore years are a balance between general University studies and art and design courses.

Students begin to concentrate their studio course work in a specific area of the visual arts in the junior year in preparation for their senior studio. The senior studio is the most significant course work in the undergraduate curriculum, as it reflects a time in which concepts and skills are focused

and developed to produce a cohesive body of artwork and a portfolio for graduate study or professional applications.

The student undergraduate experience is enhanced by informal professional activities with faculty; field trips to art centers in Charlotte, Columbia, Atlanta, New York City and Washington, D.C.; interaction with visiting artists; and opportunities for local and regional exhibitions.

In accordance with the mission of Clemson University, the primary purpose of the Bachelor of Fine Arts program is to educate and motivate students in the disciplines and scholarship of art. The skills relevant to design, materials, and process are taught in a studio environment in order to facilitate creative endeavors and self expression and to prepare the student for advanced study and/or for pursuing a career in fine arts.

Student learning outcomes include:

1. Conceptual and technical competency in visual arts: Provide students with the ability to analyze works of art/design, to evaluate them technically and conceptually, and to understand the historical and contemporary context in which to place them.
2. Completion of a final individual exhibit: Provide students with a working knowledge of various production methods and their relationship to the development and completion of a body of work for exhibition.
3. Provide professional readiness: Prepare students for post-baccalaureate education and/or career opportunities in art.

Assessment activities include:

1. A formative assessment of progress is conducted after the student has completed four foundation level art courses. The criterion for success is based primarily on the student's progress in five outcome areas. The student's progress in these outcome areas will be determined by the department's art faculty. Faculty responses will be documented on the Sophomore Review form. Scoring on faculty forms from 1-5 with 5 being excellent 4=very good, 3=good 2=below average, 1=poor The Sophomore Portfolio Review is conducted as students near the end of their sophomore year as an art major. Students present a portfolio of works from the foundation course sequence (Art 151, 152, 205, 207, 305), which is reviewed by studio faculty. Students receive feedback on their work that details strengths and weaknesses and offers advice for the future direction of the student. The Sophomore Review acts as an advising tool for the department and allows faculty to assess the academic standing of students before they enter the critical junior year. Students receive the compiled results of the faculty survey along with written comments and suggestions. The survey results are reviewed by the student in the company of the Foundations Director. This year, the results were high overall. All students scored between 3 and 5.
2. A formative assessment of progress is conducted in the second semester of the junior year. The criterion for success is based primarily on the student's progress in three outcome areas. The student's progress in these outcome areas will be determined by the department's art faculty. Faculty responses will be documented on the BFA Senior Studio Review form. The successful student must achieve an average score of no less than 3 in this review. The Target Level for this

method of assessment is: Faculty responses will be documented on the BFA Senior Studio Review form. The successful student must achieve an average score of no less than 3 in this review. The results are: Of Senior Studio Interviews conducted this year, the majority of students (90) scored 3 or higher. Most were in the 4 - 5 category. 2 students scored 2 (below/average) and was asked to represent his work at a later date, as faculty determined that the student had neglected to include or discuss several pieces of work from an upper division course in which the student was enrolled. 1 student was deferred entrance until the following semester and was required to take additional courses in his studio area to strengthen technical and conceptual skills. Students receive both written and verbal feedback from faculty members.

3. BFA Exhibition evaluation: A summative assessment of progress at the conclusion of a student's program; the BFA exhibition serves as an exit requirement in the program. The criterion for success is based primarily on the student's progress in three outcome areas. Successful achievement in these outcome areas will be determined by the department's art faculty. Faculty responses will be documented on the BFA Exhibition Evaluation form. The successful student must achieve an average score of no less than 3 in this review. The department graduated 23 students, each exhibiting their senior work in the Lee Gallery. The assessments ranged from 3 to 5 with a majority scoring 4 or 5.
4. Exit interview: A program assessment based on responses from the BFA graduate. The BFA graduate will be asked to provide a qualitative appraisal of his/her educational experiences in the BFA program. Findings are: Exit interviews and questionnaire is voluntary. Students were interviewed as requested by the chair regarding their experience with strengths and weaknesses discussed. Overall weaknesses were focused on facilities, scheduling conflicts and lack of studio space or access. Strengths included faculty engagement and overall support. Action to be taken is to change sophomore review to Foundations review: Implement a review at the end of completion of foundation courses including new courses ART105 and ART106
5. Strengthen alumni feedback /exit interview process: Create a student handbook to provide a clear understanding of the goals of the program and how the Department measures and assesses its progress.

### **Visual Arts, M.F.A.**

Clemson's Master of Fine Arts in visual arts is the terminal degree within the studio art discipline. The program offers concentrations in the studio areas of drawing, painting, printmaking, ceramics, photography/digital and sculpture. The primary goal of the program is to provide students with opportunities to develop a high degree of professional competence in their chosen area of concentration. Interdisciplinary and collaborative projects are encouraged within the department. The relatively small size of the program (12 to 20 students) encourages students to explore studio areas that will enhance their major area of concentration. In addition, it creates a highly individualized method of instruction. Students may also take advantage of the opportunity to spend a semester of study abroad in Genoa, Italy, at the University's Charles E. Daniel Center for Building Research and Urban Studies.

Having the Department of Art housed in AAH presents opportunities to interact with various other college disciplines. The M.F.A. curriculum is composed of 60 credits with 15 in art history and art seminar, 30 in studio and 15 in thesis. The thesis hours are primarily art studio in preparation for a final exhibition with written documentation. The Art Department offers assistantships that

significantly reduce tuition and also provide a modest biweekly stipend. Additional funds are available to assist students who choose to spend a semester at the overseas center in Italy.

In accordance with the mission of Clemson University, one of the primary purposes of the Department of Art is to advance the education of students enrolled in the Master of Fine Arts program. The Master of Fine Arts degree is considered to be the terminal degree for studio-oriented fine arts programs. Through critical review of technique and concept, students create and develop a thesis that meets all expectations of this professional degree as defined by NASAD, the program's accrediting body.

Student learning outcomes include

1. Intense professional career education: Demonstrate both a) a knowledge and creative command of discipline and b) an historical and contemporary comprehension of their discipline.
2. Facilitate understanding of studio discipline: Demonstrate the ability to articulate, communicate, and promote in a professional manner the technical and conceptual knowledge gained through their studies. Create original works of Art: Demonstrate the ability to articulate, communicate, and promote in a professional manner the technical and conceptual knowledge gained through their studies.

MFA 30 hour review. A formative assessment of progress is given at the midway point in a student's program. The criterion for success is based primarily on the student's progress in three outcome areas. Progress in these outcome areas will be determined by the department's art faculty. It was reported that all students passed their 30 hour reviews. One student presented poorly and was asked to represent. The majority of the students received 4-5.

A summative assessment of progress at the conclusion of a student's program; the MFA exhibition and oral review, serves as an exit requirement in the program. The criterion for success is based primarily on the student's progress in three outcome areas. Successful achievement in these outcome areas is determined by the department's art faculty. Faculty responses were documented on the MFA Exhibition Evaluation form. The successful student achieved an average score of no less than 3 in this review. All students passed their orals with 4-5 evaluations.

MFA Graduate Exit Interview. A program assessment based on responses of the MFA graduate. The MFA graduate was asked to provide a qualitative appraisal of his/her educational experiences in the MFA program. MFA graduates' responses were documented on the MFA Graduate Exit Interview questionnaire. Exit interviews were informal and identified concerns of space and facility limitations. Specific details of space limitations and exhibition scheduling were noted.

## **Communication Studies**

### **Part I: General**

#### **Program overview**

Communication Studies as a discipline is interesting because it has roots both in the humanities (rhetoric) and the social sciences. The history and composition of the Department reflects those diverse roots and beginnings. Long a part of other departments, with a focus on service courses in public speaking, the program evolved in the mid-1990s into an undergraduate major. In 1999 it



became a full-fledged department. The years since achieving departmental status have been a period of growth, refinement, and emergence as a “program of destination” for undergraduate students. The success of the undergraduate major is balanced by a strong emphasis on faculty research, while upholding the department’s time-honored role to offer skilled instruction in oral communication. The Department does not have a graduate degree program but has begun to move into graduate education through collaboration in multi-disciplinary certificates and degrees, and it seeks more avenues toward graduate education.

The program’s mission is well stated in its own words: “The Department of Communication Studies advances knowledge of communication phenomena through a commitment to scholarly research, excellence in teaching, and professional service to the discipline, community, University, and College.” Further, the program “cultivates in graduate and undergraduate students the knowledge and critical thinking skills necessary to succeed not only in a professional or advanced academic environment, but also in the larger society as engaged global citizens” through faculty who “have expertise in diverse areas of human communication processes” and who pursue scholarship that “challenges and educates students at both abstract and applied levels.” Finally, the program seeks to “instill in students broadmindedness, ethical sensibilities, rigorous thought processes and genuine curiosity about the social world.”

The program is moderate in scale in terms of the numbers of the students and faculty. The Department has sought to balance the quantity and quality of its majors, and in turn it has sought to add tenure-track faculty to teach those majors. It established a goal to have “a limited number of academically outstanding majors,” setting the number at approximately 300. While the Department does not control admission criteria for freshmen and transfer students who choose Communication Studies as a major, it has instituted an admissions policy for internal changes of major in order to limit the total number of majors and maintain the quality of its students. The statistical summary of enrollments for five years (up to 2005-06) shows that enrollment declined from a high of 415 in 2001-02 to a low of 275 in 2004-05, rising again to 309 in 2005-06—approximately the Department’s stated enrollment goal. Because of new faculty positions, mainly tenure-track personnel to support the major, the student/faculty ratio has improved substantially during this period, from 22:1 to 15:1.

These changes and overall improvements have directly addressed key areas of concern in the 1997 review. Acknowledging the “huge demand” for this major, the 1997 report concluded that the “student to faculty ratio of 20:1 [in 1997] is too high.” Only 31 % of the faculty at that time were in tenure-track or tenured positions; the 1997 report was concerned that the teaching in the major was “primarily” done by non-tenure-track faculty. A related recommendation was to recruit at least one tenured senior professor to provide leadership for the new department. Since the last review period, the Department has added six tenure-track or tenured faculty lines, so that 44 % (11 of 25) of the faculty are in the professorial ranks. The Department has more senior faculty, including one full professor, who is the Department chair, and three other tenured faculty. These increases mean that 69 % of major courses are now taught by tenure-track and tenured faculty. The Department has also decreased its reliance on part-time faculty, addressing another concern in the 1997 review. There are only three part-time faculty at this time.

Another area of concern from the 1997 review was the lack of clear goals and means of assessment.

The Department has responded to these issues by establishing well-defined policies for evaluating faculty teaching, scholarship, and service, and instituting a vigorous program of assessment and strategic planning. Assessment and strategic planning are ongoing, the former being institutionalized into a thorough process of review of student outcomes and faculty accomplishments, and the latter incorporated into regular faculty retreats. The self-study report contains many of the fruits of these changes. Faculty appear comfortable with the promotion and tenure system and believe it is well explained to them.

During its growth, the program has achieved a reasonable balance among teaching, research, and service. Salaries and fringe benefits are adequate to attract but not necessarily retain outstanding faculty. The staff, facilities, and other resources are limited compared to the number of majors served.

### **Faculty**

The quality of the faculty is high. The eleven tenured and tenure-track faculty hold the PhD from nationally recognized programs, including top-20 research institutions. In the past five years the faculty have garnered a number of awards for teaching from the College, the University, and regional and national professional organizations. They engage in a host of co-curricular activities, which include maintaining a successful internship program and a forensics (debate and competitive speaking) program. The Department has recently instituted detailed goals, strategies, and measures to evaluate teaching. While there were no results to review from this new process, selected results from previous methods, primarily peer observations by the chair and the Personnel Committee, indicate rigorous standards for teaching. After meeting with focus groups representing all levels of faculty and representative students, the review committee concurred that strong teaching is a hallmark of the department. Faculty are devoted to teaching all levels of undergraduate courses as assigned. The focus group of majors was enthusiastic about their faculty, about advising, and about the “interactive” nature of their major courses.

Of special note is the Department’s general education program, which is in the hands of experienced full-time lecturers who have major responsibilities for program development, assessment, and improvement. One lecturer serves as Director of Basic Studies. As one member of the review committee noted, “It is impressive to have such a vibrant general education program in a department that is so firmly turning in the research direction.” A number of general education courses have been put online. Hiring of lecturers has been conducted successfully; however, the practices of the upper administration to wait until the last minute to allow the hiring of general education faculty makes hiring good lecturers more difficult.

The Department of Communication Studies has followed the University in increasing its emphasis on research, and the tenure-line faculty are productive. The Department follows the tradition of its larger discipline in evaluating faculty productivity. It has cultivated specialists in health and sports communication, organizational communication, and media and culture. Faculty scholarship is evaluated for the quality of placement and the number of publications, with blind peer review as the standard. Peer-reviewed publications are evaluated by criteria such as rejection rates and composition of editorial boards. Tenure-line faculty carrying a 3-3 teaching load, which was the norm up to 2006, are expected to produce, on average, one scholarly publication per year.

The numbers of peer-reviewed publications and presentations have risen with the increase in tenure-line faculty. In 2006 the Department reported publication of two books and eight journal articles, with substantially more under review or in press (two books, three book chapters, and 17 journal articles). Faculty made 26 competitively reviewed conference presentations. The Department exceeded its benchmarks for research productivity in its most recent assessment cycle.

The review committee considered that the emphasis on quantity of publication was appropriate when balanced with a sense of the impact of the research nationally. Although the self-study does not state or rank the publications in which faculty published during this period, the Department's guidelines do specify that for purposes of tenure, promotion, and reappointment, the placement of the publications are taken into account, as well as the quantity.

### **Wildlife and Fisheries Biology, BS**

At the conclusion of the review process, it was apparent to the committee that the Wildlife and Fisheries Biology (WFB) undergraduate program in the Department of Forestry and Natural Resources at Clemson provides a unique service to the University, South Carolina, and the Southeast. The Department stands alone in providing the only undergraduate/graduate program in WFB in South Carolina. The WFB program provides teaching, research, and public service involving the study and management of wildlife and fishery resources that are so integral to the health and sustainability of natural areas within the State and nation as a whole. In addition, the program is expanding to study issues related to nuisance wildlife issues occurring in urban areas. The committee feels that the WFB undergraduate program has a mission vital to the State and should be supported in its efforts to provide a high-quality educational experience to Clemson's undergraduates.

The committee has made numerous recommendations to provide such a high-quality educational experience at the end of this report. The following are a few highlights.

In particular, it is the committee's finding that in the next two years, the level of support to the WFB program will be inadequate to provide this high-quality education without infusion of resources. Primarily, the committee recommends hiring additional faculty to replace recently retired and soon to retire faculty. This is absolutely critical to restore the program to the strong position it held prior to the retirement of several key faculty, much less advance the program. With a relatively modest investment (relative to many other departments) in the program's resources, Clemson's WFB program can be regionally competitive and nationally recognized. It is also the committee's opinion that, given Clemson's unique resources (e.g., the Clemson Experimental Forest and the Research and Education Centers), the program could be one of the best in the region.

Although well-understood that changes to the curriculum are the purview of the faculty and that a thorough review of the curriculum is currently underway, the following are recommended as additional modifications. Some of these recommendations depend on hiring of additional faculty. Others, such as increasing the vertical structure of the curriculum to avoid duplication of material in classes, can be implemented without new faculty. The committee supports two major program improvements currently underway or under development. The first is a five-year joint BS/MS degree, and the second is an increase in field work through a special semester, spring or summer camp.

The remainder of this review follows the general format recommended under the program review guidelines and comments where appropriate.

**Faculty:**

*Numbers of faculty and diversity of faculty interest for the undergraduate programs offered:* The number of tenure-track faculty appointed to this program within the Department of Forestry and Natural Resources is critically low for maintaining a sustained, healthy program over time. The committee did a cursory review of other regional programs (e.g., University of Georgia, Virginia Tech, and University of Tennessee) and found that those programs have more than twice the current number of tenure-track faculty devoted to wildlife and fisheries as Clemson. At Clemson, there are only three tenure-track, core faculty members in WFB who teach in this program (Brown, Yarrow, and Lanham). Other faculty members have been lost to retirement; are within the TERRI program, are soon to retire, or are moving into full-time administration. In addition, there has been an irreparable loss of faculty in other departments who teach key courses needed to sustain this program and whose courses meet Wildlife Society and Fisheries Society certification requirements (specifically mammalogy, ornithology, herpetology, and ichthyology). Certification by these professional societies is sought by most WFB majors. Prior to the movement of Schwedler and Sweeney into full-time administration and the retirement of Wood and Eversole, the faculty showed considerable diversity of subject matter and background interests. The current tenure-track faculty no longer represent such diversity.

*Policies and efforts in the recruitment, retention, and promotion of minority and women faculty:* When looking at the larger teaching group, there does appear to be a reasonable representation by minority and female faculty. Recruitment, in recent years, has been limited, and therefore the department is unable to evaluate the policies and efforts to recruit, retain, or promote faculty. Retention does not seem to be a problem.

*Concern for, and performance in, teaching at all levels of the program:* Discussions with students suggested that all teachers in WFB were very good and interested in teaching. However, the number of faculty is low; some issues with particular courses were identified; and the curriculum lacks depth. These last two issues are covered in a later section.

*General scholarly quality of the faculty compared with that of other leading colleges and universities in the country:* The general scholarly quality seems to be good or at least on par with peer institutions, but the number of faculty in the program seems to be very low compared to other programs (particularly in fisheries) as described above.

*Publication records of faculty in monographs and refereed journals and Record of external funding:* Based on the most recent vitas provided, the publication records and record of external funding seem adequate. The committee is aware that the low number of faculty in this program requires a large commitment of time for teaching by individual faculty, which would necessarily reduce the amount of time for other scholarly pursuits.

*Effectiveness of faculty performance evaluation, including tenured review:* The committee has no basis to offer comment because only one assistant professor faculty member is involved in the tenure

review process. The issue was therefore not raised. No problems with retention, promotion, or tenure were identified. Faculty mentoring will be needed if more faculty are hired.

*Faculty morale:* The morale was very good given the tenuous condition of the resources and support for this program. They are proud of having held the line well in the face of dwindling resources, and the committee concurs. They are concerned about the program because of a lack of resources and support for the program by the college and university. A general feeling exists that the university is supporting investments in high-profile fields at the expense of core programs. Specifically, for this WFB program, shortages exist in faculty to teach the fundamental natural history, wildlife management, and organismally based classes (i.e. herpetology, mammalogy, ornithology, and ichthyology) that are important for the WFB undergraduate degree and certification of graduates in professional societies. These voids impact other programs as well. Faculty morale is good in spite of the lack of faculty numbers and resources.

**Students:**

*Quality of students:* The students who met the committee were probably not representative of all students, but were perceived as ones that are highly involved with the program. However, a subset of the committee also met with other students at a banquet for the Wildlife Society. In both meetings, the students were enthusiastic about their career paths and the major in WFB. The committee felt that the students were more enthusiastic than students in most other majors on campus. The committee found the students to be refreshing and strong advocates for the WFB major and discipline.

*Quantity of students:* Number of Undergraduate students and graduates 2002-2006 (from CU Institutional Research Web Site).

	Year				
	2006	2005	2004	2003	2002
Number in Program	116	105	103	118	128
Number Graduated	32	28	35	34	29

The quantity of students enrolled and graduated in the WFB major appears stable as represented in the adjacent table.

*Diversity of student body:* The student body majoring in WFB is composed of 35 % women. In terms of ethnicity, 2 % are African American and less than 1 % are Hispanic.

*Evaluation of admission standards:* There was no basis for an evaluation. Students seem to matriculate to WFB after arrival to Clemson.

*Financial support for students:* The department indicated that no discipline specific scholarships are available to undergraduate students. In addition, research internships are difficult for some students to pursue because of limited financial situations and a need for students to make money over the summer. This lack of financial support for students in the WFB program needs to be addressed.

*Student input into the decision-making process in the program:* It appears that student input is valued. The chair of the department and the faculty in general appear to have open-door policies, and exit interviews are offered to graduating students.

*Completion rate of programs within the normal time limits:* The completion rate seemed normal; staying much longer than four years to complete a bachelor's degree was not common.

*Opportunities for student-faculty exchange:* The students appeared not to know much about faculty research, but they expressed an interest in participating in research and field opportunities. Notification of opportunities to undergraduates would be helpful. On the other hand, they were well-informed about internships and job opportunities outside of the university.

*Student morale:* The students were very enthusiastic and had a positive outlook about the program, but the students seemed to be disappointed in the areas of advising and availability of particular classes (such as the game management and organismally oriented courses that are required for certification in their professional societies). The students noted a lack of consistent offerings of particular classes, the lack of field training, duplication of information in several courses, and the lack of rigorous upper-level classes. The students were somewhat disappointed that in national competitions (quiz bowls) in wildlife biology, Clemson's team did not fare as well as they had hoped. They were complimentary of some of the non-game classes but felt they were lacking in game management-related issues and classes that demonstrated technical aspects of wildlife monitoring and management, although they were complimentary of the efforts of Davis and Guynn. This view is consistent with the lack of faculty in those areas.

*Need for the program as indicated by (a) employers who hire graduates, (b) prospective students of high ability who apply for admission into the program, (c) knowledgeable persons who urge that well-prepared practitioners or researchers and new research findings and/or improved professional practice in the field are needed by society:* From discussions with faculty and students, it was the committee's impression that a demand definitely exists for graduates of this program among state and federal agencies, private consultants (e.g. for land managers), and companies (e.g. nuisance control). However, the primary employers for WFB graduates require a Master's degree. The graduates are limited in their career opportunities in the field otherwise. Most practicing wildlife biologists in governmental positions require a master's degree. An exception is the nuisance control/wildlife damage control positions in private and governmental agencies (e.g. USDA Animal Damage Control) that hire graduates directly from four-year colleges. There seems to be a good relationship between the Forestry and Natural Resources department and state and national natural resource agencies, which helps to place graduates of this program. There appears to be an increasing need for urban and nuisance wildlife management practitioners. The program seems to have recruited good students and sufficient numbers of students.

Students are not getting enough field application in part because of a lack of faculty, lack of transportation resources, and institutional impediments, such as the recently more stringent requirements of the Animal Research Committee. The regulatory component of the university is inhibiting progress toward improved professional practice in the field (i.e. handling of animals).

### **Curriculum and programs of study:**

*Diversity of curriculum offerings to allow for a broad range of educational experiences and for specialization (inside and outside of the classrooms):* This evaluation is based on the current curriculum, which, according to students and faculty, is likely to change in the next year. Although there seems to be a rich listing of elective courses, most are not being taught because of a lack of resources. This greatly limits student's experience in the classroom. Most students and faculty cited that one weakness of the current curriculum is too little time in the field especially during labs and longer-term field work experiences. In addition, more technically challenging, cutting-edge quantitative work in classes (e.g. landscape modeling, GIS, spatial modeling) needs to be included in the advanced undergraduate curriculum but not at the expense of traditional natural history and techniques coursework, which needs to be maintained.

The students and faculty noted that the current course offerings have a lot of overlap without structurally building upon previous course information. This duplication needs to be reduced, which will free up credit hours and key course segments for new depth, rigor, and timely content (e.g., climate change effects on wildlife, GPS population monitoring, etc.) at the junior and senior levels.

The rudiments of the core curriculum appear to be there, but the rigor of the core curriculum needs to be further developed. In particular, the Wildlife Techniques course, which provides a melding of basic theory and application, has not been consistent or at times rigorous enough. There seems to be a need for a two-semester, techniques sequence with one being largely theory and methods and the second application. Some of the introductory class work in the first year of the curriculum appears to be unnecessary and was not viewed positively, especially by students.

The committee felt that there needs to be a stronger connection between the undergraduate and graduate program primarily because most of the undergraduates will need to go on to get a master's degree. Exposure to the requirements of a master's program and types of research being conducted would greatly improve the understanding of undergraduates about what will be required in the future. Additional faculty and inclusion of graduate teaching assistants would address this need.

*Program requirements (courses, graduation requirements) compared with other leading universities in the country:* There was insufficient information to evaluate, but there is no reason to believe that Clemson's WFB program requirements is not on a comparable level with other leading universities. Certification by professional societies and preparation for a master's degree program are the two main drivers of wildlife programs across the nation. The quality of courses and program at Clemson may decline in the next few years because of a lack of resources and replacement of faculty. The lack of faculty hires in WFB as well as Biological Sciences to teach organismally oriented classes needed for certification in Wildlife Biology or Fisheries is especially a problem. These faculty could have joint or dual appointments with other departments.

*Instructional methods and innovations:* Innovations such as Creative Inquiry classes were generally seen positively by the students, but not all were thought to be valuable. Some students gave an enthusiastic endorsement for a Creative Inquiry class conducted by Davis. It appears that the enthusiasm was engendered by the hands-on research in the field. At the same time, a lack of innovation exists in many cases because of a lack of resources, particularly graduate teaching assistants (TAs) to help in implementation of these innovations. Innovation is also stymied by lack of cutting-edge equipment and limited transportation, leading to an inability to utilize field resources

(CEF). In some instances, resources are not available to take advantage of the unique comparative advantage capital assets available to the WFB undergraduates. For example, the Clemson Experimental Forest is a key resource for teaching and field work, but adequate vehicles or funds are not available to move students from the university to the CEF. Instruction is also hampered by lack of an animal collection and laboratory space for examining specimens.

### **Facilities and resources:**

*Budget adequacy with respect to the program's mission:* This program has lost support during the last few years. The budget does not appear adequate because there is a great need for teaching assistants, more faculty, common-use teaching equipment, and transportation. The teaching budgets for courses often does not allow for rental of vans from the motor pool, and the current two vans dedicated for departmental use are over-used and in poor condition. Additional transportation needs to be a priority.

*How appropriate are the physical facilities (classrooms, office space, labs, study and lounge spaces), libraries and computer facilities in terms of instructional, research, and service goals of the program?* Classes currently are forced to use the collections in the Campbell Museum of Natural History, but the classroom in that building is not large enough to accommodate the size of the classes. Handling and inspection of specimens justifies a separate collection tailored to the program needs. Also, additional access to software and computing for landscape modeling and Geographical Information Systems may be necessary.

*How do any centers and institutes associated with the program affect the academic and research goals and operation of the program?* The Clemson Research and Education Centers, specifically the Baruch Institute, could be more valuable resources for providing field sites for undergraduate research and training. Given the distance to Baruch from Clemson, it is unclear how much this institute helps the undergraduate curriculum. The Clemson Experimental Forest is essential to the WFB program providing a comparative advantage over other WFB programs, as well as providing close and easy access for learning about wildlife in the field and for applying techniques taught in more formal class settings.

Additionally, the US Fish and Wildlife Cooperative Unit located at Clemson is a resource available to the department, especially in research and graduate education. It is understood that those faculty cannot directly participate in undergraduate teaching, but they still contribute to the overall mission of the department.

*In what ways is staff support adequate or inadequate to support the educational mission of the program?* The committee was given the impression that the staff is currently adequate since no discussion arose regarding the need for improvement. However, the faculty and program have an inadequate number of teaching assistant positions, as cited previously. With the addition of faculty, a need to increase staff to an appropriate level may arise.

## **Part II: Commendations**

### **What is the program doing very well?**

It was the committee's observation that the high level of morale and enthusiasm of the students and the faculty was the most notable aspect of what the program is doing very well. This is the only



wildlife and fisheries program in the state of SC and is meeting a valuable need in the State and Southeast. It is distinct from other general biology programs at Clemson with the applied nature and field-work emphasis of the program. In addition, there is a healthy relationship with state and federal agencies, which helps with job placement for graduates, placing students in internships, and keeping faculty in touch with real world wildlife issues. The program also seems to be good at placing graduates into graduate school and permanent positions. Students seem to be happy with the results of the program, with a few exceptions. Individual faculty members have very strong nationally recognized research and extension programs. The WFB program has also done a good job integrating key related faculty, classes, and expertise of the forestry part of the department into the WFB program (e.g., Guynn and Shelburne).

**In what areas has the program made significant progress that also deserves commendation?**

The program has identified that the curriculum needs to be improved and has initiated steps to bolster the curriculum with added field techniques training during the semester and/or during a spring or summer camp (as they have in Forestry). Inclusion of more technical skills such as GIS and landscape modeling has increased the rigor of the program.

The management of wildlife does not stop at the edge of natural areas such as forest, field, and wetlands. Some nuisance wildlife encroach on human settlements, leading to a rapidly expanding field referred to as “urban wildlife management” and “nuisance control.” The program has added at least one class in this field, which is positive because this field will provide new employment opportunities for the students.

This program seems ideal to be linked with the "Curious Campus" concept. Almost all of the CC concepts are related to the Wildlife and Fisheries program.

**Part III: Recommendations**

**Identify specific steps to exploit opportunities and remediate weaknesses**

Given the enthusiasm and morale of the students and faculty, this program could be a very strong. If followed, the department’s strategic plan and the plan contained in the George Askew memo would allow the program to return to a more healthy condition. The committee encourages the department to conduct a comparison of their curriculum with those of their regional and national peers. Nonetheless, it is the committee's perception that with a fairly small investment in overall resources, this program could be regionally competitive and nationally recognized in certain areas.

It is clear to the committee that new faculty positions and resources must be added to this program for the program to achieve a critical mass and to return the program to a position of strength. The following recommendations are strongly emphasized to strengthen the program:

1. Hire new faculty members: Hires should have competencies in these areas: quantitative wildlife and fisheries biology, game management, fisheries, wildlife disease, and wildlife nutrition. There could be overlap in these positions. The committee did a cursory review of other regional programs (e.g., University of Georgia, Virginia Tech, and University of Tennessee) and found that those programs have more than twice the number of tenure-track faculty devoted to wildlife and fisheries as Clemson. In recent years, Clemson has lost its competitive edge due to inability to hire critical faculty, particularly in Fisheries, which has been decimated to an even greater degree than the

Wildlife emphasis (5 down to 1 faculty member within the last three years). Past and future retirements and movement of faculty into administrative positions have devastated this program's ability to meet the current curriculum's needs. Therefore, for this program to survive, much less improve, tenure-track faculty must be hired.

**2.** Strengthen the Fisheries program within WFB: At a minimum, the Fisheries component of the WFB program must be renewed to provide a base of fisheries coursework for the Wildlife aspect of the curriculum. The committee feels, however, that this minimalist approach is not in the best interest of the program, the University, or the State. Based on the extensive wetlands, freshwater, and coastline in South Carolina and their heavy recreational and commercial utilization, there is ample justification for the reestablishment of a strong Fisheries component in the WFB program. In fact, it appears that there may be more career opportunities for students in fisheries than in wildlife. Currently, there is one faculty member remaining with fisheries expertise. This faculty member has administrative responsibility as Chair of the Animal Review Committee and will be retiring within two years. The Fisheries program is in critical condition and must be rebuilt with new faculty.

**3.** Create at least five teaching assistant positions to assist with labs in core WFB courses (e.g. WFB 410, WFB 412, and WFB 350): This will help increase the contact between undergraduate and graduate students, which will expose the undergraduates to how research is conducted and the demands of graduate school. Addition of teaching assistant positions will also take some of the burden of teaching off of faculty members allowing more topics, greater rigor, and assistance with labs.

**4.** Improve the curriculum: Continue the department's proactive review of the curriculum. Specifically, the following is recommend for this program's curriculum:

- a. Integrate meeting the curriculum's needs as well as requirements for graduate school and wildlife or fisheries society certification.
  - b. Emphasize mammalogy, ornithology, herpetology, and ichthyology as integral parts of the curriculum and ensure that these classes are taught on a regular basis. Note that some of these courses are traditionally taught in other departments and serve other majors (e.g. Biological Sciences), and the university will need to allocate hires to help meet this need of the WFB curriculum. These classes are needed for certification by the Wildlife Society as well as for a solid base for the natural history aspect of the program.
  - c. Increase the vertical structure of the program. There needs to be more rigor and depth in higher level courses and expansion into more cutting edge fields (e.g. using satellite telemetry for wildlife density estimation).
  - d. Increase the number and quality of field-based labs that improve the teaching of field techniques, animal trapping and handling, and data collection for analysis.
  - e. Increase the quantitative and technological focus of the program by creating more undergraduate courses utilizing Geographic Information Systems (GIS), statistics, and modeling.
- 5.** Improve the infrastructure for teaching:
- a. Provide resources necessary to improve the access to the Clemson Experimental Forest: Purchase and maintenance of more 12-passenger vans or other forms of transportation to conduct research and Creative Inquiry projects will allow greater movement of students out to the field.
  - b. Rebuild and properly curate a vertebrate specimen collection: The Campbell Museum of Natural History has a very good specimen collection, but the classroom in the building is too

small for WFB courses and the specimens must be handled in a specific way not conducive to teaching WFB classes. Therefore, the department should rebuild their own collection.

- c. Purchase common-use equipment to be used in teaching and Creative Inquiry projects: Faculty should not have to provide their own research equipment for instruction.
6. Improve student advising:
- a. Look at creating an undergraduate student manual for presenting advising and career information. This manual should include requirements of certification, how to locate internships, and information on faculty interests and research.
  - b. Create a more formal and structured academic advising (potentially implement a workshop to standardize the advising philosophy and structure).
  - c. Increase the dissemination of information about professional society certification requirements.
  - d. Ensure that students understand the importance of a master's program for many careers.

## **COMPONENT 5 ACADEMIC ADVISING**

As required by law and based on the 1995 Assessment Plan for Institutional Effectiveness submitted to the SC Commission on Higher Education, Component 5, Academic Advising, the statement of purpose of Academic Advising at Clemson University is: to assist the student in scheduling courses to fulfill the requirements of the degree program. Since its adoption, the purpose and mission have been revised.

### **EXPECTED RESULTS:**

1. A majority of students will report satisfaction with academic advising experiences.
2. The university graduation rate, based on definitions from the Student Right to Know and Campus Security Act, will not drop below 65 %.
3. A majority of students will report satisfaction with the availability of their academic advisor.
4. A majority of students will report satisfaction with the information provided by the advisor.

**ASSESSMENT PROCEDURES:** A survey of graduating students will be employed to provide information relative to expected results 1, 3, and 4. Expected result 2 will be determined by analysis of the annual graduation rate based on cohort data.

**ADMINISTRATION OF ASSESSMENT:** The survey data will be collected and analyzed by the Office of Assessment. The graduation rate data will be computed by the Office of Institutional Research.

### **USE OF ASSESSMENT FINDINGS:**

**INTERNAL:** The data will be compiled and provided to all departments and academic advising centers. The academic departments and advising centers will use the information to determine whether changes to the academic advising procedures are required.

**EXTERNAL:** The information will be reported to the CHE as part of the annual Institutional Effectiveness Report.

**REPORTING YEAR:** 2008

## **PURPOSE AND MISSION OF ACADEMIC ADVISING AT CLEMSON UNIVERSITY**

The purpose and mission of academic advising are noted on page 8 in *Clemson University's 2008-2009 Undergraduate Announcements* under the Advising Policy

*To ensure that students receive both personal and professional assistance in navigating through curricula and University requirements toward degree and graduation, the Academic Council adopted the following policy. Each student is assigned to an academic advisor (either professional advisor or faculty advisor) upon admission to the University. Responsibilities of the student and the advisor are clearly delineated in the advising process. The University maintains the continual and systematic assessment of the process. The University Academic Advising Committee is responsible for implementing specific guidelines and evaluating effectiveness.*

*Goal I-The following University mission statement on academic advising shall be widely disseminated and implemented: "Academic advising is an ongoing educational process that connects the student to the University. Academic advising supports the University's mission of preparing the student for learning beyond the confines of the academy. Academic advisors represent and interpret University policies and procedures to the student and help students navigate the academic and organizational paths of the institution."*

*Goal II-The University shall demonstrate a continuing commitment to effective academic undergraduate and graduate advising through appropriate recognition, communication, policies, and funding.*

*Goal III-Each college and department shall develop a plan of action for continued commitment to effective academic advising consistent with the University's philosophy.*

*Goal IV-Academic advisors (faculty and professional staff) shall demonstrate effective advising consistent with the University, college and departmental philosophies.*

*Goal V-Students shall be informed of their personal responsibilities in the advising process.*

Clemson University employs several academic advising models. All five colleges within the university have a slightly different model of advising but each with the same expectations as outline in the 2008-2009 Undergraduate Announcements: *CLASSWORK: Academic Advising*

Each student is assigned an academic advisor in his/her major area. It is the responsibility of the student to consult with the advisor during registration. The advisor will assist the student in scheduling courses so as to fulfill the requirements of the degree program; nevertheless, it is the responsibility of the student to fulfill the relevant requirements of the degree. Advisors also maintain files on individual advisees to assist in academic planning.

The College of Agriculture, Forestry and Life Sciences (CAFLS) has a mixed model of advising. CAFLS has a student services center that provides academic advising to undeclared students within the college, as well as college-specific career and alumni services for all students within the college. All other majors within the college are advised primarily by faculty advisors, except for the

department of Animal and Veterinary Science which has a professional advisor to advise freshmen in the major.

The College of Architecture, Arts and Humanities (AAH) also has a mixed model of advising. This college has an advisement center that provides academic advising for undeclared students in the college. All other students in the college are advised by the faculty in their majors.

The College of Business and Behavioral Sciences (BBS), with the exception of students majoring in Graphic Communications, has a “shared/split” model of academic advising. First-year and transfer students in Pre-business and Behavioral Sciences are advised in the college’s academic advising center. After successfully completing 45 hours, upper class students in BBS are advised by faculty members within their major department. All Graphic Communication students are advised by faculty in their major.

The College of Engineering and Science (ES) has a hybrid model of academic advising; it employs the “total intake” model for engineering students and “faculty-only” model for science students. First-year and transfer students majoring in engineering are advised in the General Engineering Advising Center. Upper class students in engineering and all students in the science majors are advised by faculty members in their academic major.

Finally, the College of Health, Education and Human Development (HEHD) has a “total intake” advising model. First-year and second-year students are advised in the HEHD advising center and all upper class students are advised by faculty in their academic major.

There are other units at Clemson University that provide supplemental advising for special population students; however, they are not considered a substitute for the academic advising provided by the college advising centers’ staff or departmental faculty advisors. All freshmen have a Freshman Academic Success Program (FASP) advisor related to their major (coordinated by Undergraduate Studies) to assist them in making the transition to college during their first year. The Early Success Program (ESP) students receive special advising assistance and academic support through Undergraduate Studies. Honors students receive supplemental advising and mentoring from the staff in the Calhoun College Honors Program. Finally, student-athletes receive additional advising and academic assistance from the athletic academic support staff in Vickery Hall.

Assessment of academic advising is a very complex task due to its structure and implementation. Several intentional activities have been implemented to enhance student success; many include direct or indirect advising of students. This report will describe the efforts that have and continue to be made to strengthen academic, professional, or personal advising of Clemson University students.

*“Good advising may be the single most underestimated characteristic of a successful college experience.”* Richard Light, 2001

### **Benefits of Good Advising**

- Appropriate course selection and referrals
- Increased academic performance (GPA)
- Increased satisfaction with faculty and in general
- Reduced courses failed and drop-add transactions
- Increased persistence rates
- Increased graduation rates
- Reduced time to graduate
- Increased graduate/pre-professional school admission rates

NACADA, 2000

### **ADVISING AND ASSESSMENT PRACTICES**

The WEAVEonline electronic assessment system provides a search mechanism to find selected words or phrases. In applying this feature with “Advising”, there were 25 programs in the 2006-2007 Assessment cycle in the Objectives whereas there are 33 programs having the same word in the Findings. This indicates that the data suggest a focus on advising practices. There are 28 2007-2008 Measures using Advising. The following displays the number of “hits” for each element in the two assessment cycles.

#### WEAVEonline: References to “Advising”

Element	2006-2007 # times used	2007-2008 # times used
Objective	25	25
Measure	29	28
Finding	33	N/A
Action	28	N/A
Annual Report	21	N/A

In examining the 2006 - 2007 Assessment Reports regarding the proposed Actions to be taken associated with advising, very broad issues were identified including faculty and staff workload or number of advisees, communications, student satisfaction with advising, focus of advising topics (ie. prerequisites), and students with an undeclared major. The following examples include graduate and undergraduate programs, departments, and special program areas.

English, B.A.

Focused and Improved Advising Efforts: During the 2007-8 advising period, the administrative assistant will advise first-year undergraduate students in attempt to reduce the number of advisees for faculty members and to form a closer connection with first-year students. The faculty members will focus on upper-classmen and helping to guide their selection of courses through the curriculum that will benefit the students from their sophomore year to graduation. Advising workshops will be given to all advisors prior to the

beginning of advising and the importance of making themselves available for the students to consult with about courses and future career goals.

#### Department of Public Health Sciences

Continue to address faculty workload: Continue to address faculty workload related to teaching and advising. This requires "right-sizing" the undergraduate program to assure that faculty teaching loads, class sizes and advising loads maintain excellence, monitoring and adjusting faculty research buyouts to assure equity and also seeking resources to permit the department to maintain a higher number of undergraduate majors while building a doctoral program.

#### Professional Communication, M.A.

Redouble advising efforts: During 2006-7, the director of the program was on maternity leave in the spring semester. As a result, some of the planned program-wide advising meetings were not held and some of the messages usually sent to students to remind them of graduation deadlines were not sent. These actions will be restarted in 2007-8.

#### Production Studies in Performing Arts, B.A.

To better advising: Work to better advising in a department that expects at least 75% satisfaction and only had 43% last year.

#### Management, B.S.

Prerequisites enforcing: Students register to courses before completing prerequisites. Advising needs to be improved.

#### Calhoun College Honors Program

Monitor probation: Monitor students on probation and increase advising, as appropriate

#### General Engineering

Academic Advising: Using information from 06-07 a detailed review of the advising program has begun. Since one advisor left the office in 07, no one has replaced this person. This opportunity allowed the department to re-evaluate the job assignments of all 3 advisors. A second action is the request for an additional advisor. The advising load for 3 individuals is much higher than the national average (we actually need 5 advisors to satisfy this).

#### Office of Student Relations & Recruitment

Undeclared Advising: Academic Advisor will continue to track undeclared students standing. Academic advisor will participate in University advising committees and keep CAFLS Advisors informed of all current information.

#### **ADVISING: PROGRAM REVIEW**

In the program review of Wildlife and Fisheries Biology, BS, the general findings reported for academic and career advising practices were:

Advising was generally good, but was not consistent among advisors. Students and faculty suggested that in some instances the advising seemed superficial. Several students stated that they had switched advisors two or three times, implying that a lack of consistency exists.



Several students preferred to go to xxx (CAFLS Dean's office) for advising, which suggests that some students aren't getting their needs met by the department. A few faculty were singled out as very good advisors (sss and sss), but the overall structure and quality of advising needs improvement.

Based on these findings the following recommendation was made

7. Improve student advising:
  - a. Look at creating an undergraduate student manual for presenting advising and career information. This manual should include requirements of certification, how to locate internships, and information on faculty interests and research.
  - b. Create a more formal and structured academic advising (potentially implement a workshop to standardize the advising philosophy and structure).
  - c. Increase the dissemination of information about professional society certification requirements.
  - d. Ensure that students understand the importance of a master's program for many careers.

**SURVEY INFORMATION ABOUT ADVISING**

*CHE Advising Survey of Students, 2007*

Undergraduate students participating in the 2007 SSI were given the brief CHE Advising Survey to complete. The students were randomly selected to represent the distribution of undergraduates by college and by class rank. There were approximately 2100 students in the sample. The freshman cohort is a bit underrepresented and the seniors, overrepresented. The following two tables show the frequency by class standing and by college of those in the sample.

CHE Advising Survey: Class Standing

		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	Freshman	303	14.7	14.8	14.8
	Sophomore	507	24.7	24.7	39.5
	Junior	621	30.2	30.3	69.8
	Senior	620	30.2	30.2	100.0
	Total	2051	99.8	100.0	
Missing	System	4	.2		
Total		2055	100.0		

CHE Advising Survey: College Affiliation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agriculture, Forestry, and Life Sciences	387	18.8	18.9	18.9
	Architecture, Arts and Humanities	254	12.4	12.4	31.3
	Business and Behavioral Science	718	34.9	35.1	66.4
	Engineering and Science	360	17.5	17.6	83.9
	Health, Education and Human Development	329	16.0	16.1	100.0
	Total	2048	99.7	100.0	
Missing	System	7	.3		
Total		2055	100.0		

The total response by students to their level of satisfaction to the question: “Please indicate your satisfaction with the availability of your academic advisor by circling one response from the scale below. (In selecting your rating, consider the advisor's availability via office hours, appointments, etc.)”. The mean scores for Class Standing are similar as are those for College Affiliation with the exception of Architecture, Arts, and Humanities. The lower score for this college should be examined further.

CHE Advising Survey: Class Standing Descriptive Statistics

Class Standing	N	Minimum	Maximum	Mean	Std. Deviation
Unknown.	3	2.0	4.0	3.000	1.0000
Freshman	289	1.0	4.0	3.104	.7474
Sophomore	497	1.0	4.0	3.089	.7595
Junior	602	1.0	4.0	3.103	.7757
Senior	614	1.0	4.0	3.153	.7911

CHE Advising Survey: College Affiliation Descriptive Statistics

College Affiliation	N	Minimum	Maximum	Mean	Std. Deviation
Unknown.	5	2.0	4.0	3.000	.7071
Agriculture, Forestry, and Life Sciences	381	1.0	4.0	3.318	.7373
Architecture, Arts and Humanities	244	1.0	4.0	2.992	.8063
Business and Behavioral Science	704	1.0	4.0	3.054	.7820
Engineering and Science	352	1.0	4.0	3.017	.7915
Health, Education and Human Development	319	1.0	4.0	3.210	.6889

A cross tabulation of scores by class standing by college allows further examination of response patterns.

CHE Advising Survey: Crosstabulation

College Affiliation			Very			Very	
			Dissatis	Dissatis	Satis	Satis	Total
<b>Unknown.</b>	Class	Fresh.		1	2	0	3
		Sr.		0	1	1	2
	Total			1	3	1	5
<b>Agriculture, Forestry, and Life Sciences</b>	Class	Fresh.	0	1	13	12	26
		Soph.	4	7	58	56	125
		Jr.	3	13	55	47	118
		Sr.	3	11	40	57	111
	Total			10	32	166	172
<b>Architecture, Arts and Humanities</b>	Class	Fresh.	2	11	29	10	52
		Soph.	5	9	36	11	61
		Jr.	4	5	26	15	50
		Sr.	2	15	33	29	79
	Total			13	40	124	65
<b>Business and Behavioral Science</b>	Class	Fresh.	8	10	44	22	84
		Soph.	9	18	86	35	148
		Jr.	7	36	123	60	226
		Sr.	7	40	112	87	246
	Total			31	104	365	204
<b>Engineering and Science</b>	Class	Fresh.	2	7	50	16	75
		Soph.	2	12	40	17	71
		Jr.	8	12	49	29	98
		Sr.	8	16	53	31	108
	Total			20	47	192	93
<b>Health, Education and Human Development</b>	Class	Fresh.	0	1	23	25	49
		Soph.	3	8	56	25	92
		Jr.	3	12	56	39	110
		Sr.	0	10	37	21	68
	Total			6	31	172	110

In addition to marking the scale, a few students provided written comments on the survey. The comments are in the following table.

### CHE Advising Survey: Comments

College	Class Standing	Satisfaction	Comment
AAH	Senior	Very Satisfied	I picked a new advisor to speak with rather than the one I was assigned.
<b>BBS</b>	Freshman	Satisfied	Wish they could be more useful. I felt my meeting with him as very rushed.
	Sophomore	Very Dissatisfied	I don't even know who my advisor is. It changed twice last year, and I never get emails. I just show up for class sign-ups and never hear anything else. But all of my other advisors have been
	Junior	Satisfied	TERRIBLE! This has been my only good one.
	Senior	Neutral	Neutral
	Senior	Satisfied	You should have a mid-point on a scale like this. Learned this in my Quantitative Methods course.
ES	Senior	Very Dissatisfied	Advisors are nothing more than teachers arbitrarily assigned the position. They have no training in the area and do not know the curriculum. I have done and can do everything they are supposed to do better and more efficiently than them.
	Senior	Dissatisfied	Most advisors do not know what they are talking about, and do not have knowledge of required courses to graduate (except L. C.).

#### *Non-Returning Student Survey*

Social engagement to enhance student retention, persistence, and graduation has become a theoretical focus for both inside and outside of the classroom. Being engaged while at Clemson and feeling a part of the university are considered to be important factors in satisfaction. The Non-Returning Student Survey asked students to report the extent to which they believed that they made social connections and felt a part of the University. Second year students and in-state students reported being more socially connected; although, both groups were in strong agreement with the statements as seen in items 14 a, b, and c in the table below. First year students as well as in-state were less likely to speak with faculty outside of the class room or attend group study, Supplemental Instruction, or tutoring sessions. The students reported that they attended classes between sometimes and often (4 point scale with 4=Often). (Items 15 a, b, c). Based on the mean scores, it is evident that students feel connected to Clemson.

#### Non-Returning Student Survey: Connections

	1 <sup>st</sup> Yr	2 <sup>nd</sup> Yr	In-state	Out-of-state
14.a. I made social connections while at Clemson University	3.24	3.70	3.44	3.29
14.b. The social connections I made while at Clemson University included people with similar values.	3.14	3.50	3.33	3.14

14.c. The social connections I made while at Clemson University were an adequate support system.	3.07	3.40	3.06	3.24
15.a. How often did you speak with faculty outside of the classroom?	2.83	3.00	2.67	3.05
15.b. How often did you attend group study sessions, SI, tutoring, etc?	2.68	2.70	2.59	2.76
15.c. How often did you attend classes?	3.89	3.70	3.94	3.76

When asked in the Non-Returning Student Survey how important were selected factors in influencing their decision not to return to Clemson, several items related to social engagement. There were no items with a mean score about 2 based on the scale 1=Not at all, 2=A Little, 3=Somewhat, and 4=Very. This indicates that there were other factors that influenced their decision not to return. These findings underscore the belief that students were connected to Clemson.

#### Non-Returning Student Survey: Factors influencing returning to Clemson

	1st Yr	2nd Yr	In-state	Out-of-state
16.e. Did not get along with roommate	1.55	1.10	1.39	1.48
16.f. Difficulties with my significant other	1.41	1.10	1.06	1.57
16.g. Lack of social/recreation opportunities	1.62	1.00	1.39	1.52
16.h. Did not get desired on-campus housing	1.17	1.00	1.24	1.05
16.i. Didn't get a bid from a fraternity or sorority that I wanted	1.10	1.00	1.17	1.00
16.j. Faculty did not take a personal interest in my success	1.62	1.00	1.39	1.52
16.k. Did not feel that Clemson cared about me	1.93	1.60	1.78	1.90

#### *Student Satisfaction Survey*

The Student Satisfaction Inventory was administered to 2,158 undergraduate students during selected classes in April 2007. The classes were selected to create a representative sample of the undergraduate student body. Students were asked to respond to the importance items on a “1-not important at all to a 7-very important” scale. Students were asked to respond to the satisfaction items on a “1-not satisfied at all to a 7-very satisfied” scale.

The SSI Academic Advising scale continues to show a large gap between the level of importance and the level of satisfaction in advising. Advisor characteristics such as approachability, concern, helpfulness and knowledgeable continue to have a greater than 1 difference indicating that students have a higher level of importance than satisfaction with their advisors. The items related to advisors knowledge about the requirements in the major and that the major requirements are clear and reasonable have a very small decline in the mean difference in satisfaction but there continues to be greater than 1 difference between importance and satisfaction.

### SSI: Advising Scale Data

Scale/Item	2005 All Clemson Importance Rating	2005 All Clemson Satisfaction Rating	2007 All Clemson Importance Rating	2007 All Clemson Satisfaction Rating	Satisfaction Mean Difference of 2007 vs 2005
<b>Academic Advising Scale</b>	6.25	5.12	6.25	5.11	-0.01
6. My academic advisor is approachable.	6.35	5.42	6.35	5.40	-0.02
14. My academic advisor is concerned about my success as an individual.	6.18	4.96	6.19	5.01	0.05
19. My academic advisor helps me set goals to work toward.	5.82	4.50	5.82	4.53	0.03
33. My academic advisor is knowledgeable about requirements in my major.	6.52	5.39	6.53	5.37	-0.02
55. Major requirements are clear and reasonable.	6.38	5.32	6.35	5.25	-0.07

#### NSSE

When students responded to the NSSE item evaluating their academic advising, the seniors rated the experience between fair and good. It must be noted that the mean score for the seniors has gone up from 2005 as has that of the freshmen as seen in the following table.

#### NSSE: Academic Advising

<i>1=poor, 2=fair, 3=good, 4=excellent</i>	Yr.	2005	2007
Overall, how would you evaluate the quality of academic advising you have received at your institution?	FY	3.11	3.12
	SR	2.71	2.91

#### ADVISING HANDBOOK

Undergraduate Studies of Clemson University has developed an extensive handbook for advising practices. Included in the handbook are practical approaches to advising, educational needs or tasks for each class level, FERPA guidelines and other very useful tools. Several of these documents are included at the end of this report as a demonstration of the quality of the handbook.

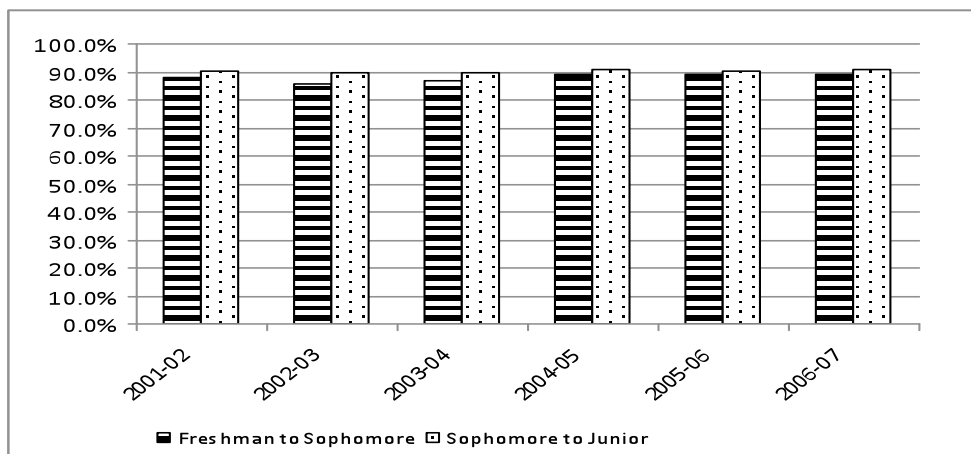
#### 2007-2008 STUDENT SUCCESS AND STUDENT SUPPORT

Retention, persistence, and graduation rates as well as emotional and social well-being are integrated in the concerns of advising. Whether advising for academic or career purposes, students seek advice and guidance for many reasons. Students may elect or be required to seek counsel; however, the desired outcome is always the same: to enhance student success. Indicators of student success are not only grades. During fall 2007, an intensive analysis of native student persistence from freshman year to second year and from second year to third year was initiated in attempts to answer several questions regarding the relationship between academic achievement and academic support. The

analysis was designed to incorporate graduation of students in terms of academic performance and persistence. In addition to the data from cohorts of first-time, full-time students, survey data were incorporated to augment these analyses. These additional data provide an examination of policies and practices to enhance student performance through programs and services that the University can provide to assist students in their success.

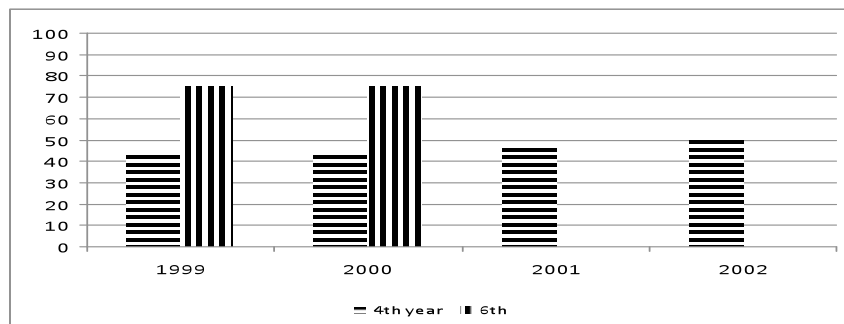
Attracting and retaining undergraduate students continues to be a focus for the institution. Since FY 2003-04, Clemson has improved the undergraduate retention freshman to sophomore rate that had been declining. Over 90 % of the sophomores continue as juniors as shown in the following chart, Freshman to Sophomore and Sophomore to Junior Retention.

Freshman to Sophomore and Sophomore to Junior Retention



In addition to the study of retention rates, the University is examining the graduation rates of first time full time students. The progression of students through their course work culminates in graduation. Effective and efficient practices may assist students to achieve graduation in a timely manner. Clemson values the importance of monitoring time to graduation and will use the findings from the on-going analysis with the desire to improve graduation rates.

Graduation Rates



Clemson University administers self-report surveys of students. From these surveys, comparisons of importance, satisfaction, intentions, use of time, engagement and other dimensions can be made to

prior cohorts of Clemson students or selected peers. These results provide greater insight into the choices and behaviors of students as they matriculate through Clemson. The student feedback on the quality / usefulness of student services such as advising assists the university, departments, and programs in improving the services.

Clemson University student development programs and services are designed to be responsive to the needs of the student; aiding the student in adjusting to the educational and diverse cultural and social awareness choices of campus life. By design, this empowers the student with a smooth transition from college student to adulthood, departing Clemson with the requisite skills for achievement and success in both career and personal life. The delivery of these programs and services is within both the Division of Academic Affairs and the Division of Student Affairs.

Current programs and services offered at Clemson are based on 2007 institutional goals. The following table displays the goals and those programs, services, or activities that support the goal. For all of the programs and services, there are staff or faculty members available to advise students in academic, personal, professional/career endeavors.

#### Some Student Support Programs and Services with Advising Elements

Goals	Services and Programs
Attracted the best and the brightest students	Strong recruiting programs Helpful and accurate admissions counseling Assist in providing access to financial resources
Encouraged academic advising	Within Colleges Academic Success Center
Established transitional programs and services	New (Freshman and Transfer) Student Experience International Services Freshman Summer Reading Early Success Program Bridge Program CU 101 Academic Outreach Programs Transfer Transition and Success Services First-Year Experience Program



Provided living environment integrating social and academic needs	BRIDGE Early Success Program (ESP) FIRST Program Civics and Service House First Year Experience (FYE) Honors College Housing RISE Professional Golf Management (PGM) Women in Animal and Veterinary Science (WAVS) Air Force ROTC Clemson Business Experience TIGER Den Fraternity and Sorority Housing Cultural Exchange Community
Supported special programs or courses	Diversity Education Honor's Program National Scholars Program Student Athlete Enrichment Programs Student Involvement (Campus Ministers to Students, Community Service, Leadership Education, Student Activities, Student Events, and University Awards)
Promoted learning assistance	Academic Success Center Workshops and seminars Tutoring Supplemental Instruction Disability services Probation Program
Encouraged career enhancement	Student Professional Organizations ROTC Cooperative Education Michelin Career Center
Provided physical, mental, social, and emotional well-being programs and services	Diversity Program Student Orientation Redfern Health Center, Hendrix Student Center, McKissick Theater, EMpower, Fike Recreation Center and Swann Fitness Center

The initial study was an extensive examination of student groups. Those selected to be included in this report have programs or service in place to support students. Other groups may need additional support. The critical effort is to identify students who may not succeed and provide advising, counseling, and mentoring when feasible. The following discussion centers on areas or population groups that were examined in terms of retention, persistence, or graduation rates. When possible, programs and services related to the cohort are described. Those that are incorporated into this summary are

- Eligible but fail to re-enroll
- Legacy and first generation students
- Finances
- Enrollment patterns

- Class size and faculty-student ratio
- DWF rate and faculty response to student performance
- Change of majors
- Foundation courses
- Selected programs
- Housing location and types
- Other

It is the intention of Clemson to review these measures and take the next crucial steps to examine the current support of its students. Since the initial study, many changes have been made in programs; however, not all changes have been submitted to the office of Assessment and, therefore, are not recorded herein. It is the intention of Clemson to undertake a similar analysis every other year to monitor progress and ‘close the loop’ by recording how on-going evaluation contributes to student success.

### **Eligible but Fail to Re-enroll**

In order to determine the impact of student persistence on graduation rates, Clemson identified those students who were academically *eligible to enroll* (in good standing) and did not re-enroll in Fall 2007. Of the students who did not re-enroll, it was important to know if they enrolled in *another college*. The discovery is that 91.4 % of the Fall 2005 First-Time, Full-Time Freshmen students who were academically eligible (in good standing) to enroll Fall 2007 and did not do so, attended another institution. SC students tend to re-enroll in SC and non-SC students attend schools in their home states (36 % of the in-state students eligible to reenroll attend USC). 74.4 % of the students on Academic Probation continued at another institution.

It is evident that the choices students make is reflected in the survey data from the EBI, SSI, and NSSE with the greater number of students being satisfied with Clemson and would re-enroll here again than those not. Based on a survey of eligible but non-returning students, of those who failed to re-enroll, the most positive mean scores for all responding students were being happy with a roommate, Social Issues and Engagement in Academic Support. The least positive scores regarded finances and sense of belonging. Both finances and sense of belonging are not generally incorporated in academic advising but are addressed through other services and programs.

### *Academic probation*

There are some students who are placed on academic probation. The graduation rate of students never on academic probation (82.3 %) was significantly higher than those on academic probation at any time (47.5 %). Graduation rate of students never suspended for any reason (79.6 %) was significantly higher than those who were suspended one or more times (11.4 %). Neither of these two findings are surprising; however, the role of the university to advise students on probation or suspension is growing.

Clemson University implemented a program to assist freshmen students on academic probation after their first semester. Specific interventions and support are available to these students including a series of optional workshops and seminars sponsored by Undergraduate Studies and the Academic Success Center. For the past 3 years, the percentage of freshmen on academic probation at the end of the fall semester has been approximately 10-11 %. Adjustments to the program will include

monitoring the on-going academic progress of the students who participate in the Probation Program.

To help students succeed in not being placed on academic probation, the Early Success Program (<http://www.clemson.edu/ugs/esp/index.php>) is open to students who enter Clemson with a predicted GPA in the lower quadrant of the entering students. 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 a foundational program geared at easing the transition from high school to college.

To help Freshmen students know their course standing during their first semester at Clemson, the Freshman Academic Progress Program was instituted. Clemson University's academic calendar has a selected date by which instructors are asked to provide mid-term evaluations to students. The goal of this program is to alert freshmen if they are not succeeding in the class. For the Freshman Academic Progress Program conducted Fall 2007, 38.5 % of the classes enrolling at least one freshman reported mid-term feedback to their students, an increase over the 2006 rate of 36 %.

Additionally, to reduce the impact of transitioning to Clemson from another higher educational institution, the Transfer Transition and Success Services is designed specifically for these students. (<http://www.clemson.edu/futurestudents/transferaccepted.html>). There is a Transfer Orientation Program provides those students entering Clemson to transition with ease. Another program, the *Bridge Program* (<http://www.clemson.edu/admission/bridge/>), is designed for a select group of academically talented freshmen. The Bridge to Clemson University program is a competitive academic-enhancement transfer program available by invitation only. The Bridge program includes targeted advising, academic support and residential life to provide a seamless transition to Clemson upon successful completion of academic requirements.

### **Legacy and First Generation Students**

In trying to identify cohorts of students who may have difficulty in succeeding at Clemson, two groups were examined. The question was whether or not legacy students and first generation students persist at the same rate at non-legacy and those who are not first generation.

Persistence rates were analyzed for legacy students (family member graduated or now attending Clemson) and first generation college students to determine if they persist at a higher rate than other students. First generation students were identified through answers to questions in the Free Application for Federal Student Aid (FAFSA). Students were asked about the education level of each parent, and eligible responses were less than high school, high school, college, or unknown. If one parent was reported as having some college, the student was not considered first generation. Students who either answered the question as unknown for both parents, or who did not answer the question at all, were considered unknown. It should be noted that every student does not complete the FAFSA; therefore, for almost 800 students, the parents' education level is unknown.

Because legacy students, by definition, cannot be first generation students, these two variables were combined for analysis. Legacy categories identified included parent, grandparent, and sibling who attended Clemson. In cases where a student reported a sibling legacy, but qualified as a first generation college student, they were counted as a first generation student. There were some cases

where the student did not answer questions about the parent's education level, but reported themselves as a parental legacy. Those were included in the group "Some College – Legacy".

The persistence rates vary with the highest rate being legacy (94 %), overall students (88 %), and first generation (81 %). In actual first year performance when comparing predicted GPA to the actual GPA, the relationship between predicted GPA and actual GPA varied by student types. For students with parents who had some college and legacy students, their first-year GPA was within 0.05 of a point to their predicted GPA. However, the students who reported their parents had no college education, their first-year GPA was 7.6 % less than the predicted GPA. It was noted that all student groups had a predicted GPA of greater than 3.0.

University-wide programs targeted to assisting first generation college students should be considered; however, it is not clear from the analysis what the focus of these programs should be. Further work needs to be undertaken to know if academic, transitional, social, developmental, or other program is need for students. Furthermore, assisting parents to understand the college environment may also be useful.

The FIRST Program assists first-generation college students in reaching their career goals in science, technology, engineering or mathematics (STEM) majors. (First-generation college students, as defined by this program, are students whose parents do not hold a degree from a four-year college or university. Parents may have attended a two-year technical or junior college or attended a four-year college but did not graduate.) Eligible students are freshmen and new transfer students who are entering majors in the University's College of Agriculture, Forestry and Life Sciences (CAFLS) and in the College of Engineering and Science (CES).

FIRST provides programs and services that help student succeed as a CAFLS or CES student. These include

- Daily study halls
- Free tutoring
- Study-skills and time-management workshops
- Test bank
- Undergraduate research internships
- Workshops for college success
- Guest speakers from science and technology
- Career exploration opportunities
- Off-campus excursions
- FIRST In Line electronic newsletter
- Announcements on campus activities
- A new student lounge
- Social activities

Mentoring provides a great opportunity to learn from older students who have had similar experiences. FIRST participants are paired with a thriving upper class mentor in the same field of study. Mentors are also students who are the first in their family to obtain a bachelor's degree.

Mentors meet weekly with the students to give support, encouragement and advice about the Clemson experience. The FIRST Program is designed to assist students throughout their undergraduate career. In addition to receiving academic support and participating in a social network, FIRST students can engage in summer research and service learning opportunities by working with the SCDNA Learning Center and SC LIFE. These activities enhance their academic and work experiences.

As estimated by the Director of Admission, the number of first time freshmen students who are first generation as defined by the FIRST program is, by College: *CAFLS – 66; CAAH – 39; CBBS – 50; CES – 117; and CHEHD – 41*. Based on these numbers, it is evident that support for these students is needed in the other three colleges.

The education level of parents of Clemson students is self-reported in the (NSSE). The NSSE does not inquire whether the student is a legacy student at the institution; however, if a student is not a first generation college student, one or both of the parents attended/graduated from college. The data is not clear if “both” parents did or did not attend. Clemson students report at a greater rate that one or both of the parents attended college than did not. This confirms the FAFSA data that more students had a parent attend college.

Four of the students responding to the Non-Returning Student Survey indicated that their parents did not attend college. Those four were in the cohort not returning between their first and second year. There were no second to third year first generation students completing the survey. A lack of money to finance education was very important in the decision of three first generation students in not returning (two were in-state students and one was from out-of-state.). Keeping scholarships affected the decisions not to return of one in-state and one out-of-state student. Although this very small number cannot be used to draw conclusions that are statistically significant, it can provide an opportunity for further analysis. For instance, including questions such as:

1. Since the most vulnerable time for first generation students between the first and second year rather than second to third year, what sort of assistance can Clemson provide (academic, transitional, social, and developmental)?
2. Since all first generation college students lost scholarships (according to the survey), is there a relationship between scholarship retention, academic engagement, and predicated GPA?
3. How does social engagement, difficulties with significant others, and lack of motivation interrelate and impact persistence?
4. What role can Clemson play in assisting parents in learning about the college environment and academic expectations?

## **Finances**

### *Financial aid*

Academic advising frequently includes addressing the other issues that students have that may affect their ability to perform well in their schoolwork. One of the factors that students seem to struggle with is financial resources. The question about persistence rates for students with varying levels of family financial resources was examined along with persistence by in and out-of-state students. It was found that students with lower income persist at a lower rate, receive more grant aid than those students with higher income, and have a lower average predicted GPA. The students with grant aid

persist at a lower rate than those without grant aid and have a lower predicted GPA. In-state students have higher predicted average GPA. In-state students receiving grant aid persist at a lower rate (83 %) than those in-state students not receiving grant aid (91 %). Based on the survey responses, non-returning students stated that “Lack of money to finance education” was important in their decision not to return to Clemson. In-state students noted “Adequate finance support was available but the budget was too tight.”

Using the FAFSA data, one can determine financial need. Only, those families seeking financial aid will complete the FAFSA form; therefore, those seeking financial aid or scholarships will have FAFSA data available. Of the Fall 2005 cohort, roughly 54 % (1,564 of 2,903 students) completed the form. Those seeking some merit-based awards may file a FAFSA form regardless of family financial disposition. Those who do not complete the form may or may not have financial difficulties. However, although the FAFSA data are not perfect for analyzing financial need, they are the best available.

The percentage of students who persisted from Fall 2005 to Fall 2006 is greater for those with higher family income than those with a lower income. Based on a logistic regression algorithm, the breakpoint in predicting persistence based on income levels is \$57,280. For those students who had no income data, their persistence rate was between the higher and lower income groups. It must be noted that there is a significantly smaller persistence rate for those with family income below \$57,280

It is possible that grant aid could control for any bias in FAFSA filers versus non-filers when using income as an indicator. It is unlikely that non-FAFSA filers would receive any grant aid. Students qualifying for grant aid could be considered those with more financial need. This field considers family size and other circumstances that are not included when examining only income.

Students with less available financial resources (those being grant aid recipients) persist at a remarkably lower rate than those without aid. At the same time, grant aid recipients are not as academically prepared using the predicted GPA average. A regression analysis that includes both predicted GPA and the grant aid status shows that grant aid is still a significant variable. This analysis indicates that financial need appears to be an important factor in persistence independent of other variables.

#### *Residential status and financial need*

Residential status may factor into financial need and influence persistence. In-state students are a higher number of grant aid recipients than out-of-state students are. The in-state students persist at a slightly higher rate than out-of-state students and hold a higher average predicted GPA. The difference between persistence rates for in-state students (89.5 %) and out-of-state students (87.3 %) is not significantly different according to a Chi-square analysis.

South Carolina students with apparent greater financial need are less likely to persist than those who do not have the same need (as defined by receiving grant aid). Those students without grant aid have a higher average predicted GPA and persist at a greater rate than those with grant aid.

It is a positive note that students who do not persist at Clemson do continue in another higher educational institution. Of the 46 in-state students on grant aid who did not persist, 58.6 % were enrolled elsewhere: Greenville Technical College (5), USC (4), Midlands Technical College (2); Tri-County Technical College (2); and Horry-Georgetown Technical College (2). The other 12 students were enrolled at two and four year institutions throughout the state. This may be a question of the students need to have stronger or different advising about financial need and impacts resulting from that need prior to entering Clemson rather than once enrolled.

The Non-Returning Student Survey asked students to indicate how important selected areas in their decision to leave Clemson were. In the area of Financial Concerns, the 4-point scale ranged from 1=Not at All to 4=Very. The mean score for their not retaining a scholarship was 1.61 with the first year students rating this 1.54 and the second year, 1.80. The mean score for in-state students (1.94) was higher than that of the out-of-state students (1.30).

#### Non-Returning Student Survey: Financial Concerns

	1st year	2nd year	In-state	Out-of-state
16.a. Did not retain scholarship(s)	1.54	1.80	1.94	1.30
16.b. Lack of money to finance education	1.55	1.90	1.89	1.43
16.c. Adequate financial support but budget too tight	1.45	1.40	1.56	1.33
16.d. Work conflicts	1.03	1.00	1.06	1.00

The scores for the lack of money to finance the education was a similar distribution between in- and out-of-state as well as first and second year students. The overall mean for this impact was 1.64, the highest of the choices regarding Financial Concerns. The frequency distribution for the out-of-state students was “not at all” (18) and “very” (3). This indicates that the importance of this factor is clearly an indicator to out-of-state students who have financial difficulties. The in-state students noted that there were adequate funds but the budget was too tight as one of the higher reasons.

Work conflicts appear to be the least reason for not continuing at Clemson with only one second-year, out-of-state student working full-time who reported “not at all” a factor. This is not surprising based on the NSSE scores. The NSSE survey asked students to indicate their use of time in working for pay on campus and off campus. Working for pay on campus, the freshmen mean score was 1.36 which was between 1=No hours and 2= 1-5 hours. For time working off campus, the freshmen score was 1.45. For both of these items, Clemson freshmen work statistically significantly fewer hours than Selected Peers, Carnegie Peers and NSSE.

#### *Scholarships and grants*

Further analysis to determine if there is a difference in graduation rates of those students with LIFE scholarships and Palmetto scholarships and those without scholarships. The number of undergraduate students at Clemson who retain their LIFE scholarship has increased continuously over 3 years. In the past year over 100 additional students retained their scholarship. The Fall 2000 cohort contained 1,253 students who entered with the LIFE Scholarship. Forty-six percent of the students retained the LIFE scholarship to their second year. Students who retained the LIFE

scholarship had a six-year graduation rate of 93.8 %, while students who lost the LIFE scholarship by their second year had a 58.5 % graduation rate.

Eighty-two students, who did not have the LIFE scholarship when they entered the university, yet they earned the scholarship by the start of their second year. These students had a 98.8 % six-year graduation rate. Students who enter with a LIFE or Palmetto Fellows Scholarship graduate at a higher rate than those who do not enter with a scholarship (except those who earned a LIFE scholarship their first year). These results indicate that scholarship retention influences graduation rates and must be carefully monitored. Furthermore, effort and resources should be expended to assist in-state students who enter without a state scholarship to earn a scholarship. Some SC students enter without a state scholarship and do not earn a state scholarship for their second year. In the Fall 2000 cohort, 347 resident students entered without a state scholarship and did not earn a scholarship by their second year. These 347 students had a six-year graduation rate of 60.8 %. The ability to maintain LIFE scholarships and the retention of students continues to be monitored.

The Academic Success Center assists students with the provision of tutoring, supplemental instruction, workshops and seminars, and disability services for those who qualify and seek accommodations. (<http://www.clemson.edu/asc/>)

The Fall 2000 first-time freshmen cohort consisted of 3,033 students of whom 298 entered with the Palmetto Fellows Scholarship. 255 or 85.6 % retained the scholarship to their sophomore year. The graduation rate of those who retained their scholarship from first to second year is 95.3 % compared to the 55.8 % who did not retain the scholarship.

The Non-Returning Student Survey asked how important was not retaining a scholarship in their decision not to return to Clemson. Based on a 4-point scale (1-not at all; 4=very), the in-state students noted that this was more important than the out-of-state students. Additionally, the impact was greater on the second year students than the first. Of those first year students who did not return Fall 2007, 11 had LIFE scholarships and none were Palmetto Fellows. The second year students included 1 with LIFE scholarship and 2 with Palmetto Fellows.

The initial study did not specifically examine the success of international students. These students use International Services, (<http://www.clemson.edu/IA/IntlServices/index.htm>), which provides immigration, employment, and tax services to international students, faculty, and visitors who study or work at the university. Assistance and advising also includes immigration (visas) and employment/tax services.

### **Enrollment Patterns**

Clemson values its atmosphere of being a “family” and a part of a community. Academic advisors, tutors, and mentors try to help students make good choices for themselves regarding the courses that the student must select for their major. Students are limited to the number of course hours that can be dropped; hence, it is imperative that guidance be provided that is useful in making decisions to enroll as well as drop courses. The information must be more than knowing the regulations but include course taking patterns, personal challenges that may affect student performance, and such. Dropping courses may also affect financial aid as described in the 2008-2009 Undergraduate Announcements, the regulations state:



Each undergraduate student is allowed to withdraw or be withdrawn with a grade of W from no more than 17 hours of coursework during the entire academic career at Clemson University. Transfer students may withdraw from no more than 12 percent of the total work remaining to be done in the chosen undergraduate curriculum at the time of transfer to Clemson University up to a total of 17 hours of coursework, whichever is fewer..... Withdrawal can negatively impact financial aid eligibility if a student does not complete a sufficient number of hours.

The SSI inquires about the importance and satisfaction students have with: “Class change (drop/add) policies are reasonable.” The students’ mean score of importance (6.04) on a 7-point scale is .66 points higher than the mean score of satisfaction. This does not mean that the policies promote dropping courses but indicates that the current policies are reasonable as well as being implemented effectively.

The recent study examined the relationship between those who persist and Withdraw (W) Hours to determine if there is a threshold of Withdraw or Dropped hours that delays graduation. If persistence is affected by student interactions with faculty and perceptions of institutional or faculty caring, then the survey data from NSSE, SSI, and Non-Returning Students indicate that there are opportunities for improvement.

The number of withdrawal hours in the first year was analyzed for the fall 2005 cohort. There were only 79 students who had withdrawal hours in their first year. Of those, 34.2 % (27) did not return fall 2006. These numbers are too small to generate conclusions about W rates and first year persistence. Withdrawal hours are not available in the fall 2000 cohort database, and were not closely tracked then. This issue can be reviewed in future cohorts as they are developed.

### **Class Size and Faculty-Student Ratio**

#### *Class Size*

Another element that contributes to this sense of caring as well as being able to provide more interaction between faculty and students is the size of a class. Clemson continues to make improvements in reducing the class size for undergraduate classes by increasing the percentage of all class sections with less than 20 students and reducing the percentage of all class sections with more than 50 students. Issues related to class size are linked to courses in which primarily freshmen require more intense student/faculty ratios. The number of 2006-2007 classes with over 30 % DWF rates have declined in the past two years both overall and by class size. Also, classes with high DWF rates have been targeted with supplemental instruction, and teaching methods have been evaluated.

Freshman math and English courses are two key areas where students are more successful when faculty can provide feedback. The smaller the class size, the more faculty are able to provide written work (essays, math problems, etc.). Also, smaller classes are preferred in junior and senior courses in the majors so that faculty and students within the discipline can interact. Large classes work best when there are breakout labs (sciences) or attached seminars.

Because of the importance of student-faculty interaction in contributing to learning, NSSE establishes several benchmarks; including Active and Collaborative Learning (ACL). This benchmark indicates that Clemson freshmen (as well as seniors) are statistically significantly higher than

all peer groups. The ACL Benchmark is based on the concept that “Students learn more when they are intensely involved in their education and asked to think about what they are learning in different settings. Collaborating with others in solving problems or mastering difficult material prepares students for the messy, unscripted problems they will encounter daily during and after college.”

NSSE: Active and Collaborative Learning Benchmark

		<i>Class</i>	<i>CU Mean</i>	<i>Carnegie Mean</i>	<i>Sig.</i>	<i>Effect Size</i>
Asked questions in class or contributed to class discussions.	FY	2.73	2.67		.07	
	SR	3.06	2.97	*	.10	
Made a class presentation.	FY	2.31	2.10	*	.27	
	SR	2.94	2.70	*	.28	
Worked with other students on projects <b>during class</b> .	FY	2.59	2.39	*	.24	
	SR	2.51	2.50		.02	
Worked with classmates <b>outside of class</b> to prepare class assignments-	FY	2.79	2.35	*	.50	
	SR	3.16	2.78	*	.43	
Tutored or taught other students (paid or voluntary)	FY	1.85	1.71	*	.17	
	SR	1.96	1.89		.06	
Participated in a community-based project (e.g. service learning) as part of a regular course	FY	1.68	1.53	*	.19	
	SR	1.72	1.66		.07	
Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)	FY	2.64	2.63		.01	
	SR	2.82	2.83		-.01	

The benchmark Student-Faculty Interactions is a collection of items representing “Students learn firsthand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, life-long learning.” Clemson seniors are statistically significantly higher than all peers.

NSSE: Student Faculty Interactions Benchmark

	<i>Class</i>	<i>CU Mean</i>	<i>Carnegie Mean</i>	<i>Sig.</i>	<i>Effect Size</i>
Discussed grades or assignments with an instructor.	FY	2.62	2.55		.08
	SR	2.91	2.78	*	.15
Talked about career plans with a faculty member or advisor.	FY	2.12	2.09		.03
	SR	2.53	2.35	*	.19
Discussed ideas from your readings or classes with faculty members outside of class.	FY	1.72	1.80	*	-.09
	SR	2.08	2.04		.04
Received prompt written or oral feedback from faculty on your academic performance.	FY	2.63	2.56	*	.08

	SR	2.86	2.74	*	.16
Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.).	FY	1.63	1.56		.09
	SR	1.95	1.78	*	.19
Work on a research project with a faculty member outside of course or program requirements.	FY	.05	.05		.01
	SR	.29	.19	*	.24

As seen in the items, connections with faculty and staff outside of the classroom are strong yet with opportunities for improvement. To facilitate strengthening student interaction with faculty and staff, a VP of Student Affairs and the Director of Assessment prepared several joint presentations based on NSSE. These presentations were delivered to the Department Chairs, Associate Deans, Undergraduate Curriculum Committee, Undergraduate Studies, Student Affairs VP and Division Directors, and the University Assessment Committee. All were charged with implementing new opportunities and strengthening current practices of interacting with students.

SSI examines the Instructional Effectiveness in which one item, “Faculty care about me as an individual”, has statistically significantly improved in Satisfaction between 2005 and 2007. The performance gap between the mean scores of Importance and Satisfaction remains greater than one for most of the items indicating a lower level of satisfaction.

#### SSI: Instructional Effectiveness Scale

	Spring 07	Spring07		Spring 05	Spring 05	I-S	
Scale	Import	Satis / SD	Gap	Import	Satis / SD	Gap	Mean Diff.
<i>Instructional Effectiveness</i>	6.28	5.29 / 0.85	0.99	6.32	5.25 / 0.85	1.07	0.04
3. Faculty care about me as an individual.	6.03	5.03 / 1.26	1.00	6.03	4.91 / 1.29	1.12	0.12 *
8. The content of the courses within my major is valuable.	6.53	5.41 / 1.22	1.12	6.53	5.37 / 1.25	1.16	0.04
16. The instruction in my major field is excellent.	6.54	5.42 / 1.24	1.12	6.56	5.37 / 1.26	1.19	0.05
25. Faculty are fair and unbiased in their treatment of individual students.	6.35	5.11 / 1.35	1.24	6.39	5.03 / 1.37	1.36	0.08
39. I am able to experience intellectual growth here.	6.38	5.75 / 1.13	0.63	6.41	5.72 / 1.14	0.69	0.03
41. There is a commitment to academic excellence on this campus.	6.28	5.68 / 1.17	0.60	6.33	5.62 / 1.21	0.71	0.06
47. Faculty provide timely feedback about student progress in a course.	6.33	4.85 / 1.37	1.48	6.32	4.89 / 1.39	1.43	-0.04

53. Faculty take into consideration student differences as they teach a course.	5.82	4.69 / 1.43	1.13	5.97	4.61 / 1.45	1.36	0.08
58. The quality of instruction I receive in most of my classes is excellent.	6.47	5.27 / 1.25	1.20	6.48	5.25 / 1.29	1.23	0.02
61. Adjunct faculty are competent as classroom instructors.	5.93	5.06 / 1.29	0.87	5.97	4.99 / 1.29	0.98	0.07
65. Faculty are usually available after class and during office hours.	6.26	5.64 / 1.20	0.62	6.29	5.65 / 1.17	0.64	-0.01
68. Nearly all of the faculty are knowledgeable in their field.	6.48	5.60 / 1.16	0.88	6.52	5.62 / 1.21	0.90	-0.02
69. There is a good variety of courses provided on this campus.	6.38	5.72 / 1.23	0.66	6.42	5.68 / 1.26	0.74	0.04
70. Graduate teaching assistants are competent as classroom instructors.	6.11	4.72 / 1.58	1.39	6.16	4.69 / 1.59	1.47	0.03

The Student Satisfaction Inventory contains items which comprise the Concern for the Individual scale. Faculty, academic advisor, counseling staff, and resident hall staff are highlighted. Clemson students continue, in general, to place greater importance on many of items than they are satisfied. The overall scale reflects the gap between the expectations/importance and failing to be satisfied. Changes have occurred between the 2005 and 2007 administrations. As seen in the table below, there has been a statistically significant change in satisfaction for the scale. “Faculty care about me as an individual” has also improved statistically. Clemson has room for improvement but it appears that improvement is taking place.

#### SSI: Concern for the Individual Scale

Statistically Significant Difference *	<i>Spring07</i>	<i>Spring07</i>		<i>Spring05</i>	<i>Spring05</i>		
<i>Scale</i>	<i>Import</i>	<i>Satis / SD</i>	<i>Gap</i>	<i>Import</i>	<i>Satis / SD</i>	<i>Gap</i>	<i>Mean Diff.</i>
<i>Concern for the Individual</i>	5.97	4.94 / 0.97	1.03	6.00	4.87 / 0.99	1.13	0.07*
3. Faculty care about me as an individual.	6.03	5.03 / 1.26	1.00	6.03	4.91 / 1.29	1.12	0.12*
14. My academic advisor is concerned about my success as an individual.	6.19	5.01 / 1.65	1.18	6.18	4.96 / 1.67	1.22	0.05
22. Counseling staff care about students as individuals.	5.72	4.76 / 1.23	0.96	5.81	4.73 / 1.25	1.08	0.03
25. Faculty are fair and unbiased in their treatment of individual students.	6.35	5.11 / 1.35	1.24	6.39	5.03 / 1.37	1.36	0.08
30. Residence hall staff are concerned about me as an individual.	5.25	4.66 / 1.43	0.59	5.26	4.58 / 1.44	0.68	0.08
59. This institution shows concern for students as individuals.	6.19	5.03 / 1.41	1.16	6.22	4.96 / 1.40	1.26	0.07

#### *Faculty-Student Ratio*

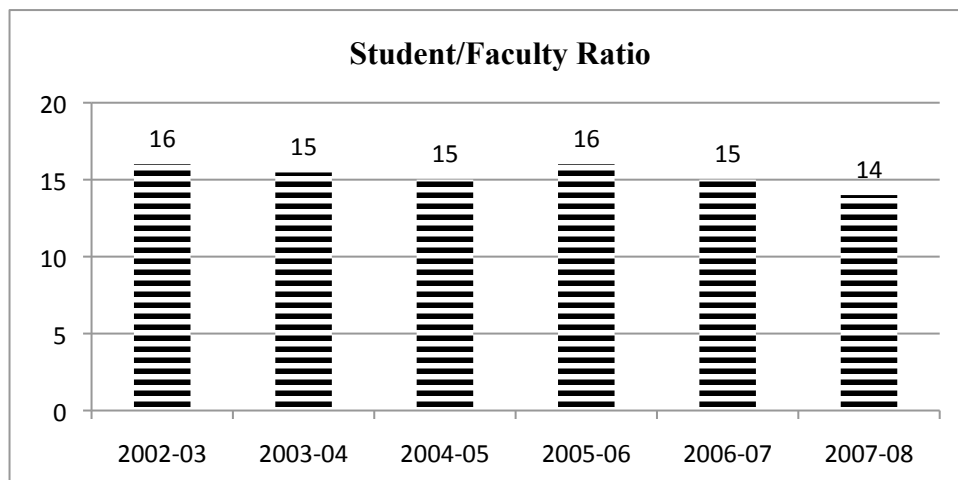
In part, student retention and graduation rates can be attributed in policy as well as practice through intentional design that enhances the opportunity for student success. Focused examination and adjustments to many factors including but not limited to faculty assignments, allocation of students

to classrooms, and purposeful changes to pedagogy have reduced the ratio of number of students to each faculty member.

It continues to be a priority of Clemson to ensure that the students are given opportunities to succeed including designing classes whose size allows greater interaction; therefore, greater opportunity to help students prior to their receiving a D, W, or F in a course. As noted in the list of recent policies and administrative decisions, efforts to have a smaller number of students to each faculty member will allow for small advising groups, especially in the junior and senior years. Faculty will be able to interact by providing academic and personal guidance more directly with the students in their courses if the ratio is lowered.

- Enhanced faculty / Student ratio
- Hired and retained quality faculty
- Reduced class size
- Reviewed and revised Undergraduate Curriculum
- Reorganized Student Affairs Division

On-going concern is the number of students in classes (discussed earlier as “Class Size”) as well as the ratio of faculty members to students, indicators of quality of the educational environment. The ratio of students to faculty members is lower than it has been in the past 4 years as clearly seen in the following chart. Clemson strives to provide a ratio of students to each faculty member that will ensure optimum opportunity for student success. The following chart displays the shift in the ratio of students to faculty members.



The NSSE freshmen report, at a significantly lower level than Carnegie peers, that they do not discuss ideas from readings or classes with faculty members outside of class. The lower engagement with faculty outside of class is consistent with the Non-Returning Student Survey. The Non-Returning Student Survey asked students to indicate their academic engagement by noting the frequency of interaction. Neither in first year students spoke with faculty outside of the classroom as frequently as the second year students and the out-of-state students. However, both the first and second year students reported that they frequently attended class. Contact outside of the classroom

provides opportunity not only for academic discussions but personal and career. Advising can manifest itself in several ways, including a very informal setting.

Overall, the students were less involved in group study sessions, Supplemental Instruction, or tutoring, than in other engaging activities. The difference between in- and out-of-state students being involved was even greater than the difference by year. Even though the students report that they spoke with faculty outside of the class room, the non-returning students felt that Clemson neither care about them nor did the faculty take a personal interest in them.

#### Non-Returning Student Survey: Academic Engagement

	1st year	2nd year	In-state	Out-of-state
15.a. How often did you speak with faculty outside of the classroom? (1=Never – 4=Often)	2.83	3.00	2.67	3.05
15.b. How often did you attend group study sessions, SI, tutoring, etc? (1=Never – 4=Often)	2.68	2.70	2.59	2.76
15.c. How often did you attend classes? (1=Never – 4=Often)	3.89	3.70	3.94	3.76
16.j. Faculty did not take a personal interest in my success. (1=Not at all – 4=Very)	1.62	1.00	1.39	1.52
16.k. Did not feel that Clemson cared about me. (1=Not at all – 4=Very)	1.93	1.60	1.78	1.90

#### **DWF Rate and Faculty Response to Student Performance**

##### *DWF Rate*

DWF rate is defined as the number of students who received a D, W, or F divided by the number of students enrolled in the class. Classes with DWF rates over 30 % were targeted in this analysis to be consistent with other analyses on DWF rate analyses.

To examine the relationship between class size and DWF rates, classes were grouped into five categories: 20 students or less, 21 – 30 students, 31 – 40 students, 41 - 50 students, and over 50 students. These categories are consistent with US News and World Report categories, which have 20 or less, over 50, and other.

The analysis focused on DWF records over the past three years. In the classes of 20 and under category, there are fewer classes with DWF rates higher than 30 % than in any other category. In 2004-05 and 2005-06, a greater percentage of classes from 21-50 had DWF rates higher than 30 %. However, in 2006-07 the percentage of classes with DWF rates greater than 30 % has dropped to single digits as seen in the following table.

#### Percentage of Classes with DWF Rates Higher Than 30 % by Class Size

Class Size	% 2004-05	% 2005-06	% 2006-07
20 and Under	7	9	8
21 – 30	10	12	8

31 – 40	13	16	9
41 – 50	16	15	7
Over 50	12	7	7

### *Faculty Response to Student Performance*

Advising students is one part of the equation of having successful students. Another component is the faculty response to student performance. In a very innovative way, Clemson has implemented a change in pedagogy that promotes smaller classes and greater interaction between faculty and students as well as student-to-student interaction. The model engages students in their learning process in a very innovative way. Mathematical Science and Chemistry faculty members have modified their methods of instruction, which has increased success for their students in terms of DWF rates. Student-Centered Activities for Large Enrollment Undergraduate Programs (SCALE-UP) program utilized the new pedagogy in Ch 101 (beginning fall 2005) and in MthSc 103 and MthSc 106 (both MthSc beginning fall 2006). Students taking one SCALE-UP course retain the state scholarship at a higher rate than those students taking a non-SCALE-UP math or chemistry course. When students take both chemistry and math SCALE-UP courses at the same time, scholarship retention increased significantly and DWF rate was reduced significantly. It is evident that successful retention of state scholarships is enhanced through the implementation of the SCALE-UP in both chemistry and math courses.

Student performance was analyzed for those taking Ch 101 without another SCALE-UP course. In fall 2004, freshmen had a DWF rate of 42 % for Ch 101. In fall 2005, it dropped to 18 %. State scholarship retention increased from 38 % to 46 %. For freshmen arriving in fall 2006, the DWF rate was down further to 13 % and retention rate of state scholarship jumped to 60 %. The overall shift was a 22.4 % increase in percentage of scholarships and 28.8 % reduction in DWF rates.

A similar analysis was undertaken for those students taking MthSc 106 alone. The DWF rates for MthSc 106 dropped 19.2 % with the implementation of SCALE-UP in 2006. Fall 2005 freshmen taking Mth 106 with a state scholarship retained it at a rate of 44 %. The next year's freshmen retained their state scholarship at a rate of 64 %, an increase of 20 %. The analysis of the SCALE-UP program will continue. Other entry level courses are examining similar models to enhance student performance.

### **Change of Majors**

Being able to advise students is frequently more than selecting appropriate courses. It entails providing guidance in selecting the academic program in which the student will find the best path to a particular career. A review of freshmen and sophomore patterns of changing majors, persistence, and graduation lead to other questions. The questions included: Of those who do not graduate, how many times did they change majors; of those who graduated, how many did not change majors?

The data indicate that the graduation rates are significantly different only in 1999 between students not changing majors and all other 1999 groups. The overall six-year graduation rate for students who did not change majors was 71.9 % while students who changed majors one time had graduation rates of greater than 82 %. Changing majors one or two times did not have a significant effect on the time to graduation. However, students who changed majors three times took 4.67 years to graduate compared to 4.27 years for students who did not change majors. Students who changed majors one

or two times took 4.38 and 4.56 years to graduate, respectively. These results do not indicate that the changing of majors negatively impacts six-year graduation rates or the time to graduation.

Graduation data from the 1998, 1999, and 2000 first-time freshmen cohorts were examined. The total student population was 8,617 students. The overall six-year graduation rate was 74 % with a range from 72-75 %. In this analysis the changing of major is defined as changing from one field of study to another, with some exceptions. The exceptions are:

1. If a student enrolled in Agriculture undeclared and then changed to an agricultural major, a change of major was not counted. However, if the student later changed majors then a change of major was identified.
2. If a student enrolled in General Engineering and then changed to an engineering discipline, a change of major was not counted. However, if an engineering student later changed from one engineering discipline to another engineering discipline, a change was identified.
3. If a student enrolled in Business undeclared and then changed to a business discipline, a change of major was not counted. However, if a student changed from one business major to another business major a change was identified.
4. Changes from a BA to BS or BS to BA within the same discipline were not considered a change of major. This exception was noted for psychology, sociology, biological sciences, chemistry, computer science, mathematical sciences, and physics.
5. A change of major from one PRTM discipline major to another was not considered a change of major.

These exceptions were defined in order to more accurately determine when a student actually changed major or just changed emphasis areas. For each student in the three cohorts that comprised this study population, student major was identified for each term that the student was enrolled. Changes between terms were recorded and counted for each student. Students who never returned to the university after the fall of the cohort year were not included in this analysis. The following table summarizes the graduation rates for students who changed majors one, two, three times, or never changed majors. Because there were only 3 students who changed majors 4 times, this analysis is not included. (Of the three students who changed majors 4 times, one graduated).

Summary of Six-year graduation rates of 1998-2000 cohorts by number of major changes.

<b>Year</b>	<b># Students ( % Graduate)</b>	<b>not changing majors</b>	<b>Change once</b>	<b>Change twice</b>	<b>Change 3 times</b>
		<b># ( %)</b>	<b># ( %)</b>	<b># ( %)</b>	<b># ( %)</b>
<b>1998</b>		1,440 (71.5)	938 (77.9)	200 (85.5)	23 (91.3)
<b>1999</b>		1,564 (71.1)	1,022 (84.9)	189 (87.3)	26 (84.6)
<b>2000</b>		1,695 (72.9)	1,030 (83.5)	180 (88.9)	23 (87.0)
<i>Total</i>		4,699 (71.9)	2,990 (82.2)	569 (87.2)	72 (87.5)

All of the second year non-returning students indicated on the Non-Returning Student Survey that they had decided on a major while at Clemson where as 4 first year students had not (3 of who were from out-of-state). The survey asked the students to indicate how important were selected factors in their decision not to return to Clemson. The items related to majors indicate that out-of-state students were more apt not to return because Clemson did not offer a major that was decided upon. In-state



students were noted that being unable to get into their major was a reason for not returning. However, major programs do not appear to be a significant factor in determining if a student will re-enroll.

### Non-Returning Student Survey: Majors

<i>4 point scale: 1=Not at all – 4=Very</i>	<b>Year</b>		<b>Residency</b>	
	<b>1st</b>	<b>2nd</b>	<b>In-state</b>	<b>Out-of-state</b>
16.m. Decided on a major that Clemson does not offer	1.41	1.40	1.28	1.52
16.n. Unable to get into my desired major	1.45	1.30	1.56	1.29
16.o. Opportunity to attend the university/college that was my 1st choice	1.48	1.30	1.44	1.43

It may be considered in the future to counsel with students more specifically about their choice of a major prior to enrolling in Clemson or before the beginning of coursework.

The SSI asks students to respond with their level of importance and satisfaction to: “My academic advisor is knowledgeable about requirements in my major.” The satisfaction of the students (3.57) is less than the importance (6.53). The performance gap between importance and satisfaction is 1.16, indicating that the level of satisfaction is quite a bit lower than expectations. Additionally, there is a wide standard deviation (spread) of 1.65 indicating that students have varied levels of satisfaction. This item may be one primarily about advising; however, the implications are that students may be frustrated in that they are not able to find the major that they seek because they believe that the faculty members are not knowledgeable about the requirements.

During interviews with senior students in the major of Food Science and Human Nutrition in spring 2008, the facilitator discussed the departmental advising process. The students were asked if their advisor provided direction that allowed taking the right course in the correct sequence. Also, the students were asked if the advisor provided the information that the students were seeking. The following summary has a broad variety of topics that students addressed during the discussion.

- *Quality advisors.* Advisors are good! Native students see the efforts of faculty and student connections better than those who transfer into the program.
- *Informed.* Changes in Curriculum occur. Not all students believe that faculty explain best choices for the individual. Faculty who ask about the students’ long term goals provide the most useful suggestions.
- *Website.* Food Science website appears to have random updates. Students would like more information about upper classes. Suggestion: Seniors visit FdSc 102 and share experience as being a student.
- *Advising process.* Students may see someone other than the assigned advisor but they are happy with the current process of obtaining advice/guidance from the faculty.
- *Department faculty advising.* Clear and firm statement that want to keep advising with the faculty rather than a General Advising Center. (a) The students stated that the faculty really know what the program is about and therefore will be able to give the best guidance. (b) By having a faculty member as an advisor, the students believe that they get to know each other

much better than if there were a center. (c) Professors know each other and the courses being taught. This helps avoid/reduce scheduling conflicting classes.

- *Scheduling advising.* Students like the professors notifying them by email to sign up for advising. Being able to sign up ahead of time assures the students that they will be able to talk to their advisor about the things that are important.
- *Internships.* Students think that the faculty are informed but not all students get the message during their advising process of when to do an internship. For instance, the Culinary students suggested that an internship undertaken early in the academic process is beneficial. It is too late to wait until the Junior year to find and undertake an internship.
- *Concentrations/emphasis areas.* Many of the students are still a bit unclear on when to choose concentration or emphasis area. Enhanced explanations during advising sessions would benefit the students.
- *Transfer students* are not getting information that would be useful in terms of declaring a concentration or participating in an internships. Those in the sessions reported not getting the handbook or being told when/how to do the internships.
- *General Education.* Advising about General Education is still confusing but that may be the result of the changes in catalogues and options for so many General Education courses.
- *AP students* noted that faculty are not strong at offering suggestions in ‘filling up’ the extra needed hours created by entering with AP hours. Frequently they took “fun” courses rather than those that would be of use because they were not advised what courses would benefit them. More attention to electives/general education / and non-required courses would be helpful.
- *Volunteer work.* Need more and earlier direction about volunteer work. Advisors should make sure that students are informed about the better choices for volunteer work. Upper classmen sometimes help with information but that is not always consistent.

### **Foundation Courses**

Academic advisors, whether in an advising center or faculty within the program, provide guidance to students who may to strengthen study skills and be given support in their transition to the University. One course, CU 101, is offered to freshmen and first semester transfer students. (<http://www.clemson.edu/CU101/101main.html>) CU 101, a University Success Skills course, includes group study sessions in the residence halls for common courses among first-year students. Programs addressing student social transition and adaptation issues are also offered. CU 101 University Success Skills is about identifying tools and techniques that are useful in being successful in studies and in other significant areas of life. A variety of topics critical to success as students are offered including time management, goal setting, test taking, campus resources and policies, critical thinking and diversity. Students are provided opportunity to discover and practice many procedures, techniques and tips.

The CU 101 course Mission and Objectives are:

Students are expected to approach CU 101 with the intention of developing skills as a learner and becoming an active participant in an academic community. This class will provide you with information and tools to be successful. Through the use of interactive exercises and assignments, the objectives of CU 101 are:

1. To introduce you to the academic culture of Clemson University: to recognize and appreciate Clemson’s uniqueness.

2. To develop an understanding of the complex issues and choices confronting you as a college student as you make a successful transition from high school to university learning.
3. To help you clarify why you are in college and set realistic goals for your experience here.
4. To recognize and use the resources available to you to support your goals.
5. To provide an opportunity to develop skills and expertise that will lead to your success academically and in other areas of your life, including decision-making, academic skills development, communication, and time management.
6. To encourage individual growth by increasing awareness of human diversity, cultures, values and beliefs.
7. To develop an ePortfolio in Blackboard and share the ePortfolio with your CU 101 instructor for review.

The question arises in the contribution of CU 101 to the success of those students enrolled in the course. The analysis revealed that those students who do not take CU 101 are generally better prepared based on predicted GPA. Furthermore, CU 101 does not appear to have a significant impact on student persistence to the 2<sup>nd</sup> year when including the predicted GPA. Also, CU 101 was not significant in identifying students who graduated within 6 years.

Those students in the Fall 2005 cohort who took CU 101 during their first semester persisted at a 1 % lower rate than those students who did not take CU 101. The persistence rates of both groups are nearly identical to the overall persistence rate of 88.7 %.

The predicted GPA can be used to normalize each population regarding academic preparedness. This metric is based on each student’s academic credentials such as standardized test scores and high school GPA. The higher predicted GPA for non CU 101 students is statistically different using a T-test. Students who do not take CU 101 are generally better prepared students. However, in a logistic regression analysis CU 101 was still found not to be significant when including predicted GPA. After accounting for the predicted GPA difference, CU 101 was not shown to have significant impact on student persistence to the second year. The average predicted GPA according to those students who persisted and for those who did not is shown below.

Average Predicted GPA for Those Who Did Not and Did Take CU 101

CU 101	# Students	Avg Predicted GPA		
		Overall	Persisted	Did not Persist
Not take	1,860	3.15	3.17	2.99
Took	1,043	3.02	3.04	2.88
<i>Total</i>	<i>2,903</i>	<i>3.10</i>	<i>3.12</i>	<i>2.95</i>

Graduation rates of the fall 2000 freshmen cohort was also examined for students who took and did not take CU 101. A Chi-square test showed that CU 01 was not statistically significant at the .05 level for determining which students graduated within six years. Whether or not statistically significant in difference is not the primary consideration. Knowing that the students in CU 101 were not on par with those who did not take it, having a similar graduation rate is quite an achievement for

those who may not have been quite so successful without developing the skills and having the mentoring and advising that CU 101 offers.

### **Selected Programs**

#### *ROTC*

Advising for students who participate in ROTC is more engaging than in some other selected programs. However, the small number of ROTC students does not allow conclusions to be drawn about participation in ROTC affecting persistence. In Fall 2005, there were 59 students identified as part of ROTC. The average predicted GPA of these students is 3.08 which is very similar to the predicted GPA of all other 2005 freshmen at 3.10. The persistence rate of the ROTC students (88.9 %) in the fall 2005 cohort who persisted to Fall 2006 is higher than non-ROTC students (81.4 %). The fall 2005 ROTC students did not persist as well as the rest of the cohort. However, with relatively small numbers of students in the group, a Chi-square test does not reveal that ROTC is a significant factor in persistence.

#### *Athletics*

Clemson University offers Athletic Academic Services (<http://clemsontigers.cstv.com/school-bio/vickery/home.html>) to student athletes. The mission of the Student-Athlete Enrichment Programs at Vickery Hall is to monitor, guide and encourage student-athletes to fulfill their long-term goals and to achieve their academic and career potentials. This is accomplished through academic support and advising programs track the progress of student-athletes; provide an environment for learning and special honor roll recognition.

The center provides career preparation beginning with incoming freshmen and continuing through graduation from Clemson University. The Personal Growth and Development programs are designed to provide student-athletes with a smooth transition to college life and to enhance decision making skills crucial to their personal and academic lives. Academic and other integrated advising services and programs have been found to benefit the student athletes. Student athletes in the Fall 2005 cohort comprised less than 4 % of the total cohort. The persistence rate for athletes (87.5 %) and non-athletes (88.7 %) is similar; however, the low number of student athletes makes this comparison very difficult.

Based on broad assumptions drawn from the NSSE data, it would benefit further research to examine the persistence of those students who report that they are engaged in club sports. It would also be useful to examine the persistence of those students using other athletic, health-club related facilities such as Fike Recreational Center.

#### *Recognized Student Organizations*

Greek organizations are recognized student activities that provide advising within each chapter. There is a slightly higher persistence rate among those who pledge a Greek organization and those who do not. In the Fall 2005 freshmen cohort, there were 517 students who pledged their first fall at Clemson. It appears that these students were equally prepared academically compared to other incoming freshmen based on the predicted GPA. Students who pledged had an average predicted GPA of 3.11 compared to the 3.10 predicted GPA of those that did not pledge. A Chi-square test did not show statistical significance.

The eligible but non-returning students were asked in a survey to respond to the question: “Did you go through Greek fraternity or sorority recruitment at Clemson University?” As well as, “Did you join a Greek fraternity or sorority at Clemson University?” They were asked to rate the importance of the factor of not getting a bid from the fraternity or sorority that was desired.

Of the 11 students who went through Greek recruitment and did not receive a bid from the desired organization, 7 of the students received a bid from the group that they wished. One indicated that not receiving a bid from the desired group was a very important factor in not returning to Clemson.

The 7 students’ mean score of agreement (3.57 of 4 points), with the statement that they made social connections while at Clemson, was higher than the score of those who did not join a Greek organization (3.31). Both those who joined a Greek organization and those who did not stated that they made social connections while at Clemson with people with similar values. Both Greeks and non-Greeks were in agreement with the statement that social connections while at Clemson were an adequate support system.

#### Non-Returning Student Survey: Social Connections

<b>Did you join a Greek fraternity or Sorority at Clemson University?</b>	<b>Yes</b>	<b>No</b>
14.a. I made social connections while at Clemson University.	3.57	3.31
14.b. The social connections I made while at Clemson University included people with similar values.	3.29	3.22
14.c. The social connections I made while at Clemson University were an adequate support system.	3.14	3.16
16.i. Didn't get a bid from a fraternity or sorority that I wanted.	1.00	1.09

Because there is little structured support to those students who rush and were not offered a bid, further study of persistence should examine those students.

The NSSE asks students to report if they are a member of a social fraternity. When those students who indicated that they were not members responded to: “If you could start over again, would you go to the same institution that you are now attending?”, 59.8 % said “Definitely yes” and 28 % indicated “Probably yes”. Those who were members responded 70.3 % and 22.3 % respectively. The mean score for evaluating their entire educational experience for those who were members was 3.53 whereas non-members scored 3.40.

#### *Other recognized student organizations*

The NSSE asks students to mark the range of estimated hours spent participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc). The freshmen reported that 61 % spent between 1 and 10 hours per week. At Clemson, all recognized student organizations have a faculty or staff member as an advisor. This interaction between students and organization advisors is another opportunity for advising whether professional, social, personal, or academic. With over one-half of the freshmen engaged in co-curricular activities, continued investigation of student success should be undertaken.

Student engagement is reported in the SSI as importance as well as satisfaction. In the Campus Life scale, several of the items ask the students to report their responses to activities or programs. The following table has been edited to include only those items regarding engagement in campus life.

SSI: Campus Life, Edited

<i>Statistically Significant Difference *</i>	<i>Spring 07</i>	<i>Spring07</i>		<i>Spring05</i>	<i>Spring05</i>		
	<i>Import</i>	<i>Satis / SD</i>	<i>Gap</i>	<i>Import</i>	<i>Satis / SD</i>	<i>Gap</i>	<i>Mean Diff.</i>
<i>Campus Life</i>	5.68	5.08 / 0.86	0.60	5.70	5.09 / 0.83	0.61	-0.01
9. A variety of intramural activities are offered.	5.21	5.82 / 1.15	-0.61	5.20	5.76 / 1.17	- 0.56	0.06
24. The intercollegiate athletic programs contribute to a strong sense of school spirit.	6.05	6.05 / 1.17	0.00	5.95	5.95 / 1.19	0.00	0.10*
31. Males and females have equal opportunities to participate in intercollegiate athletics.	5.31	5.43 / 1.29	-0.12	5.32	5.39 / 1.29	- 0.07	0.04
42. There are a sufficient number of weekend activities for students.	5.62	5.04 / 1.42	0.58	5.63	4.86 / 1.48	0.77	0.18*
46. I can easily get involved in campus organizations.	5.98	5.69 / 1.22	0.29	5.96	5.64 / 1.25	0.32	0.05
52. The student center is a comfortable place for students to spend their leisure time.	5.37	5.19 / 1.36	0.18	5.48	5.30 / 1.33	0.18	-0.11*
56. The student handbook provides helpful information about campus life.	5.21	4.90 / 1.32	0.31	5.28	4.92 / 1.29	0.36	-0.02
64. New student orientation services help students adjust to college.	5.76	5.05 / 1.44	0.71	5.75	4.99 / 1.42	0.76	0.06
67. Freedom of expression is protected on campus.	5.94	4.95 / 1.51	0.99	5.90	5.27 / 1.31	0.63	-0.32*
73. Student activities fees are put to good use.	6.08	4.64 / 1.59	1.44	6.12	4.66 / 1.58	1.46	-0.02

### **Housing Location and Types**

Policies and procedures governing the residence halls are clearly stated and the unit strives to provide a helpful safe and secure living environment for the residents. Residence halls provide a very active learning environment for students in support of the mission of the institution. Living and Learning Communities have been created and various groupings of students have been created to create community atmosphere meeting the special needs of students. Within these communities, peer, staff, or faculty advising occurs to enhance student success.

### ***On-Campus vs Off-Campus Residency***

The question frequently arises regarding the persistence and graduation rates comparing students who live on campus and off campus. The two groups are not homogeneous. Since there is a difference in potential between the two groups of students, residency alone cannot be attributed to the performance of students. Using the Chi-square analysis and Fisher's Exact Test, the graduation rates based on sophomore housing cannot be completely explained. In order to draw any conclusions about graduation rates, as influenced by housing, the homogeneity of on-campus students and those

living off-campus must be determined. Two factors were selected, first year predicted grade point ratio and actual first year grade point ratio, and a t-test between the on-campus populations and off-campus populations were conducted.

Students returning for their second year who lived on campus had a predicted first year grade point ratio (P GPA) mean of 2.82 while students who chose to live off campus had a mean P GPA of 2.73 (P<.01). This held true for the actual first year grade point ratio (FY GPA). Students who returned and lived on campus had a mean FY GPA of 2.94 while students who lived off campus had a mean of 2.81 (P<.01).

Both of these analysis indicated that there is a statistically significant difference between the two groups. Students who lived on campus were predicted to perform better during the first year and performed better during the first year. The students who lived on campus during the fall of their second year had a six-year graduation rate of 86.2 % compared to students who moved off campus who had a 80.3 % graduation rate (P<.01). It is critical to note that these groups are not homogeneous and therefore, not comparable. Other characteristics must be considered other than residency.

The 2005 EBI Survey of Housing residents inquired “How satisfied are you with your student staff member on your floor (ie. RA, Community Advisor, Mentor, Apt. Advisor) regarding helping with a problem?” The mean score of the 1736 respondents to completed the survey was 5.36 (slightly to moderately satisfied) on a 7-point Likert-like scale (1=Very Dissatisfied; 7=Very Satisfied). It is not clear from the other items on the survey how improvements can be made to better meet the needs or wants of the residents in terms of the staff being able to assist with a problem. Nor is it evident the residential environment in which the students who are least satisfied are living.

*Living and Learning Communities*

Clemson initiated Living/Learning communities a number of years ago and continues to monitor the progress of students who participate. However, the number of students participating in a community is too small to draw a conclusion to attribute persistence to the Living/Learning community experience.

There were 363 students identified as residents of a Living Learning Community with the greatest number being in the Science and Engineering programs. The persistence rate of these students as well as those in the Clemson Business Experience was above 90 %, only 1.5 % higher than students not living in a Living/Learning Community.

Living Learning Communities 2006 cohort

<b>Living Learning Community</b>	<b>Students</b>	<b>Persistence Rate</b>
Residence in Science and Engineering	187	92.5 %
Clemson Business Experience	63	90.5 %
Civics and Service House	34	85.3 %
Women in Animal Science	32	93.8 %
Professional Golf Management	22	90.9 %
Air Force ROTC	18	88.9 %

Cultural Exchange	7	71.4 %
<i>All students in Living Learning</i>	363	90.9 %
<i>Students not in a Living Learning Community</i>	1,858	89.4 %

Students participating in the NSSE responded to their engagement in a living community selecting “Have not Decided”, “Do not Plan to”, “Plan to Do” and “Done” to the question: “Participate in a learning community or some other formal program where groups of students take two or more classes together.” For this analysis, those students who indicated that they “Plan to Do” or “Have Done” were grouped together. In some activities, the two groups were very similar. Approximately 20 % of both groups participate in a social fraternity or sorority. Both groups responded similarly (92 % of those who do not plan to live in a community and 97 % of those who are or plan to live in a community) in evaluating their entire educational experience at Clemson as being “Good” or “Excellent”.

Those who plan to or have lived in a Living Learning Community (92 %) would probably or definitely attend Clemson if they could start all over again. 87 % of those who do not plan to live in a Living Learning Community would attend Clemson given a chance to start over.

For several items, the percentage of difference between the two groups was greater than 5 %, an arbitrary distinction. Eighty percent of those who live in a community or plan to rated their quality of academic advising as “Good” or “Excellent” whereas only 72 % of those who do not plan to live in a community gave high marks. Discussing ideas from readings or classes with faculty members outside of classes was higher for those planning or having lived in a community (73 %) with only 60 % of those not planning to live in a community having discussions. The largest difference between the two groups on selected items was in response to participating in a community-based project as part of a regular course. Sixty-seven percent of the students planning or having lived in a community participated in a community based project while only 41 % of those not living in a community reported having done so.

**Other**

The NSSE provide benchmark comparisons with other institutions including a factor “Enriching Educational Experiences.” On this benchmark, Clemson freshmen are statistically significantly higher than selected peers and NSSE overall. The benchmark is constructed to measure “Complementary learning opportunities enhance academic programs. Diversity experiences teach students valuable things about themselves and others. Technology facilitates collaboration between peers and instructors. Internships, community service, and senior capstone courses provide opportunities to integrate and apply knowledge.” The following table provides additional comparisons of items in this benchmark between Clemson students and Carnegie.



## NSSE: Enriching Educational Experiences

	<i>Class</i>	<i>CU Mean</i>	<i>Carnegie Mean</i>	<i>Sig.</i>	<i>Effect Size</i>
Had serious conversations with students of a different race or ethnicity than your own.	FY	2.48	2.60	*	-.12
	SR	2.60	2.68		-.07
Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values.	FY	2.68	2.70		-.01
	SR	2.80	2.71	*	.10
Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment.	FY	2.77	2.61	*	.15
	SR	2.95	2.82	*	.13
Participating in co-curricular activities (ie organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports).	FY	2.66	2.28	*	.24
	SR	2.57	2.04	*	.37
Encouraging contact among students from different economic, social, and racial or ethnic backgrounds.	FY	2.77	2.58	*	.19
	SR	2.61	2.40	*	.21
Practicum, internship, field experience, co-op experience, or clinical assignment.	FY	.06	.07		-.05
	SR	.68	.51	*	.35
Community service or volunteer work.	FY	.42	.39		.07
	SR	.78	.59	*	.38
Participate in a learning community or some other formal program where groups of students take two or more classes together.	FY	.16	.18		-.05
	SR	.20	.25	*	-.11
Foreign language coursework.	FY	.27	.22	*	.12
	SR	.48	.43	*	.11
Study abroad.	FY	.01	.02	*	-.09
	SR	.16	.14		.07
Independent study or self-designed major.	FY	.02	.03	*	-.10
	SR	.17	.17		.00
Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.).	FY	.01	.02		-.06
	SR	.41	.33	*	.18

The overall Campus Climate Scale of the SSI survey reflects a change in general student perception. Even though the gap is still greater than 1, there has been a statistically significant improvement in the attitude about faculty caring. There continues to be room for improvement to reduce the feeling that students are getting the run around and feeling that the institution does not have concern for them as individuals. Students feel well informed and that their freedom of expression is protected (although the satisfaction has dropped significantly).

### SSI: Selected Campus Climate Scale

Statistically Significant Difference *	Spring07	Spring07		Spring05	Spring05		
Scale	Import	Satis / SD	Gap	Import	Satis / SD	Gap	Mean Diff.
<i>Campus Climate</i>	6.11	5.34 / 0.86	0.77	6.12	5.32 / 0.83	0.80	0.02
1. Most students feel a sense of belonging here.	5.94	5.63 / 1.19	0.31	5.95	5.56 / 1.23	0.39	0.07
2. The campus staff are caring and helpful.	6.12	5.34 / 1.13	0.78	6.15	5.25 / 1.18	0.90	0.09*
3. Faculty care about me as an individual.	6.03	5.03 / 1.26	1.00	6.03	4.91 / 1.29	1.12	0.12*
10. Administrators are approachable to students.	5.72	5.07 / 1.21	0.65	5.74	5.00 / 1.20	0.74	0.07
41. There is a commitment to academic excellence on this campus.	6.28	5.68 / 1.17	0.60	6.33	5.62 / 1.21	0.71	0.06
57. I seldom get the "run-around" when seeking information on this campus.	6.01	4.59 / 1.64	1.42	6.06	4.61 / 1.59	1.45	-0.02
59. This institution shows concern for students as individuals.	6.19	5.03 / 1.41	1.16	6.22	4.96 / 1.40	1.26	0.07
71. Channels for expressing student complaints are readily available.	5.82	4.55 / 1.48	1.27	5.87	4.47 / 1.48	1.40	0.08

The NSSE Benchmark Supportive Campus Environment is constructed to show “Students perform better and are more satisfied at colleges that are committed to their success and cultivate positive working and social relations among different groups on campus.” The freshmen and senior groups are both statistically significantly higher than all peers. For each of the items, the Clemson freshmen students are significantly higher than Carnegie peers.

### NSSE: Supportive Campus Environment

	CU Class	CU Mean	Carnegie Mean	Sig.	Effect Size
Relationships with other students.	FY	5.71	5.50	*	.15
	SR	6.08	5.61	*	.35
Relationships with faculty members.	FY	5.29	5.08	*	.15
	SR	5.64	5.33	*	.23
Relationships with administrative personnel and offices.	FY	4.76	4.56	*	.13
	SR	4.85	4.45	*	.24
Providing the support you need to help you succeed academically.	FY	3.29	2.96	*	.41
	SR	3.10	2.83	*	.33
Helping you cope with your non-academic responsibilities (work, family, etc.).	FY	2.22	2.13	*	.09
	SR	1.93	1.89		.05
Providing the support you need to thrive socially.	FY	2.54	2.41	*	.13
	SR	2.40	2.17	*	.24

As seen from this thorough analysis of current advising practices, Clemson University has and continues to provide programs and services to promote the success of all students. With the use of WEAVEonline and enhanced program review, Clemson will be able to track improvements in reported advising of students. Also, continuing to use the SSI, NSSE, EBI, and other instruments, the

University will be able to monitor the overall opinion of students. There is no direct measure of successful advising and student success. Thus, on-going analysis of student success should include retention, persistence, graduation rates as well as student performance by groups. With vigilance, advising practices of academic, career, personal, and all other areas should continue to strengthen.

### **Additional information**

The major activity for the undergraduate population was establishing the academic support program, FIRST (First-generation Success in Research, Science and Technology), for incoming Clemson University STEM majors who are the first generation in their families to attend college (FGC). A FIRST Coordinator with a M.S. degree in psychology and experience in two states with Upward Bound and TRIO programs directs this program. Incoming freshman and transfer students identified as FGC are invited to participate in FIRST activities and assigned FIRST proactive mentors.

For the Fall 2006 freshmen cohort, FGC were identified only from review of FAFSA forms, because the Clemson University application for admission lacked a question on first generation status. Our STEP project convinced the admissions office to add a question to the application for the Fall 2007 freshman class -- evidence of systemic change elicited by our FIRST program and administrative interest in first generation students.

FIRST programming began the first week of classes, when FGC freshmen were notified about the program and informed that a FIRST mentor would contact them. Seven mentors were hired, all junior or senior first-generation college students with GPR >2.5 in STEM majors. Mentors were trained in proactive mentoring, with special attention to the needs of first-generation students, using methods adapted from Clemson University's PEER mentoring program for minority students. Training included communication skills, diversity and other basic counseling skills. Each mentor was matched with approximately ten students. As part of the proactive mentoring model, all FGC students were assigned mentors. Mentors hosted weekly meetings for their mentees, contacted each student individually at least once a week and maintained logs of student interactions that were shared with the FIRST Coordinator in private weekly meetings. Mentors also attended weekly training sessions with the FIRST Coordinator. Four of the seven mentors graduated May 2007; one was accepted into medical school, one to pharmacy program; one to graduate school; and one to a job in his major.

#### *2006-2007 FGC Cohort*

The initial (2006-2007) FIRST cohort was restricted to the 64 FGC STEM freshmen identified in the College of Agriculture, Forestry and Life Sciences. Thirty-eight FGC students participated in group and/or individual mentoring throughout the 2006-2007 academic year. Twelve students were on academic probation in fall semester, five at the end of the spring semester. Of the students on probation in the fall, five withdrew (two for medical reasons) and six improved their GPRs. Of the six who improved, five were active in the FIRST program. Students on academic probation were contacted to discuss their options, in coordination with the Office of Undergraduate Studies. As of the end of spring semester 2007, 59 of the 64 FGC students (92 %) were retained at Clemson University and 31 students retained their LIFE Scholarship (a South Carolina state scholarship) by maintaining a GPR>3.0. The students with GPRs between 2.0 and 3.0 were contacted to discuss taking summer courses to improve their GPR and thus regain the LIFE scholarship for the 2007-08 academic year.

#### *2007-2008 FGC Cohort and the FIRST Summer Bridge*

The 2007-2008 freshmen FGC cohort, 66 students in the College of Agriculture, Forestry and Life Sciences (CAFLS) and 117 in the College of Engineering and Science (CES), was identified directly from student admissions applications. All 183 FGC students were invited to participate in FIRST activities during the academic year and to apply to the FIRST Summer Bridge Program in July 2007. Forty-one FGC students were accepted into the FIRST Summer Bridge program, 33 attended (25 males, 8 females; 8 CAFLS, 25 CES). Students completed the Clemson University course, CPSC 115: Introduction to Computational Science, and participated in seminars with speakers from STEM departments and student service programs on study skills and time management. Two FIRST mentors assisted with social and counseling activities.

#### *Findings*

Because the FIRST program particularly targets first-generation college (FGC) students, we compare the performance of FIRST students in the Fall 2006 cohort to FGC students who are non-participants as well as to the general population of students in the College of Agriculture, Forestry, and Life Sciences.

The literature indicates that FGC students underperform compared to non-FGC students, controlling for differences in other predictors. Invitations were sent to FGC students identified from financial aid records and an admissions survey. Based on that invitation and secondary pathways, the Fall 2006 FIRST cohort (N=38) was established on a voluntary

basis, leaving a cohort of non-participant FGC students (N=24). Because this non-participant FGC cohort would be expected to be less motivated than the FIRST cohort, the primary comparison group will be the non-FGC population in the same college. These populations will be referred to as FIRST, Other FGC, and Non-FGC respectively.

#### Baseline comparison of the FIRST, Other FGC, and Non-FGC populations

The three populations are very similar on most admissions data. Clemson computes a predicted grade-point ratio (PGPR) that considers SAT scores, high school grade-point average, high school rank, and a factor that accounts for the typical performance of students from a particular high school. The PGPRs for the three populations are nearly identical: 3.01, 3.03, and 3.07 (FIRST, Other FGC, and Non-FGC respectively). Additional detail shows that the similarity extends to the specific SAT subscores of SAT Verbal (583, 559, and 589 respectively) and SAT Math (591, 575, and 611). The percentage of women in the three populations is similar (63 %, 71 %, and 60 %), but minorities are somewhat overrepresented in the FIRST population, apparently due to an overrepresentation in Clemson's FGC population in general (24 %, 25 %, and 15 %). In conclusion, the FIRST population seems to be representative of the general population in every way examined except that they have been identified as FGC students and that there is a concomitant higher representation of minority students.

#### The effect of FIRST participation comparisons to the FIRST, Other FGC, and Non-FGC populations after two semesters

On the measures of the FIRST participants relative to the FGC non-participants and non-FGC students in the same college measures grade-point ratio after two semesters, grades in Chemistry I, and grades in Biology the performance of the FIRST participants is comparable to that of the non-FGC students. A more important conclusion is that the performance of the FIRST participants is consistently much better than that of the FGC students who did not participate in FIRST FGC students participating in FIRST do better than FGC non-FIRST students, and in some measures become as successful as non-FGC students. The validity of the latter conclusion is threatened by the volunteer nature of the FIRST program, suggesting a possible difference in the motivation of the two groups.

To manage the threat to validity of the volunteer nature of the program, the project team is tracking the level of participation of students in the FIRST program in order to develop a model of intervention as a function of continuous variables number of hours of student mentoring, number of hours of faculty mentoring, number of hours of program-specific social interaction, etc. This will allow us to model the effect of the program in terms of those continuous variables instead of the logistic variables of participation / non-participation. This model is still being developed.

## **NATIONAL ACADEMIC ADVISING ASSOCIATION**

The National Academic Advising Association (NACADA) is the leading organization for academic advisors, both faculty and professional advisors. NACADA goes beyond the traditional course registration and scheduling advising approaches and offers a broader vision for academic advising. NACADA has recently developed and adopted an official Concept of Academic Advising (NACADA, 2004) and Statement of Core Values of Academic Advising (NACADA, 2006). The Concept of Academic Advising provides an overview of academic advising and its relationship to curriculum, pedagogy and learning outcomes. The Statement of Core Values of Academic Advising provides a structure to guide professional practice.

To promote best practices in academic advising, NACADA encourages institutions to use the Council for the Advancement of Standards (CAS) in Higher Education: Standards and Guidelines for an Academic Advising Program as a benchmark (NACADA, 2008). All three of these documents are included in this section for your reference.

### **NACADA ADVISOR ROLE AND RESPONSIBILITIES**

Keeping in mind that good academic advising is a two-part responsibility between the academic advisor and the student, NACADA provides general responsibilities for both academic advisors and students to achieve the best advising results. The responsibilities for advisors include:

- Help students define and develop realistic educational career plans.
- Assist students in planning a program consistent with their abilities and interests.
- Monitor progress toward educational/career goals.
- Discuss and reinforce linkages and relationships between instructional program and occupation/career.
- Interpret and provide rationale for instructional policies, procedures, and requirements.
- Approve all designated educational transactions (e.g., schedule, drops and adds, withdrawals, change of major, waivers, course substitutions, and graduation requirements).
- Maintain an advising file on each advisee.
- Refer students when academic, attitudinal, attendance, or other personal problems require intervention by other professionals.
- Inform students of the nature of the advisor/advisee relationship.
- Request re-assignment of advisee to another advisor, if necessary.
- Assist advisees in identifying career opportunities.
- Develop a caring relationship with advisees.
- Inform students of special services available to them for remediation, academic assistance, and other needs.

### **NACADA ADVISEE RESPONSIBILITIES**

The responsibilities for students to achieve the best advising results include:

- Clarify their personal values, abilities, interests, and goals.
- Contact and make appointment with the advisor when required or when in need of assistance. If the student finds it impossible to keep the appointment, the student will notify the advisor.
- Become knowledgeable and adhere to institutional policies, procedures, and requirements.
- Prepare for advising sessions and bring appropriate resources or materials.
- Follow through on actions identified during each advising session.
- Evaluate the advising system, when requested, in order to strengthen the advising process.
- Request re-assignment of a different advisor if necessary.
- Accept final responsibility for all decisions.

(Gordon & Habley, 2000)

### POSITIVE APPROACHES TO ADVISING

There are several ways for an academic advisor to positively approach their responsibilities. While some of these approaches may seem like common sense, doing these things can enhance the advising relationship and the advising process.

1. Get to know your advisees' names and use them.
2. Post your office hours and keep advising appointments.
3. Prior to an advising appointment, review your notes from previous advising appointment or look up the student's information electronically.
4. During advising meetings, show students you are listening carefully by taking notes, asking clarifying questions and maintaining eye contact.
5. Anticipate student needs and be prepared to address them. Remember that students often don't know what they don't know.
6. Refer students to the appropriate campus resources and follow up on the recommendations and referrals.
7. Prior to the student leaving your office, ask them "Is there anything else that I could do to assist you? Have I answered all of your questions?"

(Noel/Levitz, 1997)

### THE ACADEMIC ADVISING MEETING

There is no one right way to conduct an academic advising meeting; it often depends upon the reason for the meeting (i.e. registration advising, class concerns, deciding upon a major). The scenario below offers general guidelines and suggestions for conducting a productive advising meeting.

1. *Opening.* Greet students by name, be relaxed and warm. Open with a question e.g., "How are things going?" or "How can I help?"
2. *Phrasing Questions.* Conversational flow will be cut off if questions are asked so that a "yes" or "no" reply is required. A good question might be, "What have you thought about taking next semester?" or "What are some things that have made you think about a business as a career?"
3. *Out-Talking the Student.* Good advising is effective listening. Listening is more than the absence of talking. Identify the fine shades of feelings behind the words.
4. *Accepting the Student's Attitudes and Feelings.* A student may fear that the advisor won't approve of what he/she says. Advisors must convey their acceptance of these feelings and attitudes in a non-judgmental way. Cardinal principle: If the student thinks it is a problem, the advisor does too.
5. *Cross-Examining.* Do not fire questions at the student or put the student on the defensive.
6. *Silence in the Interview.* Most people are embarrassed if no conversation is taking place. The student may be groping for words or ideas so let them have some time to think about what they want to say.
7. *Reflecting the Student's Feelings.* Try to understand what the student is saying. For example, it is better to say "You feel that professor is unfair to you." Rather than "Sometimes everyone has trouble getting along with professors."
8. *Admitting Your Ignorance.* If a student asks a question regarding facts and you do not have the facts, admit it. Go to your resources for the information immediately or call/e-mail the student back with the information.
9. *Setting Limits on the Interview.* It is better if the advisor and the student realize from the beginning that the interview lasts for a fixed length of time.
10. *Ending the Interview.* Once limits have been set, it is best to end the interview at the agreed time. A comfortable phrase might be, "Do you think we have done all we can for today?" or "Let's make another appointment so that we can go into this further."

(Crockett, 2001)

## SAMPLE ACADEMIC ADVISING VISIT QUESTIONS

Depending on the purpose of your advising meeting, listed below are some questions that might be helpful in building rapport and getting to know your advisee. An advisor likely would not ask all of these questions; rather, he or she would pick and chose the most appropriate or helpful questions.

### **Identifying Areas of Interest and Preparation**

1. What are the three courses (high school or college) you have most enjoyed?
2. In which academic areas do you feel you are most thoroughly prepared?
3. In which courses are you likely to earn your highest grades because of what you already know or have experienced?
4. Which of your academic skills are your strongest?
5. What do you look forward to in college?
6. What do you consider the two most interesting books you have ever read?
7. What academic/school project has given you the greatest pride?
8. What aspect of the world around you would you most like to better understand?

### **Identifying Student Strengths and Talents**

1. What do you feel your academic and personal strengths are?
2. What do you do well enough that you could teach someone else?
3. What kind of things make you feel most fulfilled?
4. When you are not in school or working, how do you like to spend your time?
5. What part of your educational plan do you feel best about?
6. What part of your educational plan do you feel most concerned about?
7. Upon graduation from college, what will make you feel most satisfied?
8. Ten years after college, what will make you feel fulfilled and successful?

### **Identifying Time Commitments**

1. If you plan to work this term, how many hours per week do you plan to work?
2. In what school activities do you wish to be involved? How many hours per week?
3. In what non-school activities do you wish to be involved? How many hours per week?
4. What family and/or child care commitments will you have this term?
5. Will you have any other scheduled commitments of your time this term?

### **Identifying Career Interests and Goals for Life After College**

1. What academic areas are you currently considering? What do you like about these areas?
2. What occupations are you considering? What about these attract you?
3. How do your strengths/skills fit the tasks necessary to succeed in these areas?
4. Will these occupations provide the rewards and satisfactions you want for your life? Why?
5. What are the differences among the majors/occupations you are considering? The similarities?
6. Who has influenced your ideas about these alternatives?
7. In what kind of work environment do you picture yourself five years after you have finished school?

### **Follow-up Visit Questions for New Students**

1. How are your parents doing without you?
2. What has been your most surprising experience here so far?
3. What do you like best and least about being here?
4. Are you doing as well academically as you thought you would in your first semester?
5. How is the school different from what you thought it would be?
6. What are you spending more time on than you thought you would?
7. What are some of the feelings you've experienced about being in college?
8. If you were starting a journal about new things you are learning about yourself, what are some things you would list?
9. What advice would you give a brand-new student, based on what you've learned so far?

(Noel/Levitz, 1997)



## WHEN AN ACADEMIC ADVISOR SHOULD BE CONCERNED

The following behaviors and attitudes may indicate that a student could benefit from additional assistance. If you are not professionally qualified to address these issues, please refer the student to the appropriate campus resource (i.e. Counseling and Psychological Services, Career Center).

### Unusual Behavior

- Withdrawal from usual social interaction.
- Marked seclusion and unwillingness to communicate.
- Persistent antisocial behavior such as lying, stealing, or other deviant acts.
- Lack of social skills or deteriorating personal hygiene.
- Inability to sleep or excessive sleeping.
- Loss of appetite or excessive appetite (starving or bingeing behavior).
- Unexplained crying or outburst of anger.
- Acutely increased activity (i.e., ceaseless talking or extreme restlessness).
- Repeated absence from classes.
- Unusual irritability.
- Thought disorder (i.e., the student's conversation does not make sense).
- Suspiciousness, irrational feeling of persecution.

### Traumatic Changes in Personal Relationships

- Death of a family member or a close friend.
- Difficulties in marriage or family relationships.
- Dating and courtship difficulties.
- Sexual abuse (i.e., rape, incest, harassment).
- Terminal/chronic illness of a family member.

### Drug and Alcohol Abuse

- Indications of excessive drinking or drug abuse (i.e., binges, neglects eating or physical appearance, impaired thinking).
- Severe drug reaction (i.e., bizarre behavior, unexplained "blackouts" of memory).
- Being a child of an alcoholic or drug dependent parent.

### Academic Problems

- Dramatic drop in grade point average.
- Poor study habits.
- Incapacitating test anxiety.
- Sudden changes in academic performance.
- Lack of class attendance.

### Career Choice Problems

- Dissatisfaction with academic major.
- Unrealistic career aspirations.
- Confusion with regard to interests, abilities, or values.
- Chronic indecisiveness or choice conflict.
- Uncertainty of career alternatives.

(Crockett, 2001)

## REFERRAL SKILLS

Once you determine that a student might benefit from additional assistance, here are the things you should consider in making a referral.

**Referral decisions**—ability to determine whether a referral should be made.

- Determine issue(s).
- Determine whether or not you can help and/or are qualified to offer the assistance needed.
- Determine possible agencies or persons to whom the student may be referred.

**Referral process**—ability to refer the student to the proper person or agency for help.

- Explain in a clear and open manner why you feel it desirable or necessary to refer.
- Take into account that student's emotional and psychological reaction to the referral.
- Get the student to discuss his/her issue(s), consider reasons for referral, evaluate possible sources for help, and assist in the selection of the specific person or office.

- Explain fully the services which can be obtained from the resource person or agency you are recommending.
- Reassure student about capability and qualifications of resource to help meet the particular need expressed.
- Attempt to personalize the experience by giving the student the name of a contact person to ask for or help by calling for an appointment for the student. Give directions to the office if necessary.
- Discuss with the student any need for transfer of data and obtain consent and approval for the transfer.
- Assist the student in formulating questions to ask or approaches to take.
- Transmit to the person or office that will assist the student all the information essential for helping the student.

**Follow-up**—ability to evaluate the appropriateness and effectiveness of the referral.

- Determine if the student kept his appointment.
- Discuss with the student his evaluation of the help received from the agency or person.
- Determine whether you selected the appropriate resource for the student.

(Crockett, 2001)

## ADVISING ISSUES BY ACADEMIC STATUS

Academic advising issues vary for students at different points of their academic careers. Organized by academic status, the chart below highlights the academic themes, student needs, educational tasks, and academic and career services to meet those needs.

### Pre-Entry Student

Themes by Academic Level	Student Needs or Educational Tasks	Academic Advising and Career Services
Acquire accurate expectations	1. Prepare for entry into an academic discipline.	Provide new students with information on major courses of study and descriptions. Establish communications with new students and give assistance in decoding an academic discipline. Assist in clarifying students' academic and career goals.
Prepare	2. Become familiar with college requirements, course contents, and course terminology (i.e., credit hours, section, building abbreviations).	Ensure that new students receive the general catalog and relevant advisement information via Web access. Provide walk-in, Web or telephone assistance. Involve additional faculty in personalizing and clarifying academic program requirements and expectations.
	3. Complete initial registration.	Ensure that new students have received a class schedule and registration instruction, and supply a recommended first-year schedule. Conduct registration assistance via the Web or on campus.
	4. Learn to adjust class schedule before semester begins.	Provide add/drop instructions with course confirmation; where possible, develop specific instructions, especially for new students.
	5. Learn about financial aid and scholarship options and practices.	Provide walk-in, personalized faculty or staff assistance, as well as Web or telephone access to key financial aid and scholarship planning information. Connect students with appropriate personnel for specialized information on grants, loans, and scholarships.

### Freshman Year

Themes by Academic Level	Student Needs or Educational Tasks	Academic Advising and Career Services
Become familiar with academic life	1. Become familiar with university resources.	Provide information on academic advisement programs and university resources. Conduct new-student orientation and introduce students to campus resources. Develop and produce a handbook of related materials.
Set goals	2. Become acquainted with the college's mission, academic leaders (faculty, dept. chairs, deans) in major programs or interests.	Involve faculty in new-student orientation. Assign advisors to meet with new students during orientation. Plan faculty-student orientation seminars.
		Help students understand their goals in relationship to the aims of the college.
		Explore opportunities for students to obtain personal meaning of the college's mission statement.
	3. Learn to adjust class schedule after semester has begun.	During orientation, acquaint freshmen with advisement and registration offices, general catalog, and accessibility of campus Internet. Provide class-adjustment assistance.
Make commitments	4. Understand university and major requirements: <ul style="list-style-type: none"> <li>•General education</li> <li>•Credit hours</li> <li>•Residence</li> <li>•Major courses</li> <li>•Prerequisites for admission to college or major</li> </ul>	Automate academic requirements in Degree Progress Report and provide student access via Web. Provide walk-in academic advising services or seminars during new-student orientation.
		Maintain academic records for students, and provide individual access through campus Internet.
Use resources	5. Understand university policies and academic options	For example: <ul style="list-style-type: none"> <li>•Academic probation</li> <li>•Changing majors</li> <li>•Challenging classes</li> </ul>

		<ul style="list-style-type: none"> <li>• Advanced placement credit</li> <li>• Transfer credit</li> <li>• Independent study credit</li> <li>• Study abroad</li> <li>• Honors courses</li> </ul>
Setting expectations & responsibilities	6. Develop accurate expectations of time and effort required to make successful academic progress, and timely graduation: <ul style="list-style-type: none"> <li>• Time management</li> <li>• Study skills &amp; habits</li> <li>• Graduation plan</li> </ul>	Develop related seminars during the year or refer student to Academic Support Center for assistance with academic issues. Regularly monitor student academic progress and make appropriate referrals. Advisors help students develop and submit a graduation plan.
	7. Evaluate whether major and career choices match interests and abilities: <ul style="list-style-type: none"> <li>• Identify interests</li> <li>• Assess abilities</li> <li>• Explore major/career options</li> </ul>	Help students crystallize choice of major; work closely with career counselors to assess students' interests and abilities. Develop related seminars and refer students appropriately. Connect career plans with academic plan.
	8. Assume responsibility for own educational progress.	Use college resources to provide accurate academic, financial, and career planning; focus on enhancing student success in college.
	9. Learn how to associate with professors in and out of class.	Encourage and establish regular advising with faculty and dept. contacts.

### Sophomore Year

Themes by Academic Level	Student Needs or Educational Tasks	Academic Advising and Career Services
Crystallize academic plans	1. Determine academic path and expectations.	Establish contact with each sophomore student. Explore with students their academic direction. Electronically track and monitor student academic progress.
Development through student experience	2. Develop accurate expectations for selected major.	Develop, produce, and disseminate descriptive and interactive Web-based academic planning assistance. Provide students with technology and individualized service by promoting faculty assistance, and college- and department-sponsored seminars.
Integrate with campus life	3. Explore career opportunities within major.	Refer students to career counselors and relevant Web sites. Encourage contact with advisors. Conduct college-sponsored seminars and create pre-professional clubs. Promote student-initiated discussions with university and community professionals. Refer students to related academic internships and service learning experiential opportunities.
Reflection	4. Make well-defined educational plans for up-to-date information on major and university requirements.	Provide academic information that sequentially details requirements and that allows students to interact with the data via a Web-based system (individualized academic planning).
	5. Determine possible eligibility for financial assistance and/or scholarships.	Refer students to financial aid/scholarship office and promote financial-aid awareness and planning through a Web-based system, brochures, posters, and bulletin boards. Connect financial aid to an academic path to graduation.

### Junior Year

Themes by Academic Level	Student Needs or Educational Tasks	Academic Advising and Career Services
Integrate academic plans with career plans	1. Become acquainted with two or three faculty members in major field for academic or career planning and counseling and for future letters of recommendation.	Encourage faculty to post office hours and provide career/discipline advisement. Monitor program progress. Faculty-student interaction must be fostered, particularly at this academic level.
Clarification	2. Clarify career goals and test career choice.	Connect students with career counselors to review career literature related to major, such as related Web links. Develop opportunity for internships, college-sponsored seminars with guest lecturers, research projects, pre-professional clubs, co-op or academic internship experiences.

	3. Achieve intellectual competence in chosen field and confidence in professional ability.	Suggest study, group tutoring, supplemental instruction, lab experiences, major classes, internships, fieldwork, and research projects with faculty.
	4. If contemplating graduate school, consider institution-specific graduate program requirements and scholarships.	Explore with students or make available related institutional Web sites. Refer to graduate school catalogs. Provide information on graduate aid available and sources for scholarship applications.
	5. Determine academic standing.	Maintain and encourage students to monitor their academic progress. Suggest applying for graduation at the end of the student's junior year. Coordinate with graduation evaluation office to evaluate general education, major, and university requirements. Identify deficiencies.

### Senior Year

Themes by Academic Level	Student Needs or Educational Tasks	Academic Advising and Career Services
Preparing for transition to work or graduate school	Prepare for employment opportunities: •Prepare resume •Develop interviewing skills	Provide self-help guides on resume preparation and interviewing skills. Advisors should encourage students to obtain letters of recommendation from faculty, and provide other contacts. Promote career-planning seminars for advisees to attend.
Clarification	•Work with career placement center for interviews, contacts. •Identify and pursue potential career opportunities.	
Transitional	Prepare for graduate or professional opportunities: •Prepare for and take entrance exams (GMAT, GRE, LSAT, MCAT). •Assess different schools and programs to match abilities, financial commitment, and geographical preference. •Understand and complete application procedures. •Select graduate school to attend from offers received.	Review programs and guidebooks on graduate programs. Refer to faculty advisors to suggest schools, write letters of recommendation, and provide counsel and contacts. Submit application(s) for entrance exams.
	Fulfill major, general, and university requirements for graduation.	Conduct a degree-audit interview with each student. Review status of academic plan.
	Meet graduation deadlines.	Advise students of graduation status.
	Prepare for Commencement.	Ensure that students are appropriately recognized during commencement with diploma or other honors.

### Graduate Years

Themes by Academic Level	Student Needs or Educational Tasks	Academic Advising and Career Services
Stage Development	1. Understand the structure of the field.	Maintain a graduate advising program that coordinates central graduate school advisors with faculty advisors.
	2. Become acquainted with the language approach. Learn expectations and demands.	Focus on the process of academic and social integration of new graduate students through college/discipline-sponsored seminars, research projects, graduate student clubs and organizations, assistantships, etc.
	3. Become acquainted with people, a group of peers, faculty sponsor, etc.	Designate graduate faculty and graduate student peers to assist new students as socialization agents.
	4. Find a faculty sponsor.	Assign faculty advisor; match students with compatible faculty members to help focus their interests.
	5. Obtain sufficient financial assistance.	Identify faculty who can play a key role in helping students find institutional support and effective use of campus resources.
	6. Choose a committee.	Help students compose a committee of compatible individuals who have

		students' interests and success as a priority.
	7. Fulfill the dissertation or thesis requirement; that is, formulate the idea and method approach.	Provide guidance through committees, peers, and faculty advisors. Mentor students by providing career advice as they embark on their professional careers, especially in the exploration of alternatives in the field. Review students' goals, interests, and priorities.

(Modification of Kramer, 2000)

## TOP TEN TIPS FOR FRESHMAN ADVISORS

### Freshman Advising

“Academic advising should be woven into the fabric of the freshman year in ways that promote student development and that provide clear, consistent, and accurate information that is easily accessible to students. It should reflect the best professional knowledge of the day. Quite simply, good advising should not be left to chance.”

Vincent Tinto, 1999

### 10 Get to know your students.

Ask them a few quick “get to know you” questions (and keep notes on their responses):

- Where are you from?
- What brought you to Clemson?
- What were your favorite classes in high school? Why?
- What is something you can do for hours or have a passion for?

### 9 Treat students like they matter.

- Be on time for advising appointments.
- Call students by name.
- Take notes during appointment and keep them for later reference.
- Provide students with accurate information.

### 8 Avoid distractions.

- Be fully present and maintain eye contact while talking with student.
- Do not answer the telephone or e-mail during advising visit.
- Do not check your watch every few minutes.

### 7 Listen more than you talk.

- Ask open-ended questions.
- Allow students to share their stories with you, so that you can personalize the advising process for them.

### 6 Offer both challenge and support to the student.

- Help students reach beyond their comfort zone while providing them with support or scaffolding. Baxter Magolda & King, 2004

### 5 Encourage the student to take responsibility for their educational experience.

- Explain the notion of shared responsibility.
- Empower students to make informed decisions that move them closer to their academic and personal goals. Susan Frost, 1991

### 4 Involvement matters.

- Encourage your advisees to get involved in one academic and one social club/organization. Astin, 1993

### 3 Check on your students a couple of times during the semester.

- Connect with your advisees throughout the semester, not just at registration or crunch time.
- Depending on the need of the student and availability of time, choose between e-mail or face-to-face contact.

### 2 Be authentic and genuine with students.

- Students value and appreciate when an advisor is genuine and authentic with them. When advisors self-disclose, students feel like they are being treated as an individual, not as a number. Schreiner, Noel & Anderson, 2005

### 1 Ask yourself “what would I do if I really cared about this student?” and let your answer be your guide. Chip Anderson, 2005

**Resources** Compiled by Patrice Noel, 2006: <http://www.clemson.edu/advising/> - Clemson University Academic Advising Web Page  
<http://www.registrar.clemson.edu/portal/> - Registration Portal (includes information on Degree Progress Reports);  
<http://www.nacada.ksu.edu/> - National Academic Advising Association ; <http://www.psu.edu/dus/mentor/> - The Mentor, An On-line Academic Advising Journal; <http://www.sc.edu/fye/> - The National Resource Center on First-Year Experience and Students in Transition; Gordon, V. N., Habley, W. R., & Associates. (2004). *Academic Advising: A Comprehensive Guide*. San Francisco: Jossey-Bass.; Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (2005). *Challenging and supporting the first-year student*. San Francisco: Jossey-Bass.

**What is Ethical Behavior for an Academic Adviser?** Joyce Buck, John Moore, Marion Schwartz, and Stan Supon, Penn State University **Editor's note:** This is an excerpt from the second edition of *The Penn State Adviser*, published this month.

There is a moral contract that each of us subscribes to when we become academic advisers. We are in a position of responsibility to students and to the institution; therefore, we are obliged to behave morally. Moreover, there is no way we can ignore this responsibility, for there is no ethically neutral place from which to advise. So how do we fulfill the contract to which we have subscribed? There is no list of moral principles that can cover all situations in a foolproof way. Instead, we offer the following discussion of areas or of ideas where the issue of right conduct is especially crucial or pertinent.

### **Legal responsibilities/moral responsibilities**

When you started as an academic adviser, you took on certain legal obligations. You became part of a larger legal entity: you are the University, and your actions are the University's actions. On a day-to-day basis, the legal obligations that pertain to the advising process are actually few. It is hard to get yourself or the University sued if you act in good faith and with students' interests at heart. But it can happen.

The relationship between students and the University is contractual. This circumstance means that you as a spokesperson of the University must be careful about making any claims that you can't back up, such as regards fulfillment of degree requirements, guaranteeing employment in a certain field, and so on. Even spoken statements, like "I'm sure that the College of Science will allow you to graduate without this course," or "Major in food science and you'll get a good job in the field," whether true or not, are potentially dangerous because their utterance changes the terms of the contract between the student and the University. Only write or speak claims of which you have certain knowledge or that you have the power to bring about. If a student can prove that the adviser made a claim and that claim is not being fulfilled, the adviser/University might be asked to deliver on a promise or be sued.

Be careful, too, about defamation. "Defamation is a false statement made by one person to another about a third person that damages the reputation of the third person. For example, an adviser who mentions to another faculty member that one of his advisees cheated his way into medical school could be liable for slander (spoken defamation). If the communication were put into writing, it is called libel (written defamation)." (Donald D. Gehring, "The Legal Limitations on Statements Made by Advisers," *NACADA journal*, Vol. 7, No. 2 [Fall 1987], p. 64). We advisers like to talk about our students with each other. This is good. But magnifying problems to make the narrative more interesting is not. Be careful lest exaggeration lead to defamation.

No one would question that we need to take pains to provide the best advice we can to each student we meet. No one would question that we should take students' best interests to heart. But there are a thousand ways to do these things. Some obvious ways to fulfill moral obligations are to present students with all options, not just those you want them to follow; to get your students to take responsibility in advising and curricular matters; and not to cast aspersions on a colleague, class, or student. Don't recommend or not recommend a course or colleague based on hearsay alone.

Our moral obligations as advisers *should* correspond in every way with our legal responsibilities. To what extent are we responsible to students? To what extent are they really responsible for their own progress toward graduation? Penn State's faculty senate policy says that students are responsible for such decisions. Indeed students can take action contrary to what we urge them to do. But legally and morally we owe them those recommendations and admonitions. We owe them our counsel and the moral responsibility of standing by our counsel. Although we are legally not required to do so, when we are wrong, we need to make things right.

### **Bias and harassment behavior**

Bias and harassment include but are not limited to harassment along any of the following lines: gender, race, culture, age, sexual orientation, disability, and intellectual abilities. We humans are forced to see the world from a particular, limited point of view. We cannot see things or people as they really are; we are forced to make judgments about them according to our own lights. This viewpoint means that we are biased by our very nature. It is natural to group things and people together according to the ways in which they are similar. It is, furthermore, quite natural to respond to things and people based on this perceived similarity. But in the advising relationship, we must strive to fight against our natures and respond to people as individuals, suspending judgments that force themselves into our minds, judgments that are based on a perceived similarity between the person before us and a category of persons with which we are already familiar. In fact, we are arguing here against categorization, even though we realize that it is literally impossible to do away with categories.

Though it is impossible to resist categorization, you can still behave *as though you* were not categorizing people and judging them on their similarity to others. You certainly have the freedom of your thoughts. But you cannot let categorization govern the ways in which you listen to the student you are with. Similarly, you cannot let yourself exhibit any behavior – regardless of your inner thoughts – that could be considered harassment, because you need to relate to the student as a student and not as an object, a category, or a thing to be dominated. Your student needs to see you as a human being, not as a power broker.

In fact, all forms of harassment get back to an issue of power. We have earlier advocated that you regard your advisee as an equal who is entitled to your respect. This attitude demands that any power not being used for the greater benefit of the student should be



relinquished or eschewed. Even pity at a physical or a learning disability is a form of exercising power (to feel pity is to engage in a power relationship: one is up and superior, one is down and inferior). Charity is not a virtue when it allows one to feel superior.

A good way to become aware of (and hence to cut down on) your own biases is to monitor closely how you refer to students in the third person when discussing cases with other advisers. If you find yourself saying things like “This student, a girl in engineering ...” instead of “This engineering student ...” when engineering is the only relevant factor, then you have two strikes against you already. You may be basing other judgments on extraneous factors as well.

### **Conflict of interest**

Sometimes your role as a private individual comes into conflict with your role as an adviser. Sometimes the multiple roles that are part of the moral contract of being an adviser come into conflict with each other: for example, your legal versus your moral obligations; or your role as student advocate versus your role as institutional representative. Sometimes what the student wants very much conflicts with what you want for the student. But there is no rule for dealing with conflict of interest; you, yourself, must decide which role should gain ascendancy.

If things reach a point where you are exerting undue and untoward pressure on the student or yourself, the only thing to do is to withdraw from the situation. Refer the student to a higher authority, or ask another adviser to take over the situation for you. At the very least, consult with a colleague to find out what that person might have done in a similar situation.

### **Three dialectical tensions**

There are at least three continua along which moral behavior must be located for each new adviser. That is, new advisers must decide where they are comfortable on each of three sliding scales. Each veteran adviser needs to keep revisiting these dialectical tensions so as not to get stale.

The first is *neutral vs. prescriptive*. To occupy a position on the neutral side of this scale is to be reluctant to tell students what to do, preferring to let students discover the appropriate action with a little guidance. A neutral adviser will patiently provide information to help students decide on a course or a major, but will draw the line at making a recommendation. A prescriptive adviser doesn't hesitate to render an opinion, sometimes using the authority of the position of adviser to make the recommendation stick. Both positions, if taken to the extreme, can be dangerous to students.

The second is *encouraging vs. discouraging*, or always being optimistic vs. being cruel to be kind. On the one extreme are advisers who only look for ways to give positive messages to students. Such advisers, if they exist at all, would never criticize students for, say, bad grades, lest they become discouraged and go from bad to worse. On the other extreme are advisers who might relish every opportunity to chastise or look for negative consequences. These advisers are the sort who seem to lay every mishap that befalls a student on that student's doorstep. Neither extreme is likely to be right. Where you decide to place yourself on this continuum probably depends on what you believe would be right for the individual student before you.

Last, there is *judgmental vs. nonjudgmental*. This tension only exists within the adviser, not in the interaction with students. It is a basic attitude that you hold, a stance that you take, a way of looking at the world. You can either form judgments or not, or be somewhere in between. To be nonjudgmental is to accept without criticism what students say; to be judgmental is to not accept anything without subjecting it to scrutiny. Neither position is right or wrong. Both positions, if taken to the extreme, can affect students adversely. You need to locate yourself along this continuum in order to assess the moral position you hold vis-a-vis your interlocutors.

### **Summary**

1. In talking with students, make no claims based on uncertain knowledge. Avoid hearsay.
2. An adviser must be a custodian of the student's good reputation.
3. Present students with all the options open to them, not just the ones you favor.
4. An adviser who misadvises a student has the moral obligation to make things right.
5. Acknowledge one's biases and respond to students as unique individuals and not as members of a group or category.
6. Advisers advise; students decide.
7. Seek the elusive middle ground.

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**On the Web at [www.psu.edu/dus/mentor/Center for Excellence in Academic Advising](http://www.psu.edu/dus/mentor/Center for Excellence in Academic Advising)**

**Division of Undergraduate Studies**

**The Pennsylvania State University**

## FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

The Family Educational Rights and Privacy Act of 1974 (FERPA) affords eligible students certain rights with respect to their education records. They are as follows:

1. **The right to inspect and review the student's education records (provided the student has not waived this right) within 45 days of the day the University receives a request for access.**

Students should submit to the registrar, dean, head of the academic department, or other appropriate official, a written request identifying the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. **The right to request the amendment of the student's education records that the student believes are inaccurate or misleading.**

Students may ask the University to amend a record that they believe is inaccurate or misleading. To challenge the accuracy of an education record, the student should write to the registrar or other University official responsible for the record and clearly identify the part of the record he/she wants changed and specify why it is inaccurate or misleading. If the University official decides not to amend the record as requested by the student, the University official will notify his/her vice president. The vice president will then notify the student of his/her right to a hearing regarding the request for an amendment. Additional information regarding the hearing procedures will be provided to the student when notified of his/her right to a hearing. Note: The challenge of a student under this paragraph is limited to information which relates directly to the student and which the student asserts is inaccurate or misleading. With regard to a student's grade, this right does not permit the student to contest a grade on the grounds that a higher grade is deserved, but only to show that the grade has been inaccurately recorded.

3. **The right to consent to the disclosure of personally-identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.**

One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interest. A school official is a person employed by the University; a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another University official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his/her professional responsibilities. Upon request, the University discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

4. **The right to refuse to permit the designation of any or all of the following categories of personally-identifiable information as directory information, which is not subject to the above restrictions on disclosure: student's full name, home address and telephone number, campus address and telephone number, campus e-mail address, state of residence, date and place of birth, marital status, academic class, class schedule and class roster, name of advisor, major field of study, including the college, division, department or program in which the student is enrolled, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance and graduation, degrees and honors and awards received including selection to a dean's list or honorary organization and the grade-point average of students selected, and the most previous educational institution attended. Photographic, video, or electronic images of students taken and maintained by the University are also considered directory information.**

Directory information may be disclosed by the University for any purpose, at its discretion. Any student wishing to exercise his/her right to refuse to permit the designation of any or all of the above categories as directory information must give written notification to the Registration Services Office (E-206 Martin Hall) by the last day to register for the enrollment period concerned as published in the Clemson University calendar.

5. **The right to file a complaint with the U.S. Department of Education concerning alleged failures by Clemson University to comply with the requirements of FERPA.** The name and address of the office that administers FERPA is Family Policy Compliance Office, U.S. Department of Education, 600 Independence Avenue SW, Washington, DC 20202-4605.

For more information on FERPA, please refer to the on-line tutorial at: <http://www.registrar.clemson.edu/FERPA/ferpa.htm>.

## Student Concerns and Clemson University Resources

<b>Academic Concern/Issue</b>	<b>Campus Resource(s)</b>
Academic Skill Building Workshops	<u>Academic Support Center</u> Cooper Library- 3rd floor -- 864-656-6452
Study Skills and Habits Stress Management Time Management, etc.	<u>Counseling and Psychological Services (CAPS)</u> Redfern Health Center -- 864-656-2451
Change of Majors	<u>Records &amp; Registration</u> 102 Sikes Hal -- 864-656-2171
Math skills	<u>Math Department</u> 0-103 Martin Hall -- 864-656-3434
Reading Improvement	Ed 102, Efficient Reading Register for Class
Speech Lab Supplemental Instruction Tutoring in selected areas	<u>Academic Support Center</u> Cooper Library- 3rd floor -- 864-656-6452
Study Skills Course	Ed 103, Study Skills Register for Class
University Success Skills	CU101, Course Register for Class
Writing skills	Writing Center 212 Daniel Hall -- 864-656-3280

**Personal Issues****Campus Resource(s)**

Alcohol & Drug Education	<u>Redfern Health Center</u>
Appointment Line	Student Health, Counseling and Psychological Services - Redfern Health Center - Clemson
Ask-a-Nurse	University provides an on-campus health center which offers comprehensive services. Redfern Health Center is one of the 28 Student Health Centers in the United States, and currently is the ONLY Student Health Center in South Carolina to be accredited by JCAHO. In addition to Redfern's medical services division, a multi-disciplinary primary care to clients. 656-2233
Health Education	
Peer Health Education Program	
Campus Awareness Programming	
HIV/AIDS pre- and post-test counseling	
Individual Assistance and Referral.	
Personal Counseling	<u>Counseling and Psychological Services (CAPS)</u> <u>Redfern Health Center</u> -- 864-656-2451 After Hours: University Police -- 864-656-2222
Roommate problems	Floor Resident Assistant Residence Hall

**Career Issues****Campus Resource(s)**

Academic program selection	<u>Michelin Career Center</u>
Career Placement	316 Hendrix Center -- 864-656-0440
Recruiting for graduating students	
Resume assistance	
Educational Placement Services	
CU Teacher Interview Program	
Career Fair	
Career Library	
Career Planning	
Career Counseling	
Career Interest Testing	
Career Planning Workshops	
Computerized Career Guidance	
Education Career Service	
Experiential Education	
Internship Program	
Job market for college graduates	
Part-time Job Program	
Specific Career Services - CAFLS students	<u>Career Services</u> 101 Barre Hall -- 864-656-5727

**Financial Issues****Campus Resource(s)**

Financial Education Services Balancing checking/savings accounts Credit cards Managing loans Repairing Credit Spending and savings plans	Student Financial Education Service 805 University Union -- 864-656-7337
Finding a part-time job	Michelin Career Center 316 Hendrix Center -- 864-656-2160
Obtaining a loan/scholarship	Office of Financial Aid G-06 Sikes Hall -- 864-656-2280
Finding a summer job/internship/co-op opportunity	Michelin Career Center 316 Hendrix Center -- 864-656-2160  Cooperative Education 321 Brackett Hall -- 864-656-3150

**Social Issues****Campus Resource(s)**

Greek Organizations	<u>Panhellenic Council</u> University Union -- 864-656-2697  <u>Interfraternity Council</u> Wannamaker Hall Bmt -- 864-656-0909
Meeting new friends	Campus Ministry <u>Central Spirit</u> CU 101 course Dept. & Social Clubs <u>Student Organizations</u> <u>Intramurals</u> Residence Assistants Tigers Who Care (servive organization)
Multicultural Activities	<u>Multicultural Affairs</u> 214 Hendrix Center -- 864-656-7625
Student activities	Organizations Fair and Union Info Desk <u>University Union</u> -- 864-656-4357

## INSTITUTIONAL EFFECTIVENESS TABLES

### Programs Eligible for Accreditation and Programs Accredited

*Applicable to four- and two-year institutions*

**1, 2008**

**Due August**

This form includes a list of accrediting bodies for which one or more academic programs are currently creditable in a South Carolina institution as reported on U.S. Department of Education FORM IPEDS-1C-1 (6-1-94) and/or have been approved by the Commission on Higher Education.

According to Section 59-101-350, the Commission is responsible for collecting “the number and percentage of accredited programs and the number and percentage of programs eligible for accreditation” from four- and two-year post-secondary institutions to be included in the annual report to the General Assembly. The Commission on Higher Education also uses this information as a base to fulfill requirements in Section 59-103-30 for performance funding to collect information on Instructional Quality by looking at the accreditation of degree-granting programs.

If your institution offers one or more programs listed in the Commission’s current Inventory of Academic Degree Programs (<http://connect.che.sc.gov/AS400/Inven/Default.asp>) that is creditable by one or more of the following agencies, you should complete the columns in the table that follows by placing an “x” in the box. For those agencies that **accredit individual programs within departments, please put the number of programs in parentheses beside the “x”**. An **creditable** program is one that is eligible for accreditation, regardless of whether or not the institution chooses to pursue accreditation. An **accredited** program is one that has been granted **full** accreditation status by the appropriate accrediting agency.

The addition or deletion of an agency from this list is a prescribed process, administered through the Commission’s Academic Affairs Division. If an agency is added to this list the date that it is added dictates when an creditable program should be counted “against” the institution with regard to its full accreditation. The most recent agencies that have been added to the list have their corresponding dates listed so that institutions can better calculate the time frame for accreditation. Any agencies that appear on the list without a corresponding date should be understood to have appeared prior to May 1998. For a complete set of policies and procedures regarding this process, see the Commission’s website at: <http://www.che400.state.sc.us/AcademicAffairs/Accreditation%20Guidelines.doc>.

**Institution:**

Clemson University – 2008 Annual IE Report

ACCREDITING AGENCIES AND AREAS	Accreditable Program	Fully Accredited Program	Details on Program (if program not fully accredited-do not complete if fully accredited)			Date agency/are a added to CHE List
			Year program added at institution	Institution has chosen NOT to seek accreditation for this program	Accreditation Expected (if known)	
<b>American Assembly of Collegiate Schools of Business - International Association for Management Education</b>	<i>An institution may be accredited by the AACSB or the ACBSP</i>					
Business (BUS)-Baccalaureate, Masters', and Doctoral degree programs in business administration and management	X	X				
Business (BUSA)-Baccalaureate, Masters', and Doctoral degree programs in accounting	X	X				
<b>ACCREDITING BOARD FOR ENGINEERING &amp; TECHNOLOGY, INC.</b>						
<b>Engineering (ENG)-Baccalaureate and master's level programs in engineering</b>	X	X				
<b>AMERICAN COUNCIL FOR CONSTRUCTION EDUCATION</b>						
<b>Construction Education (CONST) - Baccalaureate degree programs</b>	X	X				
<b>AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS</b>						
<b>Landscape Architecture (LSAR) - Baccalaureate and master's programs leading to the first professional degree</b>	X	X				
<b>COMMISSION ON COLLEGIATE NURSING EDUCATION (CCNE)</b>						11/1999
<b>Nursing - Baccalaureate-degree nursing education programs</b>	X	X				
<b>Nursing - Graduate-degree nursing education programs</b>	X	X				
<b>COMPUTING SCIENCE ACCREDITATION BOARD, INC.</b>	This is now a part of <b>ACCREDITING BOARD FOR ENGINEERING AND TECHNOLOGY, INC.</b>					
<b>Computer Science (COMP) - Baccalaureate programs in computer science</b>	X	X				
<b>COUNCIL FOR ACCREDITATION OF COUNSELING AND RELATED EDUCATION PROGRAMS (CACREP)</b>						5/1998
<b>Masters degree programs to prepare individuals for community counseling, mental health counseling, marriage and family counseling, school counseling, student affairs practice in higher education</b>	X	X				
<b>NATIONAL ARCHITECTURAL ACCREDITING BOARD, INC.</b>						
<b>Architecture (ARCH) - first professional degree programs</b>	X	X				
<b>NATIONAL ASSOCIATION OF SCHOOLS OF ART AND DESIGN</b>						
<b>Art &amp; Design (ART) - Degree-granting schools and departments and nondegree-granting schools</b>	X	X				

ACCREDITING AGENCIES AND AREAS	Accreditable Program	Fully Accredited Program	Details on Program (if program not fully accredited-do not complete if fully accredited)			Date agency/area added to CHE List
			Year program added at institution	Institution has chosen NOT to seek accreditation for this program	Accreditation Expected (if known)	
<b>NATIONAL COUNCIL FOR ACCREDITATION OF TEACHER EDUCATION</b>						
<b>Teacher Education (TED)</b> - Baccalaureate and graduate programs for the preparation of teachers and other professional personnel for elementary and secondary schools	X	X				
<b>SOCIETY OF AMERICAN FORESTERS</b>						
<b>Forestry (FOR)</b> - Programs leading to a bachelor's or higher first professional degree	X	X				

*Changes between 2007 and 2008: Commission on Accreditation for Dietetics Education (CADE) approved Didactic Program in Dietetics until 2017 with an interim report due 2012.*

**Total**

13 13

This information to be used for performance indicator 3D



INSTITUTION:

Clemson University – 2008 Annual IE Report

*Courses Taught by Faculty*

APPLICABLE FOR FOUR- AND TWO-YEAR INSTITUTIONS – REPORTED FOR FALL 2007

**ACCORDING TO SECTION 59-101-350, THE COMMISSION IS RESPONSIBLE FOR COLLECTING “THE PERCENT OF LOWER DIVISION INSTRUCTIONAL COURSES TAUGHT BY FULL-TIME FACULTY, PART-TIME FACULTY, AND GRADUATE ASSISTANTS” FROM FOUR- AND TWO-YEAR POST-SECONDARY INSTITUTIONS TO BE INCLUDED IN THE ANNUAL REPORT TO THE GENERAL ASSEMBLY.**

**THE COMMISSION WILL USE PREVIOUSLY-REPORTED CHEMIS INFORMATION FOR DATA IN THIS TABLE. INSTITUTIONS WILL HAVE AN OPPORTUNITY TO PROOF THIS INFORMATION PRIOR TO THE PUBLICATION OF THE JANUARY 2009 REPORT. FACULTY DEFINITION WILL BE ANY FACULTY, STAFF OR GRADUATE ASSISTANT WHO TEACH A CREDIT COURSE.**

*Success of Students in Developmental Courses*

FOUR-YEAR COLLEGES AND UNIVERSITIES NO LONGER OFFER THESE COURSES, THEREFORE THIS TABLE HAS BEEN DELETED.

*Student Involvement in Sponsored Research*

APPLICABLE TO FOUR-YEAR INSTITUTIONS – REPORTED FOR FALL 2007

**ACCORDING TO SECTION 59-101-350, THE COMMISSION IS RESPONSIBLE FOR COLLECTING “THE PERCENT OF GRADUATE AND UPPER DIVISION UNDERGRADUATE STUDENTS PARTICIPATING IN SPONSORED RESEARCH PROGRAMS” FROM FOUR-YEAR INSTITUTIONS TO BE INCLUDED IN THE ANNUAL REPORT TO THE GENERAL ASSEMBLY.**

**THE NUMBERS INCLUDED HERE SHOULD REFLECT THE GRADUATE AND UPPER DIVISION UNDERGRADUATE STUDENTS WHO PARTICIPATE IN SPONSORED RESEARCH PROGRAMS. EACH INSTITUTION THAT RECEIVES RESEARCH DOLLARS GENERATED BY EXTERNAL FUNDING (SPONSORED RESEARCH) SHOULD REPORT THE NUMBER OF STUDENTS WHO BENEFIT FROM THESE DOLLARS.**

**THE CHE WILL CALCULATE THE PERCENTAGE USING THESE DATA AND HEADCOUNT ENROLLMENT DATA FROM THE FALL 2007 IPEDS ENROLLMENT FORMS.**

	NUMBER OF STUDENTS PARTICIPATING IN SPONSORED RESEARCH (EXCLUDE FIRST PROFESSIONAL STUDENTS)
UPPER DIVISION, UNDERGRADUATE STUDENTS	89
GRADUATE STUDENTS	481

*Results of Professional Examinations*

APPLICABLE TO ALL SECTORS – REPORTED FOR APRIL 1, 2007- MARCH 31, 2008

According to Section 59-101-350, the Commission is responsible for collecting “student scores on professional examinations with detailed information on state and national means, passing scores, and pass rates, as available, and with information on such scores over time, and the number of students taking each exam” from four- and two-year institutions to be included in the annual report to the General Assembly. The Commission on Higher Education also uses this information as the primary source with which to fulfill requirements in Section 59-103-30 for performance funding to collect information on Instructional Quality and Graduates’ Achievements by looking at the scores of graduates on post-undergraduate professional, graduate, or employment-related examinations and certification tests.

Past committee work and the development of performance funding have defined the collection of this information to include only first-time test takers (except the teacher education exams at four-year institutions, which include all test takers) for those students who completed an examination during the period of **April 1, 2007 through March 31, 2008**. The following tables display the exams that each sector has reported in the past. Please use this list as a guide for the exams you report this year on the table provided. **Please be aware that your institution may have students taking certification exams that have not been reported on in the past.** This would be the case if students were just beginning to complete a new program. In such cases, please report the scores and indicate that the exam is new to the table. New exams will not be used for Performance funding reporting.

*THE COMMISSION WILL REQUEST NATIONAL AND STATE PASS RATES AND ANY ADDITIONAL INFORMATION FOR THESE EXAMINATIONS, AS IT IS AVAILABLE, FROM NATIONAL AND STATE AGENCIES TO BE USED IN THE REPORT TO THE GENERAL ASSEMBLY. THESE NATIONAL AND STATE AGENCIES CAN BE FOUND IN “A CLOSER LOOK.”*

**PRAXIS EXAMS ARE REPORTED SEPARATELY IN THE FOLLOWING TABLE.**

*PLEASE NOTE THAT PRAXIS RESULTS ARE REPORTED ON ALL TEST-TAKERS. OTHER EXAMS ARE REPORTED ON FIRST-TIME TEST-TAKERS.*

Name of Exam	Date(s) Administered	# of Examinees	# of Examinees who Passed	% Examinees Passing
<i>Teaching and Research Sectors</i>				
<b>PRAXIS SERIES II: CORE BATTERY PROFESSIONAL KNOWLEDGE</b>				
<b>PRAXIS SERIES II: PRINCIPLES OF LEARNING &amp; TEACHING (K-6)</b>	4/07, 6/07, 9/07, 11/07, 1/08, 3/08	<b>195</b>	<b>185</b>	<b>95%</b>
<b>PRAXIS SERIES II: PRINCIPLES OF LEARNING &amp; TEACHING (5-9)</b>	4/07, 6/07, 9/07, 11/07, 1/08, 3/08	<b>65</b>	<b>55</b>	<b>85%</b>
<b>PRAXIS SERIES II: PRINCIPLES OF LEARNING &amp; TEACHING (7-12)</b>	4/07, 6/07, 9/07, 11/07, 1/08, 3/08	<b>124</b>	<b>114</b>	<b>92%</b>
<b>PRAXIS SERIES II: SPECIALTY AREA TESTS</b>	4/07, 6/07, 9/07, 11/07, 1/08, 3/08	<b>651</b>	<b>625</b>	<b>96%</b>

Name of Exam	Date(s) Administered	# of Examinees	# of 1 <sup>st</sup> Time Examinees	# of 1 <sup>st</sup> Time Examinees who Passed	% 1 <sup>st</sup> Time Examinees Passing
<b>RESEARCH SECTOR</b>					
National Council Licensure Exam. (NCLEX) - Registered Nurse (BS)	Ongoing	110	110	98	89.09%