

Accomplishing the Goals

This chapter presents evidence that Cottey is accomplishing its educational and other purposes as stated in the goals that accompany the mission. As a result of the College's assessment program, all of the goals linked to student academic achievement have been assessed in some manner. While most of the goals are related to the academic program, some are not; however, the College focuses on the goals as a group and considers all of them important to accomplishing the mission. The following pages chronicle achievement of the 16 goals, beginning with a brief description of the measures used. (Notebooks with complete information about the process of assessing each goal are available in the Resource Room.)

Assessment Measures

A variety of instruments is used to assess student academic achievement at Cottey. Beginning on Assessment Day in 1999, Cottey administered modules of the Collegiate Assessment of Academic Proficiency (CAAP) to directly measure attainment of the goals related to math and science. CAAP is purchased from ACT. A CAAP test is also used to measure critical thinking skills. Knowledge of the international and intercultural character of the global society is measured directly by the Global Awareness Profile, a self-awareness inventory published by Intercultural Press. Goals related to aesthetics, fine arts, and English are assessed by instruments developed by Cottey's faculty. The data analysis groups established benchmarks for these direct measures.

Items on the ACT College Outcomes Survey (COS) provide indirect assessment of Cottey's goals. The Cottey benchmark for the COS referred to in this chapter was established for preliminary analysis purposes in the review conducted by the chair of the social science division in summer 2002 and represents the overall mean score for items on the instrument related to Cottey's goals. (See Appendix 14-A for a summary of the analysis.) The COS was administered to first-year students on Assessment Day in 1999, 2000, and 2001, and to both first- and second-year students in 2002.

Information collected from the ACT Student Opinion Survey is used to evaluate accomplishment of the goals not specific to the academic program. The SOS was administered to first-year students on Assessment Day 1999-2002. The following table lists each of the College's goals and the direct and indirect measures that will be discussed in this chapter.

Table 14.1 - Summary of Measures Used to Assess Goals

College Goal	Direct Measure	Indirect Measure
Process and use information and ideas logically, critically, and perceptively	CAAP Critical Thinking Test	ACT COS
Synthesize information and ideas	Under Discussion	ACT COS
Recognize the connections among fields of knowledge	Under Discussion	ACT COS
Express themselves creatively in intellectual or aesthetic endeavors	Fine Arts Writing Exercise	ACT COS
Use quantitative reasoning and analysis	CAAP Mathematics Test	ACT COS
Communicate clearly and effectively in English	English Dept. Portfolio	ACT COS
Literature and the fine arts	Fine Arts Writing Exercise	ACT COS
The history of civilizations, ideas, beliefs, and values	Course Assessment	ACT COS
Human behavior and social interaction	Course Assessment	ACT COS
The natural sciences and scientific progress	CAAP Science Reasoning Test	ACT COS

Ethical and social issues	No Institutional Measure	ACT COS
The international and intercultural character of the global society	Global Awareness Profile	ACT COS International Survey
Participate in programs contributing to physical fitness and personal health	Course Assessment	Student Survey on Athletics, SOS
Experience growth in essential technological expertise	Computer Skills Test	ACT COS
Participate in opportunities for leadership development/active involvement in issues important to them	No Institutional Measure	ACT COS
Live, work, and study in a nationally and internationally diverse residential environment	No Institutional Measure	ACT COS

Intellectual Ability Goals

The first six goals involve the intellectual abilities of students. As stated in Chapter 10, the intellectual ability goals focus on cognitive experiences that should occur across the curriculum.

The first three statements express the College's aspirations for development of the student's critical thinking skills:

- *process and use information and ideas logically, critically, and perceptively*
- *synthesize information and ideas*
- *recognize the connections among fields of knowledge*

The Critical Thinking Data Analysis group did not select a particular score on the CAAP Critical Thinking Test as a benchmark, but determined that since Cottey students achieved a mean score that is higher than the means for both two-year and four-year private colleges, Cottey has accomplished the first of these three goals. The group recommends that future analyses correlate CAAP scores with which classes students took to see whether taking certain courses (e.g., Intro to Philosophy) might improve student performance. If so, consideration could be given to making those courses a required part of the curriculum. No direct measure of the second and third goals in this group has been made as yet, but the Critical Thinking Data Analysis Group is continuing discussions and will investigate other instruments, including the possibility of one developed by the faculty specifically for Cottey.

The average scores on the COS items in this area also indicate that Cottey accomplishes its critical thinking goals since almost all are above the Cottey benchmark of 3.52. The only exception is one of the items related to the first goal: locating, screening, and organizing information. Cottey students indicated perceived improvement in the other items related to the first critical thinking goal: developing problem-solving skills; learning to think and reason; and thinking objectively about beliefs, attitudes, and values. Students also noted improvement in drawing conclusions from information and ideas (linked to the second goal) and organizing learning across areas of study (linked to the third goal). The following table lists all of the intellectual ability goals and the average COS scores, as well as the Cottey benchmark.

Table 14.2 - COS Items Related to Intellectual Ability Goals

College Goal and ACT COS Item	Avg.
<i>To enhance their intellectual ability, students will develop their capacity to:</i>	
Process and use information and ideas logically, critically, and perceptively	
A2 Developing problem-solving skills	3.54
A3 Learning to think and reason	3.80
A4 Locating, screening, and organizing information	3.49
A5 Thinking objectively about beliefs, attitudes, and values	3.94
Synthesize information and ideas	
A1 Drawing conclusions after weighing evidence, facts, and ideas	3.57
Recognize the connection among fields of knowledge	
B6 Required courses outside my area of specialization helped me build a framework to organize my learning within and across areas of study	3.87
Express themselves creatively in intellectual or aesthetic endeavors	
A6 Developing my creativity; generating original ideas and products	3.63
Use quantitative reasoning and analysis	
A26 Understanding and applying math concepts and statistical reasoning	3.06
Communicate clearly and effectively in English	
A7 Improving my writing skills	3.70
Cottey Benchmark	3.52

The Fine Arts Division developed a writing exercise and administered it on Assessment Day 2002 to determine if Cottey students enhance their ability to:

- *express themselves creatively in intellectual or aesthetic endeavors.*

In their responses to a prompt, students express an appreciation of the fine arts, but analysis of the results does not indicate the level of expression expected by the division members. Each student paper was read and scored using a rubric by at least two members of the division (three if the first two readers did not agree). The division expected that 75 percent of students would achieve an average score of 2.0 or below (one is the best score); however, only 42 percent did.

The COS indirectly measures this goal by linking it to the topic of developing creativity. The resulting average score (3.63) is above the benchmark.

Acting as the analysis group for this data, the members of the division feel that this goal is being accomplished, but that the prompt and scoring rubric should be revised. The instrument will be administered again on Assessment Day 2003 to collect more information for further analysis.

The CAAP Mathematics test directly measures students' ability to:

- *use quantitative reasoning and analysis.*

The group analyzing this data established two benchmarks: 1) that 85 percent of students make at least 53 on CAAP's 70-point scale, and 2) that 90 percent of students meet or exceed "expected" progress as defined by CAAP. Results indicate Cottey students' performance exceeds both benchmarks: 96 percent of students achieved the first benchmark and 97 percent achieved the second.

The COS indirectly measured this goal with the item "understanding and applying math concepts and statistical reasoning." The resulting average

score of 3.06 is below the benchmark. It is possible students perceive themselves to be weaker in quantitative reasoning and analysis than they are.

The direct measure indicates that the goal of enhancing students' quantitative reasoning and analysis ability is accomplished; however, the disparity between the results of the direct and indirect assessment of this goal should be discussed further by the data analysis group.

The English department's portfolio assessment program directly assesses students' ability to:

- *communicate clearly and effectively in English.*

Entry and exit papers were collected from a stratified random sample of students enrolled in freshman composition for two years (1999-2000 and 2001-02). Five criteria were examined: focus, use of sources, individual approach, proofreading, and audience. The benchmark established by the data analysis group was that students should achieve a 2.75 score on a 4.0 scale for each of the five criteria. The benchmark was achieved in all areas in the 1999-2000 set of papers and in four of the five criteria in the 2001-02 set. The data analysis group recommended that the English department develop a plan to improve student scores related to audience, the criterion where scores fell below the benchmark.

The COS indirectly measures this goal by asking for students' perceptions about improvement in writing skills. The average score (3.70) is above the benchmark.

Both the direct and indirect measures indicate that this goal is being accomplished. While this goal appropriately relates to the English department, other academic disciplines could benefit from considering their role in meeting it. The data analysis group recommends that papers written for other courses near the completion of the academic program be examined with their rubric to assess this goal at the institutional level.

Store of Knowledge Goals

The first, fourth, and sixth goals in the group have been assessed at an institutional level, with both direct and indirect measures administered on Assessment Day with the results evaluated by a data analysis group. The remaining three goals in this group have been assessed either at the course level, or by the COS, or both. The following table summarizes the COS information related to this group of goals.

Table 14.3 - COS Items Related to Store of Knowledge Goals

College Goal and ACT COS Item	Avg.
<i>To enhance their store of knowledge, they will study:</i>	
Literature and fine arts	
A16 Appreciating the fine arts, music, literature, and the humanities	3.78
D13 Gaining insight into human nature through the study of literature, history, and the arts	3.53
B3 Required courses outside my area of specialization helped me appreciate great works of literature, philosophy, and art	3.76
The history of civilizations, ideas, beliefs, and values	
A5 Thinking objectively about beliefs, attitudes, and values	3.94
D13 Gaining insight into human nature through the study of literature, history, and the arts	3.53
Human behavior and social interaction	
D13 Gaining insight into human nature through the study of literature, history, and the arts	3.53
The natural sciences and scientific progress	
A22 Applying scientific knowledge and skills	3.10
A25 Learning about the role of science and technology in society	3.04
B5 Required courses outside my area of specialization helped me increase my knowledge of the earth and its physical and biological resources	3.53
Ethical and social issues	
D12 Becoming more aware of local and national political and social issues	2.89
The international and intercultural character of the global society	
D10 Becoming more aware of global and international issues/events	3.05
Cottey Benchmark	3.52

The writing exercise developed by the Fine Arts Division described earlier was designed to assess both students' ability to express themselves creatively in intellectual or aesthetic endeavors and enhancement of their store of knowledge in:

- *literature and the fine arts.*

Two student learning outcomes were developed by the division for the fine arts aspect of this goal: 1) show technical understanding or historical, theoretical, and/or stylistic awareness in one of the fields of the fine arts; and 2) make intelligent comparisons between different areas of the fine arts.

Results indicate that the students' level of understanding fell below the expectations of the division members. Recommendations emerging from the first administration of this activity include making more writing assignments in classes, altering other assignments, and revising the rubric used to evaluate learning outcomes for this goal. The COS indirectly measures this goal by seeking student perception of appreciating the fine arts, music, literature, and the humanities; and appreciating great works of literature, philosophy, and art. The resulting average scores (3.78 and 3.76 respectively) were above the benchmark.

The direct and indirect measures for this goal indicate that students' appreciation for the fine arts is developed at Cottey and that this goal is accomplished; however, the data analysis group would like to see the store of knowledge increase.

No institutional direct assessment of literature has occurred. The Assessment Committee will address this in 2002-03.

Although no institutional direct measure is currently in place, course assessment activities document student learning related to students' enhanced store of knowledge in:

- *the history of civilizations, ideas, beliefs, and values.*

Since fall 1999, the short answer study questions for the citizenship exam issued by the Immigration and Naturalization Service have been used as a pre- and post-test in political science courses to directly measure this goal. Although some students have achieved 90 percent correct answers, the benchmark established by the instructor, the average of all students in the course each semester has not. All students do show improvement in their scores between the pre-test and the post-test.

The COS indirectly measures achievement of this goal with two items: 1) gaining insight into human nature through the study of literature, history, and the arts; and 2) thinking objectively about beliefs, attitudes, and values. The resulting average score of 3.53 (1st) and 3.94 (2nd) fell above the benchmark of 3.52.

While the course assessment activity demonstrates learning related to this goal is taking place, and the COS averages related to this goal are above the benchmark, the Assessment Committee should explore direct measures that would provide data at the institutional level.

Course assessment activities also document student learning with respect to students' enhanced store of knowledge in:

- *human behavior and social interaction.*

The 1999 Advanced Placement (AP) Free-Response Questions developed by Educational Testing Service were used as a pre- and post-test to measure learning related to this goal in American History in 2001-02. The benchmark set by the instructor is that students will score a four or higher on the post-test since that is the score required to receive AP credit for history. In the first semester, 80 percent of the students achieved this goal, and in the second semester, 70 percent did.

In General Psychology courses, this goal was assessed through using a pre-test/post-test format. The post-test questions were imbedded in the course final test. Scores were collected for two sections of the course, with both

sections showing similar results. One section had a pre-test mean of 7 and a post-test mean of 11. In the other section the means were 7 and 10 respectively.

No item on the COS correlated precisely with student store of knowledge in human behavior and social interaction; however, the first item used for the previous goal--gaining insight into human nature through the study of literature, history, and the arts--is also appropriate for this goal.

Course assessment information indicates that this goal is being accomplished in courses that closely relate to it. The Assessment Committee should work with the faculty to identify a direct measure to assess this goal at the institutional level. An alternate indirect method for measuring enhanced knowledge of human behavior and social interaction should also be explored.

The CAAP Science Reasoning test directly measures students' store of knowledge in:

- *the natural sciences and scientific progress.*

The following benchmarks, set by the group analyzing the data collected to assess this goal were exceeded: 1) Cottey students will perform at or above the level of the national reference sample, and 2) the mean test score for Cottey students exceeds the mean score for the national reference sample. A much larger percentage of Cottey students made higher than expected progress (14 percent) than the reference group (7 percent). In addition, a much smaller percentage of Cottey students made lower than expected progress (3 percent) than the reference group (12 percent.) The Cottey mean score was 62.5, and the reference group mean was 58.9.

Indirect measurement is provided by three items on the COS: 1) applying scientific knowledge and skills, 2) learning the role of science in society, and 3) increased knowledge of the earth's resources. The average for the first two (3.10 and 3.04, respectively) fell below the Cottey benchmark, and the third (3.53) was close.

As was determined by the analysis of data collected on students' quantitative reasoning and analysis ability, the direct measure of students' store of knowledge in the natural sciences and scientific progress indicates that the goal is accomplished; however, the indirect assessment falls below the established benchmark. This disparity should be considered further by the data analysis group.

No institutional direct measure has assessed students' enhanced store of knowledge in:

- *ethical and social issues.*

The COS item that indirectly measures student knowledge of ethical and social issues records students' perceptions of becoming more aware of local and national political and social issues. The resulting average score of 2.89 fell below the benchmark of 3.52--the lowest score on any topic in the survey correlated to a College goal. Developing or selecting an instrument to directly assess this goal at the institutional level is a priority for the Assessment Committee.

The Global Awareness Profile (GAP) is a direct measure of enhancement of student knowledge related to:

- *the international and intercultural character of the global society.*

A benchmark of 10 (of a possible 18) was established for the average score in the areas tested (six regional geographic areas, six content areas, and one general global section). Students scored at or above the benchmark in the geographic areas of North America (12), South America (11), the Middle East (11), and Asia (11), and below the benchmark for Europe (9) and Africa (9). Students were at or above the benchmark in the following content areas: culture (12), the environment (11), and religion (11); and below the benchmark in geography (9), politics (8), and socioeconomics (8).

The International Studies Student Survey administered on Assessment Day at the same time as the Global Awareness profile was used as an indirect

measure of this goal. Of the 54 students who completed the survey, 70 percent agreed or somewhat agreed that they had a better understanding of the international world as a result of courses taken at Cottey. Eighty percent agreed or somewhat agreed that their academic experience at Cottey increased their understanding of the international and intercultural character of the global society. Despite the positive results on the international studies student survey, student perception of becoming more aware of global and international issues and events on the COS was 3.05.

The data indicates that students do enhance their knowledge of the international and intercultural character of the global society. The data analysis group recommends consideration of changes in the academic program, including the possible development of a cultural geography course. Another suggestion is to expand the College's International Focus Week to a month.

Personal Skills Goals

The personal skill enhancement goals form an integral part of the College's mission and goal statement. Following is a table that summarizes the COS information related to these goals.

Table 14.4 - COS Items Related to Personal Skills Goals

College Goal and ACT COS Item	Avg.
<i>To enhance their personal skills, they will:</i>	
Participate in programs contributing to physical fitness and personal health	
A19 Learning principles for improving physical and mental health	3.52
Experience growth in technological expertise	
A24 Effectively using technology (e.g., computers, high-tech equipment)	3.49
Participate in opportunities for leadership and leadership development and for active involvement in issues	
A18 Discovering productive and rewarding uses of my talents and leisure time	3.48
D6 Developing leadership skills	3.63
D7 Actively participating in volunteer work to support worthwhile causes	3.07

D10 Becoming more aware of global and international issues/events	3.05
Live, work, and study in a nationally and internationally diverse residential environment	
D1 Becoming an effective team or group member	3.44
D2 Becoming more willing to consider opposing points of view	3.53
D3 Interacting well with people from cultures other than my own	4.05
B4 Required courses outside my area of specialization helped me broaden my awareness of diversity among people, their values, and cultures	4.10
Cottey Benchmark	3.52

Data from course assessment activities in physical education, a survey administered to all students on Assessment Day 2001, and the Student Opinion Survey (SOS) indicate that Cottey students are enhancing their personal skills when they:

- *participate in programs contributing to physical fitness and personal health.*

Two physical activity or dance courses are required of Cottey students to receive a degree. Course assessments over a period of several semesters in a variety of physical education activity courses indicate a significant improvement in skill and fitness levels of most students. (Course assessment reports are available in the Resource Room).

On the Student Survey on Athletics, Recreation, and Intramurals, 64 percent of the 237 respondents rated recreation opportunities at Cottey a 4 (48 percent) or a 5 (16 percent) on a scale with 1 being poor and 5 being excellent. The results of the survey also indicated that 78 percent of the respondents felt that competitive athletics has had a positive effect on Cottey's school spirit.

Student satisfaction with health services as reported on the SOS consistently ranks above the national norms, although there was a steady decline from 1999-2001. In 2001 and 2002, student satisfaction in this area ranked in Cottey's bottom five, even though the 2002 report showed a small increase. The SOS information indicates that between 70 percent and 80

percent of the student body use this service each year. The Student Life staff used the information from the SOS and a written student complaint to work with the physicians to improve student satisfaction.

Student satisfaction with counseling services as measured on the SOS from 1999 through 2001 was rated 4.33, 4.07, 4.08, and 4.03. While there has been a modest decline in reported student satisfaction, ratings remain above national norms. Religious activities and programs consistently rank as the lowest satisfier related to the College environment on the SOS. Whether the College is meeting students' spiritual and religious needs is an area that merits further investigation by the Spiritual Life Committee, possibly on Assessment Day.

COS data supports the other measures of this goal by indicating that it is accomplished at Cottey. The related item on learning principles for improving physical and mental health falls directly on the benchmark, 3.52.

The Technology Committee served as the data analysis group to determine if students enhance their personal skills by:

- *experience growth in essential technological expertise.*

Since Cottey offers courses in computer science, the Technology Committee developed a direct assessment of this goal and then acted as the data analysis group. They identified two measurable student learning outcomes: 1) proficiency with word processing, and 2) proficiency with file management. A computer skills test, administered on Assessment Day in 2001 and 2002, measured these outcomes. The benchmark established by the group was that 100 percent of students will score 70 percent or higher in each proficiency set. In 2001, individual performance analysis showed 59 percent of the students scored 70 percent or higher on the word processing skills, and 71 percent of the students scored 70 percent or higher on the file management skills. In 2002, individual performance analysis showed 65 percent of the students scored 70 percent or higher on the word processing skills, and 60

percent of the students scored 70 percent or higher on the file management skills.

The committee used the COS item that recorded student perceptions on effectively using technology (e.g., computers, high tech equipment) as an indirect measure. The average fell below the benchmark in 2001 when it was 3.12. The Technology Committee recommended increasing computer orientation time for the following fall. In spring 2002, the average was 3.44, an improvement, but still below the benchmark. Computer orientation time was increased again in fall 2002.

This goal is accomplished for a majority of our students, but the data analysis group recommends that the term "technological expertise" be more clearly defined. Currently under discussion by the Technology Committee are possible strategies to increase word processing skills and to continue to improve file management skills, i.e., a required computer applications course, a computer skills test graduation requirement that is not tied to a specific course, or skill development integrated in cross-curricular activities.

A definite strength at Cottey lies in the programs available for students in their first and second year of college to:

- *participate in opportunities for leadership development and for active involvement in issues important to them.*

Qualitative focus groups conducted on Assessment Day in 1999 and 2000, and an SGA organization interview in 2002 provide evidence that this goal is accomplished. In addition, surveys of students in leadership positions indicate that over 70 percent have improved such skills as listening, time management, communication, decision-making, planning, people skills, teamwork, and goal-setting.

The four items on the COS that relate to this goal show that Cottey is accomplishing the leadership development aspect of this goal (3.63); however, averages for discovering productive time uses, active participation in

volunteer work, and awareness of global and international issues are below the benchmark (3.48, 3.07, and 3.05 respectively). Programs should be considered that would improve institutional effectiveness with respect to this goal, such as an evaluation of the volunteer program, and extracurricular programs that would contribute to student awareness of issues.

Cottey offers its students a unique atmosphere in which to:

- *live, work, and study in a nationally and internationally diverse residential environment.*

Based on data gathered by the SOS, satisfaction with residence hall programs and services consistently ranks among the top five satisfiers for Cottey students--number one in 1999 and 2000--and is always significantly above the national average. Food Service also consistently ranks in the top five.

Student satisfaction with College sponsored social activities ranked in the top five satisfiers on the SOS in 1999 and 2001. Opportunities for personal involvement in campus activities ranked first in level of satisfaction under the general category of College Environment in 1999, second in 2000, 2001, and 2002.

Three of the four COS items related to this goal exceed the benchmark: 1) willingness to consider opposing points of view; 2) interacting with people of other cultures; and 3) increased awareness of diversity among people, values, and cultures. The averages are 3.53, 4.05, and 4.10 respectively. One area falls below the benchmark: becoming an effective team or group member (3.44). This number is surprising in light of Cottey's suite living and small class size.

Next Steps in Assessment of Student Academic Achievement

One of the goals of the self-study process was to consider whether the goals that accompany Cottey's mission provide a framework for an effective assessment program. Evidence presented in this chapter indicates effective

assessment is taking place; however, from the careful consideration that arises from self-study and from the activities involved in carrying out an assessment program, two ideas have emerged. First, Cottey's goals are 16 specific statements. While the College has been successful in identifying direct and indirect measures for the goals related to student academic achievement, there is some concern that they may be too explicit and that there are too many. Second, while most of the goals are related to student academic achievement, some are not, but it is still important to evaluate whether they are accomplished during a student's time at Cottey. The College focuses on the goals as a group because they define the liberal arts education at Cottey and considers all of them important to accomplishing the mission.

The work of the data analysis groups clearly indicates that the College understands and can implement an effective assessment program at the institutional level. The data collected and analyzed shows that Cottey accomplishes the goals that accompany the mission. The faculty, led by the Assessment Committee, will continue to administer.

Conclusion for Criterion Three

Throughout the last ten years, Cottey has successfully accomplished its educational and other purposes. The College remains committed to providing a liberal arts education, as well as a curriculum that promotes successful transfer to baccalaureate institutions. Faculty evaluation and professional development support excellence in teaching and learning. Academic and student services and other programs reinforce the College's commitment to students' intellectual and personal growth. Finally, the College has worked diligently to establish an effective assessment program to measure student learning to ensure that Cottey continues to meet its objectives. Cottey fulfills Criterion Three and has identified the following strengths, concerns, and issues for the future.

Strengths

- An excellent liberal arts academic program that successfully prepares students for transfer.
- An excellent student life program provides quality programs that support the College's goals.
- The trip to a European city provides a unique international experience for students, faculty, and staff.
- There is strong commitment on the part of the faculty, the administration, and the trustees to establishing an effective program to assess student academic achievement and considerable effort has been expended by the faculty on the assessment program.

Concerns

- Not all of the goals related to student academic achievement are being assessed at the present time.
- The number of student-centered, specific goals makes it difficult to efficiently assess all goals.

Issues for the Future

- The Assessment Committee should work with the faculty to determine institutional measures for those student academic achievement goals that are currently being addressed by course assessment and indirect institutional measures.
- A comprehensive review of the goals, including the number and nature, should be conducted.

