LANDER UNIVERSITY

INSTITUTIONAL EFFECTIVENESS SUMMARY—2001

Introduction

Lander's procedures for assessment and planning are rooted in the University's mission and are broad based, with participation from all constituencies of the faculty and staff. Each unit establishes its assessment measures to evaluate the achievement of program goals that are consistent with institutional goals derived from the University's mission statement. Because the faculty and staff of the University are unified in their dedication to its mission, they welcome the opportunities provided by the assessment program to improve services to the students and to the people of the region.

In 2001, components reported by Lander University are Majors/Concentrations and General Education. Since the CHE is considering the creation of a uniform schedule for all institutions' reports of components other than Majors/Concentrations, the dates for future reports are uncertain. The University's schedule, pending statewide coordination, is as follows: Procedures for Student Development, 2002; Library Resources And Services, 2003; and Academic Advising, 2004.

Majors or Concentrations

The various academic units employ a broad array of assessment techniques in their program evaluation, each using multiple measures tailored for the specific qualities of the discipline. During academic year 2000-2001, majors in Mathematics and Computer Science reported assessment findings through the CHE Program Reviews, and an interim report was submitted for Biology. Because of the phasing in of the CHE's calendar for assessment reports based on the Program Review dates, the periods since these majors were last reported varies. Whereas the Biology program was previously reported in 1997, assessment of the Mathematics and Computer Science majors was reported in 1996. The chart below summarizes the assessment measures used by the majors under review.

	Mathematics	Computer Science	Biology
Alumni Surveys	x	x	x
Exit interviews	x	x	x
Content area exams	x		x
Portfolios		x	
Student's acceptance into and successful completion of Lander/Clemson dual degree engineering program	x	x	
Record of graduates entering graduate/professional schools			x
Oral competency check			x

Report of Assessment Data from Program Reviews

MATHEMATICS AND COMPUTER SCIENCE:

The division of Mathematics and Computer Science has designed a program of assessment that includes three common measures for the two disciplines and one discipline-specific measure for each program. The common elements are an exit interview with graduating seniors, which includes an evaluation of competency in oral communication; alumni surveys, which are designed to help evaluate the appropriateness of the curriculum, the adequacy of instruction and advisement, and the overall quality of the academic preparation, as judged by the graduates of the program; and records of acceptance into and successful completion of the Dual-Degree program offered in cooperation with Clemson University. The discipline specific measures focus on student learning, and are therefore necessarily quite different. The mathematics program employs the ETS Major Field Achievement Test, while the computer science program uses a portfolio to track the improvement in each student's ability to write multilevel programs. Assessment data are collected for both programs throughout the academic year, and faculty in each program meet annually to review and discuss the implications of the data.

Mathematics:

Students majoring in mathematics at Lander University supplement the basic curriculum by choosing an "emphasis option," such as graduate school preparation, business, computer science, or applied mathematics. Secondary teacher certification in mathematics is also available. Additionally, Lander offers the mathematics/engineering dual-degree program with Clemson University. This is a five-year program in which students complete the first three years at Lander University taking general education courses and 33 hours of mathematics (calculus or higher). Students receiving a positive recommendation from the Lander mathematics faculty then transfer to Clemson University and complete the final two years in the engineering major of their choice. Upon completion of the program, the student receives a B.S. degree in mathematics from Lander University and a B.S. degree in engineering from Clemson University.

The assessment measures for the mathematics major are based on four program goals. Students graduating from Lander University with a degree in mathematics should have specific competency in *The Foundations of Mathematics* (basic algebraic operations, the elements of set theory, and the fundamentals of logic); *Advanced Algebra* (the concepts of group, ring, field, and vector space); *Analysis* (calculus and at least one of the fields of real or complex analysis; concepts of continuity, differentiation, integration, sequences and series, and multivariable calculus; differential equations that arise in common applications); and *Probability and Statistics* (the acquisition and analysis of data, probability, discrete and continuous probability distributions, estimation using confidence intervals, testing of hypotheses, and linear regression).

The Assessment measure that most directly focuses on student learning as an indication of program quality is the ETS Major Field Achievement Test. For the years from 1998 to 2000, the national average fluctuated within a narrow range between scores of 150 and 151. Lander aggregate scores for these years were as follows: 1998--150.1; 1999--152.4; and 2000--150.3. In 1999, three of the fourteen students tested scored at or above the 85^{th} percentile. The performance of the dual-degree engineering students is also a measure of the achievement of the program's goals, since it demonstrates how well the students were prepared at Lander University, as evidenced by their continuing 100% success rate at Clemson University. No programmatic changes have been made as a result of these assessments during the period being reported.

The remaining measures employed by the mathematics program are designed to provide students and alumni the opportunity to give feedback and suggestions. An alumni survey is administered triennially, and a two-part exit interview is administered in the capstone course that is required of every graduating senior. The exit interview includes an open-ended oral component and a written survey with specific questions asked of each prospective graduate. Students and alumni have expressed a high level of

satisfaction with the curriculum, instruction and advisement, and the overall quality of their academic preparation. They have, however, made numerous suggestions, which have been carefully considered by the faculty in their annual assessment meetings.

Although some of the recommendations generated by these assessment measures have been deemed inappropriate by the faculty and others have not been acted upon because of financial limitations, several program improvements have been made in response to assessment data during the period being reported. For example, MATH 240--Differential Equations--now meets four times a week in response to 1998 exit interviews in which students suggested the need for the additional instruction time. Students each year requested that a broader range of courses in the major be taught. In response, MATH 390, Topics in Mathematics has been offered three times with varying content, including topics in statistics taught in response to students' suggestion that courses useful in preparing for actuarial exams would be helpful. In 1998 and in 2000, students noted deficiencies in MATH 451, the methods course in the teacher education track. That course has now been changed from a 2-credit course to a 3-credit course, in order to accommodate a broader range of subject matter.

Computer Science:

Computer science majors at Lander University may select the regular emphasis, the information science emphasis, or the networking and telecommunications emphasis, which was added in the fall of 1999. Additionally, there is an engineering/computer science dual-degree program in computer engineering with Clemson University, parallel to that in the mathematics program.

The assessment measures for the computer science major are based on five program goals. Students graduating from Lander University with a degree in computer science should have specific competency in *Programming Principles* (problem solving and algorithm development; application programming using modem structured approaches; procedural and object-oriented paradigms; modular design, abstraction, abstract data types, and programming style; programming in two or more high-level languages and in various environments); *Data Organization and Algorithms* (data structures, access methods, algorithm design and analysis, including search and sorting algorithms; introduction to complexity and program verification); *Computer Organization* (multilevel organization of computers--virtual machines, digital logic, micro-programming, conventional machine, operating system, assembly language, and problem-oriented levels; data representation; and computational error); *Software Methodology* (requirements, specifications, design, implementation, testing and analysis of software; programming in a team environment; software tools; system prototyping; documentation; program efficiency; and human-computer interface); and *Special Interests* (competency in one or more of the following areas: database, artificial intelligence, graphics, numerical computation, operating systems, theory of programming languages, and computer architecture).

The computer science program assesses student learning through the use of a programming portfolio and through tracking the success of students in the dual-degree engineering program. Like the mathematics majors, computer science students maintain a 100% success rate as they complete their programs at Clemson University. All students who entered the Clemson program during the period being reported have either completed it successfully or are continuing students. Portfolio assessment was instituted in 1995 to replace the ETS Major Field Achievement Test. The portfolio collects work from throughout the degree program in order to provide a record of the improvement of each student's abilities in writing multilevel programs. Because evaluation of the program depends on data collected throughout a four year program, it has not been in place long enough to have produced meaningful results. No programmatic changes have been made as a result of these assessments during the period being reported.

As in the mathematics program, the remaining measures employed by the computer science program are an alumni survey, which is administered triennially, and an exit interview administered in the capstone course. Students and alumni have expressed satisfaction with the program and with the overall quality of their academic preparation, and have particularly expressed appreciation for the quality of instruction and

the small class size that are characteristic of the program. They have also made suggestions and expressed concerns, which have been carefully considered by the faculty. Some of the students' suggestions involved improvements that were already being implemented for later classes, and they expressed an understanding of the financial and other limitations that prevented their ongoing concerns about class availability from being addressed. However, in several cases, their suggestions led to program improvement.

The most important of these changes was the introduction into the degree program of the networking option, which provides several new electives for computer science majors. Improvements in courses included a shift of focus from assembly language to computer organization and architecture in CS 320--Computer Organization I--and an improvement in the sequence of activities in CS 498-99--Software Engineering I and II. CS 499 serves as the capstone course for computer science, and exit interview data has led the faculty to plan to incorporate more activities related to networking into the course. In 1998, graduating seniors, in their discussion of the general education component of their program, noted the particular value of writing courses to computer science majors, and in 2000 students suggested that a course in speech should be required. In response to the students' recognition of their need for better preparation in communications, English 275--Business Communications--is now a requirement in the Information Science option, and Speech 101 is strongly recommended for all computer science majors.

Interim Report of Major Program Assessment

BIOLOGY:

The assessment plan for the biology major at Lander University is based upon four general program goals. The faculty aim to ensure that students graduating from Lander University with the BS degree in biology will (1) understand a broad spectrum of the accumulated knowledge in the field of biology; (2) have a working understanding of the application and performance of technologies and laboratory skills in the discipline; (3) be able to successfully enter and compete in graduate professional school programs, or be able to secure employment in an area of science; and (4) understand the vocabulary of the discipline and be able to communicate concepts in biology through the proper use of this vocabulary.

The assessment program for biology during the period from 1997-98 to 2000-01 contained five elements: the Biology Professional Knowledge Examination, which is administered to each freshman student entering the program and to each senior successfully completing the program; an exit interview with graduating seniors, which collects information about student perceptions of and satisfaction with the program; alumni surveys, which collect not only data about student perceptions and satisfaction but also information about their current employment and further education; a check of oral communication competency; and records of acceptance and entrance into graduate and professional programs. The student opinion surveys and alumni surveys show that biology majors have been well satisfied with their experience in the program and very appreciative of its enthusiastic and professional faculty.

The Professional Knowledge Exam, which was implemented in 1993 to determine increase in professional knowledge that occurs during the degree program, covers content from all core and elective courses taken for the biology major. The table below, which compares composite freshman and senior scores on the exam for eight consecutive years, demonstrates that, while senior scores have--as expected--always been higher than freshman scores, the difference has grown. Throughout the period, freshman scores have been consistent within a narrow range. Senior scores from 1993 to 1996, however, were lower than those in subsequent years, reflecting the impact of program improvements that were reported in 1997.

Paired scores for each student were also examined. Data for the Class of 2001, below, show scores increasing from 39% to 172%, with an average increase of 87%.

Results from Biology Exit Exam: For Biology Class Graduating 2000-01 Academic year.			
Student	Score Freshman	Score Senior Year	% Increase year
A	transfer	52	N/A
B	23	32	39
C	23	42	82
D	30	60	100
E	transfer	44	N/A
F	31	44	42
G	19	52	173
H	transfer	48	N/A
I	31	62	100
J	28	48	71

While significant--and successful--changes based on these and other entry/exit measures were reported in 1997, no new program revisions directly related to exam data have been made since that time.

Data from the University Alumni Survey is reported by division rather than by major, and therefore information from biology graduates is mixed with that from graduates of other science programs. The most recent survey indicates that 100% of the science graduates perceived their first job to be related to their major and that 83.3% are currently in a position related to the major. The survey indicates a high degree of satisfaction with the programs within the division. On a six-point scale, the composite rating of the major program was 5.3 for science graduates and 5.1 for all graduates of the University. Instruction in the major was rated 5.5 by science majors, compared with 5.0 for all graduates.

Prior to graduation, an evaluation of the oral communication competency of senior biology majors is conducted in conjunction with a research project that is the basis for both an oral presentation and a written report. At least one faculty member and the remaining students in the class rate the presenter's organization, manner of presentation, use of standard English, vocal projection, and clarity, using a 5-point likert scale with a score of one being most positive. Over the past four years, the overall mean on the Oral Competency Check was 2.0. Student ratings of the student presenter tended to be somewhat more positive than those of the instructors, but they followed similar patterns, with the students rated most positively by the faculty also rated most positively by the students, and those rated most negatively by the faculty also rated most negatively by the students. Results from this check indicate that the majority of the graduating students possess above average oral communication skills but that student performance can improve. The division is exploring the possibility of increasing the number of student research projects required to be presented, in order to provide additional experience with oral communication.

Responses of seniors in the exit interview, which allows students to share their perceptions about the biology program, have been consistent over the past five years. The students speak well of the biology faculty, noting their strong professional training and the quality of their interaction with students, and they refer with gratitude to the time faculty members devote to students outside the classroom. The majority of the students are pleased with the quality of the program and with the curriculum. Nevertheless, each year the students have expressed an interest in expanding the variety of courses available and in offering courses in the curriculum more frequently.

In response, several of the courses that are offered by the biology faculty for the environmental science degree program have been cross-listed as biology courses, and the division has attempted to offer specialized major courses more frequently than the customary once every two years. Unfortunately, attempts to improve course availability have had little success because of financial limitations that have restricted the division's ability to increase the number of full-time faculty and because of the absence in the geographical region of potential part-time faculty with credentials qualifying them to teach specialized upper-division courses.

Records of Graduates Acceptance and Competitiveness in Graduate and Professional Schools demonstrate that during the past four years approximately 70 percent of the program graduates who applied were accepted into graduate and professional programs, including medical school, veterinary school, physical therapy and occupational therapy programs as well as MS and Ph.D. programs. The graduates electing to go into Ph.D. programs have been accepted into a variety of selective universities, such as Cornell and the University of Colorado Health Science Center-Denver, as well as regional universities, including the University of South Carolina, Clemson, Emory, and Mercer. The feedback from our graduates indicates that they are strongly competitive at the graduate level. Two of our recent graduates have had a 4.0 average at the end of their first year of medical school, and several are now faculty members at large research institutions.

General Education

Lander University's general education program is based on seven goals and thirty-four objectives, and in order for a course to be approved as satisfying a general education requirement, it must demonstrably address some of those goals and objectives and must be appropriate for students who are not specializing in the discipline. The only absolute requirement is the freshman writing sequence, all the others being distribution requirements. Consequently, most general education assessment is conducted at the unit level, the only university-wide general education assessment being an assessment of students' writing skills. Academic units have developed measures to assess the success of their offerings in addressing general education goals and objectives. Assessment data are evaluated at the unit level and used for improvement of individual courses. A standing committee on general education composed of the chairs and deans of all academic units was formed in 1996 and charged with collating and analyzing assessment information and making appropriate recommendations concerning the program as a whole.

Assessment of Writing Skills

In late fall, 1996, the General Education Committee decided to restructure general education assessment of students' writing skills. Whereas the previous system was a value-added assessment comparing essays written by entering freshmen with papers written in response to discipline-based prompts by the same students as seniors, the new system uses common prompts for all divisions and schools. The change made the senior samples more uniform from major to major and more comparable to the freshman essays. Two groups of essays have been scored since general education was last reported in 1998. Ninety-seven capstone papers written during academic year 1998-99 and ninety from 1999-2000 were matched with freshman writing samples, and the entry and exit essays were assessed by groups of readers drawn from all academic units. Entry and exit essays were read by separate groups of faculty who were calibrated separately. During the evaluation session, each paper was scored holistically by two readers on a four-point scale (with four being most positive), and the two scores were averaged. Papers written in 2000-01 will be evaluated in fall 2001.

Of the 1998-99 students, 62.9% showed an increase from the freshman to the senior writing, 21.6% showed no change, and 15.5% had lower senior scores. The average of the ninety-seven entry-level writing scores was 2.26, with a standard deviation of .65, whereas the average for exit scores rose to 2.74 with a standard deviation of .69. However, in 2000, only 26.7% of the students showed an increase from the freshman to the senior writing, 18.9% showed no change, and 54.4% showed lower senior scores. The average of the ninety entry-level writing scores was 2.48, with a standard deviation of .70, whereas the average for exit scores fell to 2.13 with a standard deviation of .71. The 1998-99 scores were consistent with the scores from 1996-97 and 1997-98, which were reported in the 1998 Institutional Effectiveness Report. Since the 1999-00 scores appear to be aberrant, no action will be taken in response to them until after the 2000-01 essays are scored. At that time, procedures for calibration of readers will be refined to ensure uniformity in scoring; all readers will be calibrated together, and the entry and exit essays will probably be commingled. The significance of the troubling decline in the 1999-2000 senior scores will be more clear after that reading is completed.

Assessment of General Education Goals in Specific Courses

Each academic unit at Lander University except the School of Education offers courses that are evaluated as a part of the general education assessment program. Three of those units--the Divisions of Humanities, Biological and Physical Sciences, and Mathematics/Computer Science--contribute a significant part of their effort to general education. Each of the remaining six units offers courses that may be selected to satisfy one three-hour distribution requirement. In addition, all units, including the School of Education, may offer courses to satisfy the requirement in Global Issues and Non-western Studies. The units with greater involvement in general education employ multiple measures to assess their general education programs, while the remaining units assess their offerings through surveys based on the general education goals and objectives that they aim to address in their courses.

UNITS WITH MULTIPLE MEASURES:

Humanities: In fall 1998, the Humanities division determined that measures previously used to assess general education had not yielded useful results, so they began to develop a new program of multiple-measure assessment for general education areas other than freshman writing, which is evaluated in the university-wide writing assessment. The new assessment programs for English literature and Spanish were implemented in academic year 1999-2000 and have already produced helpful data. Information from 1999-2000 also provides a baseline against which to measure future results.

*English***:** Because students may choose from a variety of courses to fulfill their general education requirement in literature, the faculty long ago established common goals for all sophomore literature courses, regardless of specific subject matter. These goals and the university goals for general education, with which they are consistent, provide the basis for the program of assessment. The program employs three measurement instruments: (1) surveys that measure student perceptions of how well sophomore literature courses address specific goals; (2) writing samples taken from students in representative courses within the general education literature program; and (3) evaluation of individual course syllabi based on the targeted general education goals.

The student survey includes seven items, each reflecting one of the program goals. The items are rated on a five-point scale, with five being most positive. The assessment committee established a mean score of 4.3 as a reasonable target. The survey shows that students are generally very well satisfied with the general education program in literature. The target goal was achieved or exceeded in all but three areas: 1) viewing literary works as a product of their cultural period--4.21; (*2*) drawing connections between concepts in literary works and the student's own life and world--4.15*,* and (3) practicing communications skills, including oral presentations or discussions about literature--4.13*.* The composite score for all seven questions was 4.26.

Writing samples from a representative selection of sophomore literature classes were scored on three criteria using a four-point scale, with four being the most positive. The criteria were (1) ability to provide specific evidence to support generalizations, using quotations and examples; (2) critical and analytical skills in the paper; and (3) awareness of literature in a larger context. The Assessment Committee established 2.3 as a realistic target for all standards; however, the mean scores from the assessment papers failed to meet this standard in two of the three areas, critical and analytical skills (2.22) and awareness of literature in a larger context (1.79).

The assessment of syllabi examined five items on a four-point scale, with four being the most positive. The Assessment Committee established 3.7 as a reasonable target. A review of course syllabi reveals a high degree of compliance with the goals established for the general education program in English. Only one item, which dealt with the encouragement of discussion and oral presentation, received a mean score below that goal.

The results of all three assessment measurements point to three general areas that need attention: 1) students need more practice applying critical and analytical skills in their writing; 2) students need to be made more aware of how literary texts interact with their larger contexts, including historical contexts, other literary texts, and the lives of readers who interpret those texts; and 3) students need to be given more practice in making informal and formal oral presentations. The committee has recommended that the English faculty reassess the expectations for the teaching of writing in sophomore literature courses, reexamine course designs to focus on texts in larger contexts, and incorporate a more extensive oral component into the general education courses. Because of the workload involved with writing-intensive courses and the class time consumed by oral presentations by students, the ability of the faculty to act on these recommendations will depend upon the maintenance of reasonable class size.

Spanish: Lander's general education program requires that students demonstrate competency in a foreign language equivalent to that achieved in one year of college study. Most of the students elect to study Spanish, and the Spanish faculty has designed a multiple-measure assessment program to ensure that the courses are meeting their needs. The three parts of the assessment program are (1) comparison of individual course syllabi to the State and National Standards for Foreign Language goal areas--the five Cs: Communication, Cultures, Connections, Comparisons, and Communities; (2) writing samples from students in a representative number of courses to measure student performance in meeting the goals; and (3) comparison of the scores of a representative number of students who are placed into either SPAN 101 or SPAN 111 (the one-semester accelerated course) by the Spanish placement instrument to their score on the same instrument administered as they exit the SPAN 102 and 111 courses.

In the assessment of syllabi, the faculty evaluated fifteen items, organized into five groups representing the "five Cs." The assessment team established a mean score of 3.2 on a 4-point scale as a reasonable goal for all five areas. A review of course syllabi reveals a reasonable degree of compliance with the goals established for the general education program in Spanish, the mean average for all items being 3.02; however eight of the items were rated below the goal of 3.2. It was determined that the courses should be improved to provide further opportunity for students to use Spanish to present material to audiences of listeners and readers; to increase opportunities for students to gain knowledge and understanding of other cultures; and to make more use of cultural reading assignments that assist students in connecting their language study with other disciplines and viewpoints,

Writing samples collected from a representative sample of Spanish 102 and 111 classes were scored using the *South Carolina Foreign Language Academic Achievement Standards*, which employ the terms *beginning*, *developing*, and *expanding* to designate the stages of language development. The Spanish assessment team expects that students who complete the general education sequence successfully should approach or achieve the initial stages of the developing level. The scoring was based on the following four-point scale: 4=the developing-low level; 3=the beginning-high level; 2=the beginning-mid level; and 1 =the beginning-low level. The assessment team determined that scores of 3 or above indicate an acceptable level of progress. The mean score from academic year 1999-2000 was 3.07.

Although this mean score is within the acceptable level, the improvements noted are expected to increase the composite to 3.2 or higher.

The Foreign Language Placement Examination (FLPE) is used as a value-added assessment measure. Since students may exempt the foreign language requirement with a score of 30, the exit scores for Spanish 102 and 111 should be at least 30. Entry and exit scores were compared for a representative sample of students who placed into the Span 101-102 sequence; their average score increased 31% from 20.9 (placement) to 27.4 (exit). (The team notes that most of the students taking the initial placement exam had previously studied Spanish for at least two years in high school.) A representative sample of students who placed into the Spanish 111 course improved their scores from 28.75 to 31, exceeding the score required for exemption. The difference in the exit scores on the FLPE between the 102 and 111 courses caused some concern. The assessment team concluded that the students who are true beginners or are placed as true beginners need further contact with the target language in order to increase their knowledge and skills to an acceptable level. Therefore, the committee has recommended that the University increase the contact hours of 100-level Spanish courses from three to four per week. As an alternative, Lander should aggressively seek funds to establish a language resource center with multimedia equipment where students would be required to participate in a language laboratory environment for at least one-hour per week.

Biological and Physical Sciences: General education science courses are assessed through student surveys and through a comparative analysis of curricula and course content with those in programs offered both by public and private universities and colleges within the state and by a random sampling of universities and four-year colleges from other regions of the United States. The general education options at Lander University were compared with those at nineteen institutions, approximately half of them from out of state. Most of the institutions required at least eight hours of general education science, as does Lander. Two institutions required fewer hours and a few of the larger institutions required more; however, the size of Lander's general education component is typical. In all schools surveyed, biology and chemistry were the two disciplines from which laboratory science courses were most frequently required. Physics and geology were found to be offered as general education options at the larger institutions. The majority of the institutions surveyed allow students to choose courses from among the natural sciences.

Annually, the faculty review general education courses, and student surveys provide significant input into these evaluations. Results from surveys show that the students perceive that the courses are meeting the stated course objectives; however, they have led the faculty to make some improvements in the curriculum and in individual courses. Student surveys indicated two areas of concern: students wanted more general education options in science and they wanted science courses taken at other institutions to transfer more easily into the Lander curriculum. In response, the faculty developed a science course to fulfill the general education requirement in global issues and nonwestern studies, Chemistry 381--Technology, the Environment and You. Three courses have been added to the offerings for the science distribution requirement: Biology 103--Plants and Society; Biology 200--Tropical Marine Ecology; and Geology 111--Physical Geology. Students who transfer geology courses from other institutions may now use them for general education rather than for elective credit.

Mathematics: The Division of Mathematics and Computer Science offers numerous courses in support of the general education component of a Lander University education. In order to ensure that each of these courses is indeed supportive of the indicated goals, the Unit Head maintains a portfolio of tests, laboratory assignments, and final examinations for all general education courses taught in the division. These documents are periodically reviewed by the division chair and the faculty, and it was determined that they were supportive of the goals as stated. The unit also maintains copies of the syllabi for all courses taught within the division, requiring that courses counted as general education state the intended goals as part of the syllabus. The issue of general education is specifically addressed in the exit interviews with graduating seniors. Generally, the students have been satisfied with general education courses in mathematics and computer science. No formal surveying of students directly in reference to the university's goals and objectives is conducted in general education classes; however, the division maintains the summaries, including comments, of student evaluations of the classes, which are

conducted annually. As a result of student comments, more calculator exercises have been included in courses such as MATH 121--Mathematics for Business, Life Science, and the Social Sciences--and the majority of sections of MATH 211-212--Introduction to Statistical Methods--are taught in a hands-on manner in the statistics computer laboratory. In addition, Computer Science 180--Problem Solving and Programming Methods-- is also now taught as a lecture/laboratory course.

UNITS WITH SURVEY ASSESSMENT ONLY:

Behavioral Sciences and History/Political Science: At present the Divisions of Behavioral Sciences and History/Political Science are under one administration, so they have worked cooperatively on general education assessment. Data collected every semester from each of the general education classes for both divisions showed that a strong majority of the students felt that the classes were meeting the general education goals, and the positive responses were consistent regardless of the instructor of the course. Since the courses are apparently meeting general education goals, no course revisions have been made in response to the assessment data. The behavioral science faculty have, however, made an interesting use of these data. The surveys from Spring 2000 and Fall 2000 were analyzed by research students in Sociology 330--Measurement, Scaling, and Analysis of Data. The students presented their results both in a divisional faculty meeting and at the South Carolina Sociological Association annual meeting, using a PowerPoint presentation.

School of Business: Lander's general education curriculum includes a distribution requirement in political economy that addresses a broad range of objectives from four of the seven goals for the program. The School of Business offers two courses in economics that have been approved to fulfill the political economy requirement. Students are asked to assess the impact of these courses in areas related to institutional general education goals, using a five-point likert scale, with five being the most positive score. The answers given by students indicate that they agree that the goals are being addressed. In the six semesters represented in this report, the composite score for individual survey items has ranged from 3.7 to 4.4 and the overall average for each question has ranged from 3.9 to 4.1. These data have suggested no need for course revision; changes that have been made during the past two years have occurred as a part of the normal course update process.

Fine Arts: In order to address general education goals and objectives related to appreciation of the creative process and of the cultural artifacts of various societies, Lander students are asked to study one of the arts in a classroom setting. Courses in art and music that fulfill the general education requirement are assessed through a questionnaire in which students are asked to rate and to comment on the success of the courses in fulfilling four general education objectives. Ratings employed a four-point scale from "very well"-4 to "not at all"-1. Student responses were very positive for both the art and music appreciation courses, with aggregate scores on individual items ranging from 2.9 to 3.3 and composite scores for all questions 3.2 for both disciplines. Student comments were very positive, particularly with regard to the quality of the faculty.

Physical Education and Exercise Studies: Among Lander University's goals for general education is an expectation that students "recognize their need to adopt attitudes and habits conducive to positive physical and sound mental health." Objectives related to this goal note that students should come to understand the basic principles of wellness and that they should learn to use physical activities as a means of relaxation and renewal. Each year, the Division of Physical Education and Exercise Studies surveys students in its general education courses to assess the extent to which the PEES curriculum meets these objectives and to determine the extent to which students agree that the attitudes and behaviors to which they have been exposed are useful. In 1999 and 2000, average responses to survey questions ranged from 3.23 to 3.92 on a 4-point scale, showing a strong degree of satisfaction with the course and demonstrating the students' perception that the course achieves its goals. This assessment survey has yielded similar positive results in past years and has not suggested a need for change in the PEES program.

Nursing: The School of Nursing contributes to the general education program by offering a three-hour course in wellness as an alternative to the four-hour courses provided by the Division of Physical Education and Exercise Science (PEES). The PEES faculty provide one hour activity courses for students who elect the nursing option, to allow students to complete the requirement. When the nursing course was offered in fall 2000, seven of the eleven students enrolled completed assessment surveys, which deal with self-assessment of behavioral changes related to general education goals. The survey uses a four point scale, with a score of four indicating greatest change. Composite scores on individual questions ranged from 2.6 to 2.9 with an overall composite of 2.8, indicating that the students perceived that the wellness concepts related to general education goals taught in the course had had a significant impact on their lives.

Prepared by Susan Guinn

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