

CLEMSON UNIVERSITY

**SUMMARY REPORT
ON
INSTITUTIONAL EFFECTIVENESS**

**SUBMITTED TO
COMMISSION ON HIGHER EDUCATION**

AUGUST 2000

This summary report for *Clemson University* includes:
Majors or Concentrations, Academic Advising, Procedures for Student Development

The following reporting cycle (past and future) is for the required components:

Component	1999	2000	2001	2002
1. General Education	X		X	
2. Majors or Concentrations	X	X	X	X
3. Performance of Professional Programs	X	X	X	X
5. Academic Advising	X	X	X	X
12. Procedures for Student Development		X		X
13. Library Resources and Services	X		X	

Component 2 Majors or Concentrations

Reporting on assessment in the major has been modified across the state to coincide with program reviews. Majors in the areas of business, foreign language, and nursing underwent program review by the South Carolina Commission on Higher Education (CHE) and professional accrediting agencies since the last reporting period. Those programs included in the Interim Report are physical science, and performing and visual arts.

Synopsis of Program Review: Assessment for Selected Majors or Concentrations

Business [Accounting (B.S.), Financial Management (B.S.), Industrial Management (B.S.), Management (B.S.), Marketing (B.S.)] Faculty, students, and curricula were among the areas examined in the self-study performed for the AACSB review. Highlights from these areas substantiating the use of data for continuous planning and evaluation are:

- Resulting from feedback from students and advisors, a foundation curriculum was adopted for all business majors. The revision adds a more focused international requirement and additional flexibility in meeting general education requirements.
- An increase in skills development for oral and written communications is being integrated into each program.
- Employer feedback indicated that students needed more experience in group/team work. The faculty incorporated group projects into course work to aid students in developing these skills. However, recent exit survey and interview results reveal that the department tends to ‘overdo it’ as some classes do not lend themselves to group projects. Review of this practice has begun.
- Responding to the student and recruiter feedback, increased experiential learning opportunities are available through internships. In one department, a faculty member has been designated as an internship coordinator to develop opportunities, to facilitate and monitor student placement.
- Information for career possibilities has not always been accessible to students. The Finance Club is now being used as a major vehicle to inform students of career possibilities.
- Practical applications have been integrated into the classroom including ‘trading room’ and simulation game software packages.
- Results from exit and alumni surveys indicated low satisfaction with advising practices. A better student advising system, including advisor training was created along with a new freshman advisor position.
- The programs compare favorably with national norms, state averages, and within the university in student and faculty credentials. Diversity is a concern based on review of data. A commitment to holding the summer Careers Workshop is an important avenue to increasing the number of African-American students. Increased representation of African-Americans and women faculty members are on going priorities.
- Low first-time pass-rates on professional exams (accounting) raised concerns. Changes have been made in response to these data and progress is being documented.
- Feedback indicated that technical support was important. Subject to the financial assistance from a technology fee, the college will continue to update student computer labs every two years. Faculty computing will be updated on an as-needed basis.

Foreign Language [Modern Languages (B.S.), Language and International Trade (B.A.)] Both the long term and short term objectives are evaluated by the Department. Records indicate that the students generally complete their program within 4 years and seldom transfer out of the program. The use of evaluation of data provides the department with a better understanding of the effectiveness of the program. Several approaches are used to examine the knowledge, skills, and abilities of the graduating students.

- An exit examination administered to seniors allows students to demonstrate competence in the four language skills and in reading and analyzing material in the target language on topics related to their area of specialization. Reviewing a sample of the exit examination results, the faculty realized the need for further refinement of the testing instruments since the students in French, German, and Spanish did not achieve the departmental goal set for the exam. Using the assessment results, the faculty proposes modification to the time the test is administered, the preparation that the students must have prior to taking the exam, and the student culture of expectations of the exam outcomes.
- Telephone surveys are used for program evaluation. Interviews are conducted one year after graduation to gather data regarding employment or enrollment in graduate school. Feedback from the alumni indicated that they were exceptionally fluent in a foreign language or in international business knowledge but not well trained in computer technology. This observation is supported by the results from the Alumni Survey. Reconsideration of course experiences in computer technology is being discussed by the faculty.
- Alumni Surveys provide additional insight into the program. Like the telephone survey, the alumni who completed the written survey reported that frequent or extensive use of computers is necessary in their work environment. This conclusion is an area recommended for modification to the curricula.
- Advisement forms show low satisfaction with the quality of advisement. The Department of Languages has a new Director who has the reputation for extensive, high-quality advising. The department has arranged informal social gatherings for students to meet and talk with all advisors in the department.

Nursing [Nursing (B.S., RN completion program)] Multiple methods and procedures have been used effectively by the School of Nursing. Evaluation data provides continuous feedback to faculty, program coordinators, and the school director. Additionally, data are used for decision-making and systematic program improvement. Examples of the use of data for program and departmental modifications are:

- Assessment of faculty composition and distribution within clinical specialty areas of full-time tenure track faculty resulted in a decision to reallocate selected positions and to coordinate the offering of the positions to selected, well-qualified faculty.
- Ad hoc committee evaluated the equipment and supplies available for teaching psychomotor skills. Laboratory equipment was upgraded as a direct result of the evaluation.
- The School of Nursing Curriculum Committee revised courses and clinical practice based on student comments on exit and alumni surveys.
- Exit and alumni survey results indicated a need to examine (and revise) student-faculty communications. Measures instituted to enhance communications include student-faculty assembly, liaison meetings, and brown-bag luncheon seminars.
- Scores from the NCLEX-RN were lower than state and national norms. Strategies implemented to ameliorate this deficiency include requirements for program progression (minimum grades, repeating coursework, clinical standards), revision to grading policies, and mentoring program for transfer

students with those students with less than a 2.5 GPA. Additionally a diagnostic readiness test and review course prior to taking the NCLEX-RN are being encouraged.

Interim Report

Physical Science Each of the physical science programs has completed the annual assessment record required by the University and each continues to detail on-going program evaluation. Documented program enhancements as a result of assessment include:

- Through an exit survey of students, the department learned about the effectiveness of a new course, 'theoretical physics (PHYS 311). Due to its success, the faculty is discussing possibly expanding and enhancing the course to two semesters.
- One measure of student success is the mean score on the GRE. The Physics Department is discussing approaches to help students achieve higher scores. The Geology Department took the following steps to enhance student performance: establish an honors section, expand the field camp, and revise the content of the Structural Geology course.
- The Textile Chemistry Department encourages and monitors student participation in summer internship programs or summer research experiences. Reviewing the placement patterns of students indicated that a more formal industrial partnership needed to be established. Outstanding success was achieved; during the past year, the number of available summer positions exceeded the number of students to fill them.
- Evaluation of student writing skills in laboratories indicated that students were not upholding the average desired level. Results will be given to the Teaching Laboratory Instructors in which oral and written reports are required. The technical content and writing feedback to the Laboratory Instructors will be used as a basis for modification to courses and reporting of information. This will ensure an on-going evaluation by the curriculum committee assessing the ability of students to communicate technical results.
- Senior exit interviews have assisted the Geology Department in program improvement. Narrative comments on senior exit interviews indicate that greater emphasis should be placed on field experiences. Toward this end, considerable headway has been made in establishing an endowment for supporting geologic field trips.
- Based on the median scores of the American Chemical Society Division of Chemical Education Exams for Subject Courses, changes have been made to the curricular.

Performing and Visual Arts

The CHE Programmatic Recommendations identifies specific areas of the Fine Arts, B.F.A. program that need modifications; Clemson University Department of Art is taking measures to address the issues. Progress has been made in seeking accreditation from National Association of Schools of Art and Design. A site team was on campus and follow-up information is being submitted as requested. The Department continues to refocus its mission to serve the whole campus as well as continue to provide a stellar academic program. Strengthening and expanding the gallery programs, enhancing and upgrading studio space, physical improvements, upgrading equipment, refocusing courses and studios in Art History are all results of program assessment. The Office of the Vice President for Academic Affairs in conjunction with the College of Architecture, Arts, and Humanities monitors the impact of changes and

provides progress reports. Clemson University anticipates a favorable review with accreditation expected in April 2001.

Component 5 Academic Advising

Overview

It was evident from the 1998-1999 assessment of academic advising that Clemson University undergraduate and graduate students are generally satisfied with the way advising is conducted. Academic advising assessment indicates continuous improvement of programs and services. Clemson University's assessment plan for CHE Component 5, Academic Advising, identifies using surveys as one of multiple data-gathering strategies. The office for Institutional Effectiveness and Assessment has obtained data from currently enrolled students and alumni that will be provided this fall to the Academic Advising Task Force established by the Provost in response to the reports prepared last year. Additionally, summaries of data from the studies are presented to each of the college deans, Provost, Dean of the Graduate School, and Senior Vice Provost and Dean of Undergraduate Studies. This on-going inventory and review provides a useful overview of policy, procedures, or practices in academic advising and becomes the basis for the 2000-2001 study.

Measures and Strategies

Student Satisfaction: Currently Enrolled Undergraduate

The *Student Satisfaction Inventory* rates importance and satisfaction of several scales including Academic Advising. To determine the level of satisfaction with practices at Clemson University, a sample of undergraduate students was selected responded to questions on the Student Satisfaction Inventory. The reported scores based on a scale of 1 to 7 compare the 1998 and 1999 survey results with those of the students taking the same inventory in 2000.

Not only are the scores of the Clemson students compared to the prior year ratings, but also to selected peer institutions and the National Mean. The table below shows only the statistically significant score difference between mean satisfaction and mean importance. Although interesting, the comparison scores with the National Mean are not as important as those of our peer institutions. Consistently the Clemson University students have ranked the highest level of dissatisfaction with academic advising as the developmental area. That is, the students are less dissatisfied with the process or technical aspects of academic advising (i.e., knowledge of requirements) than they are with the personal aspects (i.e., approachable, concern, helps set goals).

**Statistically Significant Difference in Mean Scores of Satisfaction for
Clemson University Undergraduate Students, Peer Institutions,
and National Mean Scores, 2000**

	CU 99/ CU 00	CU 00/ Peer 00	CU 00/ National 00
Scale / Item	Statistically Significant in Mean Satisfaction Difference		
<i>Academic Advising</i>	-.07*		.09***
My academic advisor is approachable	-.13**		.12***
My academic advisor is concerned about my success as an individual	-.17***		
My academic advisor helps me set goals to work toward	-.12*	-.12**	-0.12***
My academic advisor is knowledgeable about requirements in my major			.21***
Major requirements are clear and reasonable		.13***	.25***

* Difference statistically significant at the .05 level

** Difference statistically significant at the .01 level

*** Difference statistically significant at the .001 level

The data indicates that the level of satisfaction continues to rise regarding the advisor's knowledge about requirements in the major as well as perceiving the requirements as being clear and reasonable. The mean score for satisfaction is lower for two items that reflect the advisors attitude or style: approachability and concern. It is evidenced by this display that Clemson students are dissatisfied with academic advising as it relates to the advisors ability to perform developmental or personal performance.

**Comparison of Clemson University Undergraduate Students
1999, 1998, 2000**

	1998	1999	2000
Scale / Item	Importance/ Satisfaction	Importance/ Satisfaction	Importance / Satisfaction
<i>Academic Advising</i>	6.29/ 5.05	6.28/ 5.20	6.28/5.13
My academic advisor is approachable	6.42/ 5.30	6.41/ 5.50	6.39/ 5.37
My academic advisor is concerned about my success as an individual	6.24/ 4.88	6.23/ 5.09	6.24/ 4.92
My academic advisor helps me set goals to work toward	5.88/ 4.41	5.89/ 4.58	5.85/ 4.46
My academic advisor is knowledgeable about requirements in my major	6.55/ 5.37	6.52/ 5.50	6.52/ 5.55
Major requirements are clear and reasonable	6.36/ 5.31	6.33/ 5.33	6.38/ 5.35

When compared to the National Group, the Clemson University students in 1999 reported greater satisfaction. The statistically significant difference between the results of the 2000 administration indicates that the Clemson University students continue to be more satisfied than the National Group. In addition, the Clemson students are more satisfied with the advisor's approachability, knowledge about requirements, and clarity of requirements. However, the level of satisfaction is significantly lower for

Clemson students on the item of the advisor's helping the student to set goals. This item continues to have the greatest discrepancy between Clemson students' level of importance and level of satisfaction. The following table displays the results of the past two annual administrations of the survey.

**Comparison of Clemson University Undergraduate Students
And National Group, 1999 and 2000**

Scale / Item	Clemson University		National Group	
	1999	2000	1999	2000
	Importance / Satisfaction	Importance / Satisfaction	Importance / Satisfaction	Importance / Satisfaction
<i>Academic Advising</i>	6.28/ 5.20	6.28/5.13	6.31/ 5.01	6.30/ 5.04
My academic advisor is approachable	6.41/ 5.50	6.39/ 5.37	6.42/ 5.21	6.42/ 5.25
My academic advisor is concerned about my success as an individual	6.23/ 5.09	6.24/ 4.92	6.24/ 4.90	6.24/ 4.94
My academic advisor helps me set goals to work toward	5.89/ 4.58	5.85/ 4.46	6.00/ 4.54	5.60/ 4.58
My academic advisor is knowledgeable about requirements in my major	6.52/ 5.50	6.52/ 5.55	6.50/ 5.31	6.50/ 5.34
Major requirements are clear and reasonable	6.33/ 5.33	6.38/ 5.35	6.37/ 5.10	6.37/ 5.10

As part of institutional analysis, a comparison was made of Clemson University student's response to that of peer institutions. There is a statistically significant difference in satisfaction on two items. Clemson students had a lower mean score on importance of the advisor's helping set goals. There is a statistically significantly higher level of satisfaction with the major requirements being clear and reasonable.

**Comparison of Clemson University Undergraduate Students
And Peer Group, 1999 and 2000**

Scale / Item	2000 CU	2000 Peer
	Importance / Satisfaction	Importance / Satisfaction
<i>Academic Advising</i>	6.28/5.13	6.33/ 5.13
My academic advisor is approachable	6.39/ 5.37	6.48/ 5.35
My academic advisor is concerned about my success as an individual	6.24/ 4.92	6.30/ 4.98
My academic advisor helps me set goals to work toward	5.85/ 4.46	5.96/ 4.58
My academic advisor is knowledgeable about requirements in my major	6.52/ 5.55	6.55/ 5.51
Major requirements are clear and reasonable	6.38/ 5.35	6.37/ 5.22

CHE Advisor Availability Survey, 2000

The CHE Advisor Availability Survey was administered to undergraduate students during classes in the spring term (0001). The classes were selected to create a representative sample of the undergraduate student body. The students responded to a four-point Likert-like scale of satisfaction regarding the availability of their academic advisor. They were to consider the advisor's availability via office hours,

appointments, and other opportunities for face-to-face interaction as well as via telephone, e-mail, or other means. The 2000 administration results are 83% are Very Satisfied or Satisfied with the mean rating of 3.07.

With a 4-point range on the scale and the large number of students surveyed, statistically significant findings between the years of administration must be considered with suspicion. The responses by class level are all above 3 with over 80 percentage of the students responding as being very satisfied or satisfied with the availability of their advisor. The following table displays this information.

**Responses by Class Level,
Mean and Percentage Rating Availability of Advisor as
Very Satisfied or Satisfied, 2000**

Academic Status	Mean	Percentage
Freshman	3.03	83
Sophomore	3.03	83
Junior	3.06	82
Senior	3.15	84

The mean scores by college are useful. In 2000, the range of satisfaction was from 77% in the college of Architecture, Arts, and Humanities to 90% in Health, Education, and Human Development. The College of Health, Education, and Human Development responded to student feedback by establishing an advising center for students. Clearly, the center has had a positive impact on the student responses as the mean score rose from 3.05 in 1999 to 3.20 in 2000.

The results of this survey are provided to the Provost and the Senior Vice Provost and Dean of Undergraduate Studies. Additionally, the committee appointed by the Provost to examine academic advising procedures and policies on the campus will deliberate implications of the data.

Alumni Survey

Each year the Office of Assessment sends an alumni survey to each student who graduated one and three years ago and for whom there is a complete USA address. The results of these surveys are shared with the appropriate departments, colleges, and administrators to aid in their decision making. Those graduate students who graduated one year ago (August and December 1998, May 1999) responded positively to questions associated with advising.

The One-Year Out Undergraduates were generally satisfied with their academic advising at Clemson. The data does not distinguish the type(s) of advising that the students received (faculty or center/services); however, it provides an overview with satisfaction. The table of results shows the percent responding to the level of satisfaction by item.

**Undergraduate Alumni, 1 Year Out,
1999 Survey**

Item	% Very Satisfied or Somewhat Satisfied
The way my advisor monitored and was concerned about my academic progress	50.5
My advisor's level of knowledge about curriculum, policies and procedures	69.8
My advisor's assistance with personal or academic difficulties	56.6
My advisor's availability	71.9
The effectiveness of my academic advisor in helping me select classes that contributed to learning in my major	59.6

Two things must be noted as a result of the analysis of the alumni survey. First, over the past several years, revisions have been made to the survey. In those revisions, consistency of dimensions was lost. It is essential that the office for Institutional Effectiveness and Assessment adopt scales that will provide consonant longitudinal data.

Second, the items for undergraduate students are the similar as those for the graduate students. The University Assessment Committee deliberated on these finding and determined that expectations and responsibilities for the two classes of students would not be comparable. Thus, the results for the graduate students are displayed in a separate table and should be interpreted in the context of graduate student needs.

**Graduate Alumni, 1 Year Out,
1999 Survey**

Item	% Very Satisfied or Somewhat Satisfied
I had a professor who served as my 'mentor'	55.1
The way my advisor monitored / was concerned about my academic progress	72.7
My advisor's level of knowledge about curriculum, policies and procedures	83.9
My advisor's assistance with personal or academic difficulties	75.7
My advisor's availability	79.4

Advising Services, Spring 2000

Clemson University has two forms of academic advising: faculty based advising and Student Advising Services or Centers. The administration of these approaches varies by college as well as by department. Advising Services that provide a designated point for academic counseling for specific students, is a part of four college structures. The following table displays the type of advising program by college.

Academic Advising Protocol by College

College	Advising Center or Service	Faculty
Agriculture, Forestry & Life Sciences	Undeclared Majors	Yes
Architecture, Arts & Humanities	Undeclared Majors	Yes
Business and Public Affairs	Selected departments: Freshmen	Yes
Engineering & Science	Freshman Engineering	Yes
Health, Education, & Human Development	a. Undeclared Majors b. Freshmen/Sophomores c. Transfer d. Change of Major	Yes

Different strategies are used to assess the effectiveness of advising services. The College of Agriculture, Forestry, and Life Sciences uses student feedback and student progress to evaluate its program. A file is maintained of student interactions. Special interventions are applied if students have difficulty transferring out of the undeclared status or have academic trouble. The threshold measure is that students have declared a degree granting major by the time they have completed 60 hours.

The results of the alumni survey and exit surveys have been used to improve advising services for selected programs in the College of Business and Public Affairs. The students reported low satisfaction with advising to which departmental response has been to establish a better system of advising including advisor training and funding a freshman advising position.

The Advisement Center for the College of Architecture, Arts, and Humanities uses a survey of students to help ‘undeclared student with the best advising services possible’. The students provide their class rank, age, and grade point average. Respondents indicate on a 5-point Likert-like scale their agreement with 7 items and offer suggestions to make advising sessions more beneficial. The table below displays the results of 120 surveys collected for the 2000 program evaluation.

**Advisement Center for the College of Architecture, Arts, and Humanities
Survey Responses, 2000**

Item	% Strongly Agree	% Agree	% Not Sure	% Disagree	% Strongly Disagree
My advisor is available during designated office hours and for scheduled appointments.	73	20	3	3	1
My advisor is approachable, friendly, and easy to talk to about my academic concerns.	86	8	2	<1	3
My advisor is helpful in explaining general education requirements.	82	13	<1	3	1
My advisor explains probation and suspension policies.	49	22	23	2	4
My advisor is helpful in explaining major area requirements.	72	22	3	2	1
My advisor is helpful in directing me to needed campus resources such as the Career Center, the Counseling Center	61	27	8	3	<1
Overall, my advisor has provided me with the direction and assistance I have needed to understand and comply with the requirements of my academic program.	78	18	<1	0	3

It is evident from the written comments that the students using the advisement center for the College of Architecture, Arts, and Humanities are very satisfied with the services provided by the center. There is praise for specific counselors and no suggestions for improvement.

The newly established Office of Student Services in the College of Health, Education, and Human Development reports in the Assessment Report 1999-2000 that 99% of the students completing a survey are satisfied with the advisement services. Service improvements will continue based on assessment of providing academic information, advisement, and other related services to undergraduate students as they progress toward meeting degree requirements, professional certification, or licensure.

Academic Advising Task Force

In 1998-1999, the University Assessment Committee deliberated the nature of academic advising assessment. Its concerns and supporting data were forwarded to the Provost. The Provost formed an Academic Advising Task Force in March 2000. The charge to the task force as outlined in the Assessment Committee report included (1) review recommendations presented in a 1995 report by the Committee to Study Advising and make suggestions regarding implementation of these recommendations; (2) develop university-wide academic advising policies with associated goals, objectives, procedures and practices; (3) develop a university-wide assessment plan for academic advising; and (4) make recommendations regarding the establishment of a standing University Committee on Academic Advising. Another charge by the Provost to the committee was to review and

make suggestions regarding implementation of recommendations included in a report from the University Undeclared [Majors] Committee. Nineteen committee members developed operating subcommittees for: Policies, Assessment, University Undeclared, and Graduate Advising.

PROACT

PROACT is a Clemson University freshman student-advising program with a special emphasis on retention. The advisors for the program are nominated by their college. If selected by the PROACT coordinator, the advisor receives an annual stipend of \$1500 and provided training. A recent report indicates that the PROACT program has a positive affect on the academic status of freshmen on probation. Students entering the PROACT program have a lower fall GPA than those do on probation who did not enter the program. The increase in the GPA of the PROACT students in the spring term is greater than that of other groups of freshmen students. The following table displays the GPA of all freshmen, those on probation, those participating in PROACT and those not participating.

**Change in Academic Status for
Clemson University Freshmen, 1999-2000**

Classification	GPA Fall	GPA Spring	Change GPA	GPA Cumulative
All Freshmen	2.27	2.45	-.27	2.52
All Freshmen on Probation Spring Semester	1.40	1.92	+.52	1.66
Freshmen on Probation in PROACT	1.38	1.97	+.59	1.67
Freshmen on Probation not in PROACT	1.42	1.90	+.48	1.67

Informal Strategies

Responding to results of assessment, advising practices have been modified to provide informal opportunities to interact. The Department of Language and International Trade and the undergraduate Nursing program provide informal meetings in their departments for faculty and students. Both programs have developed activities that create social and professional experiences. Student and faculty evaluation of these informal strategies has been positive.

Use of Results and Conclusions

It is evident from all of the assessment strategies that Clemson University undergraduate and graduate students are satisfied with the ways academic advising is conducted. The broad range to programs and varied advising protocol appear to address student needs; however, there is always area for improvement. Strengths as well as weaknesses in current practice will be reported to the academic deans, Provost, and the Task Force on Academic Advising.

Component 12 Student Development

As required, Clemson University has a plan to assess student development in a manner that is meaningful and applicable to the services and curriculum of the institution. The June 1995 Institutional Effectiveness Report sets forth the procedures Clemson University has identified for the assessment. These procedures include students and graduates reporting their participation and satisfaction in programs and service sponsored by the Division of Student Affairs pertaining to student academic and career success. Every program and unit at Clemson University provides an annual assessment record to the office for Institutional Effectiveness and Assessment. Used as assessment strategies, the annual alumni survey, the Student Satisfaction Inventory™, and unique surveys prepared by the departments, each provides insight into the success of the services and programs.

Clemson University student development programs and services are responsive to the needs of its students. Modifications and new programs are a direct result of opportunities and needs identified through program and institutional assessment. The Dean of Student Affairs Student Life will address the implications for further change during the division's annual summer retreat. Part of the discussion will be based on the comparative results from the Student Satisfaction Inventory (SSI) administered in 1998, 1999, and 2000. Highlights of particular program and service changes during the past two years are described in this report under six general areas. These are: (1) adjusting to campus life, (2) developing successful interpersonal relationships, (3) expressing social and cultural awareness, (4) making the transition from college student to adults who achieve and succeed in the workforce, (5) enhancing the environment, and (6) promoting academic excellence.

Adjusting to campus life

The orientation program offered by Clemson University is designed to meet the needs of its constituency. A recently developed survey for orientation participants will provide information on the nature of students' anxieties and anticipated needs related to entering college. The 2000 administration of the new survey will provide data for housing, student wellness, safety and security program directors and allow them to be more responsive to the students' needs.

New or enhanced programs assist students as they transition to the university. Before classes begin, Clemson University students may attend the 'Fast Start' seminar for new freshmen. The activities are designed (1) to assist students in adjusting to college, (2) to foster good study skills and (3) to provide guidance in career choice. Once on campus, the "Kick Off Clemson" program enables a camaraderie among students and introduces them to campus leaders.

For the past decade, University Success Skills course has been offered. The course emphasizes study and learning skills, time management, and life skills necessary for an effective transition from high school to college. The enrollment is traditionally limited to 25 students for each of the 6 to 8 classes to allow for a close-knit classroom experience. To respond to student need and the apparent success of the students taking this course, the number of course sections increased to 15 classes in the 1998-99 year and to 27 classes during the 1999-00 academic year.

About 10% of the cadets did not meet minimum academic standards (below 2.0 gpa). Thus, a new program was established by the Aerospace Studies program. The Unit Instructors will emphasize academic requirements in counseling sessions. A corps mentoring program, Phoenix Tiger, was implemented Fall 1999 to assist cadets with time management and study skills. Cadets in Phoenix Tiger analyzed the use of their time. Additionally, they were required to spend a specified amount of time studying in the library. This program was so successful that it will be continued as a part of the Air Force academic activities.

PROACT was reactivated in 1998 after being inactive for several years. It is a special advising program for new freshmen students in the fall. During the spring semester, PROACT advisors assist freshmen who are on academic probation. Students attend a study-skills seminar, which helps them identify existing barriers to success and offers tips to become a successful college student. The SSI mean score on the level of satisfaction with student advising increased between 1998 and 1999. In part, this satisfaction can be attributed to the success of the PROACT program.

Mentoring programs exist across the Clemson campus to both enhance and improve the adjustment period to university life. While the number of mentoring programs has increased, the mentoring programs often work independently of one another. One program, First Year Programs (FYP), was started by University Housing in the fall of 1998. This program earmarks selected residential halls and specific programs to first year students to facilitate a smooth transition to the university environment. Undergraduate student government initiated a mentoring program during the spring of 1999. This program has been piloted within two of the university's five colleges, and is advertised to both freshmen and transfer students during orientation. Around 250 students volunteered to serve as mentors for the program's first year.

Programs for Educational Enrichment and Retention (PEER) serves underrepresented freshmen and transfer students in the College of Engineering and Science. Women in Science and Engineering (WISE), within the same college, established an E-Mentoring Program for students to interact with technical professional women in their field of study. Multicultural Affairs mentoring program has also seen recent growth with an increase in both mentors and mentees.

Interpersonal relationships and social experiences

Campus recreation and the student union are evaluated by students as a part of the SSI. The scores indicate an increase in satisfaction with weekend activities, campus organizations, use of activity fees, and intramural sports. This increase in satisfaction may be attributed to the following modifications to programs, facilities, and services. The University Union opened the new Hendrix Student Center in the spring of 2000. A variety of new venues are available including a food court, theater, hair salon, coffee bar, meeting rooms, student lounge, and computer lab. The Michelin Career Center, Multicultural Affairs, the Union administrative offices, bookstore, copy shop and student media groups (the Tiger, TAPS, CCN, Semantics, Observer, and WSBF) have relocated to the Hendrix Student Center. In addition to the new student center, the Union has made changes to other buildings, offices and services. For example, the bowling alley was renovated and virtual reality video games were added.

Fike Recreation Center, campus recreation's primary facility, averages over 1600 visits per day during the regular school sessions. In 1998-99 approximately 10,000 undergraduate students or 80% of the

total undergraduate population used Fike. To meet the increasing demands for use, the Center has increased the hours of operation, added new equipment, and planned to renovate and expand the facilities.

In 1998 Clemson University Outdoor Recreation and Education (CORE) was established. CORE provides students with an opportunity to explore outdoor adventure activities through out the year including backpacking, hiking, rafting, kayaking, canoeing, sea kayaking, caving, rock climbing and outdoor leadership certifications.

The graduate students who have assistantships previously did not have the opportunity to buy athletic tickets at reduced prices. As proposed by Graduate Student Government, a new program was implemented in the fall of 1999; approximately 450 graduate students purchased discounted football tickets. This responsiveness is evidence of on-going use of student feedback.

Cultural awareness

On a recent alumni survey, over half of the students felt they had several opportunities to learn about different cultures while at Clemson. In addition to the celebration of Multicultural Awareness month, the Office of Multicultural Affairs offers a training program. Over 800 faculty, students and staff participated in a newly offered Prejudice Reduction Workshop during which participants are exposed to ways in which individuals and groups may experience discrimination. Participants learned effective ways to intervene when confronted with prejudicial remarks or situations.

In spring 2000 International Services held its first international photo contest in celebration of International Awareness Week. Photography entries from Clemson students who have traveled outside of North America were displayed in the library. This contest allowed students to share their experiences in different cultures. Because of encouraging comments about this activity, additional programs are being designed.

Transition from college to the workforce

Between 1998 and 1999, there was a statistically significant increase in the response on the Student Satisfaction Survey inventory toward the career center. The Michelin Career Center recently expanded programs, reorganized to include career planning and career placement, and established new programs. The Career Center is making its services more accessible to students by opening two new satellite offices to serve liberal arts students who have typically been underrepresented. In 1998, the experiential education department opened to assist students in finding internships and part time jobs. In 1999, students earning exceeded \$300,000.

Planned activities and services at the Career Center include: 9 fairs (a dramatic increase over four years ago when the center was only involved in 1 fair), the 1999 Teacher Fair (record 98 school districts). The Career Expo of 1999 had an increase in employer participation (165, 38% increase over the past three years) and student participation (highest of the past three years with 1,400 students).

The Career Center coordinated 5,485 student interviews during 1999 by over 430 different employers. This is the largest number of employers to interview students over the past nine years. Alumni use of the Career Center has also grown where the number of alumni registering for career services increased

170% from 1996-97 to 1998-99 with over 900 alumni participating. The number of employers requesting alumni resumes has increased over 30% during the past two years.

As indicated by the SSI, graduate students are dissatisfied with the available career services. Responding to this, the Graduate School offers Science's Next Wave through its web site. The Next Wave is a weekly online publication for graduate students featuring news items, career columns, and perspectives in job market news, career transitions, career and job-hunting news, women in science, etc.

Enhancing the environment

There is a statistically significant increase in the SSI on fairness of student disciplinary procedures. Judicial Services reviewed and amended general regulations and policies. A new program regarding alcohol offenses emphasizes the importance of intervention, lifestyle changes, and parental involvement for students under the age of 21. Other updated regulations handle campus problems such as arson and sexual assault.

The Municipal Court revised the process to appeal parking tickets as well as the parking review board. Student response to parking on the campus continues to be one of lower satisfaction compared to other dimensions of campus life. The amount of available parking in the center of campus was reduced this past year to accommodate building construction activities. Not surprising was the reduced level of satisfaction on the SSI regarding parking.

Another area that increased in significance on the SSI is safety and security. To improve safety additional lights and emergency telephones have been installed and these changes are reflected in the higher level of student satisfaction. Two other areas of satisfaction increase are response times by campus security. This improved rating may be a result of combined changes. The undergraduate student government established Night CAT in August of 1999 to provide free, safe transportation for students in Clemson on Friday and Saturday nights from 8 p.m. to 3 a.m. This service provides rides for 200 – 400 students per weekend. In addition, the Clemson University Police Department offers a variety of forums for students on current issues. The department established a new program called SAM or male sexual awareness that is designed to help men assist rape victims. The program also teaches the men about SC Laws in order to help prevent rape. The program is very successful and is being used as a model for schools.

University Housing has established residential areas for students interested in health and fitness. Tiger Fitness was introduced in the fall of 1998 for all classmen who are committed to living a healthy lifestyle in a substance free residence hall. Tiger Fitness participants have access to a work out facility in their dorm, and participate in special activities such as health screening and developing fitness plans.

The SSI satisfaction rating with the competency in health care had statistically significant increase. This is reflected in the recent accreditation by the Joint commission on Accreditation of Healthcare Organizations. In February 1998, Redfern Health Center received accreditation for a three-year period, the highest achievement in accreditation for health care. Redfern Health Center successfully met over 300 standards to become one of 26 national student-health centers accredited, and the only accredited student-health center in the state of South Carolina. This accreditation reassures both students and parents that excellent health care is obtained through the health center. Counseling and Psychological

Services (CAPS) added two services in the 1999-00 school year: testing and evaluation for ADHD; a support group for survivors of sexual trauma.

Awareness of Health Education programs increased to 57% in December of 1999 in comparison to 42% in 1992. The Peer Health Education program uses university students to educate fellow students in stress management, alcohol awareness, and other health related programs. Peer Health Education increased its membership in the past year and has been involved in programs such as Save the Tigers, which provided healthy alternatives to alcohol by offering substance free activities.

Academic excellence

Clemson University's commitment to academic excellence is reflected in the record number of applications in 1998, 1999, and 2000. This increase provides for a greater pool of applicants to offer admission. Calhoun College, the Honor College, had a record number of members, including 12% of the freshmen class in 1999-00. Because of the increased participation new stand alone courses and honors seminars have been adopted.

In 1998, the Office of Teaching Effectiveness and Innovation (OTEI) was established to serve faculty and graduate students who work as teachers and teaching assistants. OTEI's services include selecting and implementing teaching methods, designing a course, developing syllabi, devising new ways to teach material, integrating technology into courses, assessing student learning, eliciting student feedback, integrating classroom research, and observing classroom techniques.

In the fall of 1999, Clemson University's Student Athlete Enrichment Program was awarded the Division IA Athletic Directors Association "Program of Excellence" Award for the Challenging Athletes' Minds for Personal Success Program (CHAMPS). CHAMPS and the Life Skills Program demonstrate commitment and excellence in athletics, academics, personal growth, career development, and community service. Clemson is one of only 17 schools to win the award. Clemson student-athletes have established new high standards in the classroom during the past two years for team GPA records, number of student athletes on honor roll, and combined GPA. Continuing to examine student athlete performance and institute appropriate programs ensure that the student athletes at Clemson University will continue to achieve academic excellence.

Clemson University's technological improvements include the development of the Collaborative Learning Environment (CLE). This web-based service introduced in the fall of 1998 is accessible to all students and was designed to facilitate active learning and collaboration. The primary component of the CLE used by students is the class workspace, which allows faculty and students to share resources, to communicate and to post or retrieve assignments. Another technological enhancement undertaken by the Division of Computing and Information Technology (DCIT) is the literacy project. DCIT works with the English department to teach computer technology to all freshmen English classes. This recent interdepartmental collaboration furthers student learning and skills in the use of computers.

In November 1999, Student Information Services (SIS) became web-accessible. Students continue to strengthen computer skills as they now register for classes and housing by the SIS system. Students can obtain their unofficial transcripts, degree progress reports, account information, and traffic ticket records. Schedule of classes, the university directory, the undergraduate and graduate catalogues are

available through SIS. Clemson University is committed to providing students with computer-based opportunities and recently instituted web based student elections and Ethernet access to all university housing residents.

Clemson looks for future students. Programs for Educational Enrichment and Retention (PEER) sponsors a Sneak Preview for high school students. These students attend engineering or science classes at Clemson as a part of the recruitment process. The program has been offered traditionally to high school seniors during the fall semester; however, high school juniors were invited to attend in the spring of 2000. Upon review of the application and enrollment data, eighty percent of the high school seniors who attended the last Sneak Preview chose to attend Clemson University indicating the success of this recruiting program.

These are examples of changes being made in student development programs and services. These modifications and new programs are a direct result of opportunities and needs identified through program and institutional assessment. The effect on student development by these changes may not be known for several years. However, with planned review and analysis, enhancement to student development will continue.