

General Education Assessment Proposal

Presented to: Educational Policy and University Standards Committee

Presented by: Student Achievement Assessment Committee

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Introduction and Background

Purpose

The purpose of this report is to describe ongoing data collection activities that can be used for assessing general education and to propose a general education assessment plan for the CU-Colorado Springs campus.

Background

In the spring of 1998, the Educational Policy and University Standards Committee (EPUS) of the Faculty Assembly collaborated with the Vice Chancellor for Academic Affairs to create an interdisciplinary Core Curriculum Committee for CU-Colorado Springs. The Core Curriculum Committee formulated a proposal to bring to the faculty for their consideration. The proposal was presented to the Faculty Assembly and was passed by the faculty of CU-Colorado Springs on May 4, 2000. It consists of the following preamble and core goals for general education:

PREAMBLE: The overarching purpose of general education is to cultivate students' intellectual, personal and ethical development and thus equip them to be life-long learners, able to adapt to an ever-changing environment.

CORE GOALS FOR GENERAL EDUCATION:

1. Students will be able to read, write, listen and speak in a manner that demonstrates critical, analytical and creative thought.
2. Students will achieve a depth of understanding in their majors and a breadth of experience in other fields.
3. Students will understand and apply the tools and methodologies used to obtain knowledge.
4. Students will be prepared to participate as responsible members of a pluralistic society- locally, nationally, and globally.

Core Curriculum

During the 2000-2001 Academic Year, the colleges worked with the University Curriculum Advisory Committee and the Educational Policies and University Standards

Committee to align the individual college general education requirements to the core goals. The college requirements were set forth in the *2001-2002 Course Bulletin* and represent the first round of implementation. Several colleges are engaged in a more extensive review of the requirements to more fully address the core goals. Each of the four colleges with undergraduate programs recognizes the need to use appropriate assessment to improve the effectiveness of general education requirements to achieve the core goals.

Assessment of General Education

Student Achievement Assessment Committee

The Student Achievement Assessment Committee (SAAC), a group composed of faculty, staff, and student members, has been charged with overseeing assessment at CU-Colorado Springs. Once the core goals for general education were approved in 2000, SAAC set out to propose and implement related assessment activities in order to create a baseline set of data that preceded the effects of any changes in requirements.

SAAC's approach was shaped by a desire for general education assessment to rely upon varied sources of information, to make use of existing data sources, and to be comparable across colleges. The desire for varied sources stemmed from a long held conceptual framework for assessment at CU-Colorado Springs that addressed three learning domains: a) cognitive learning or knowledge acquisition, b) behavioral learning or skill acquisition, and c) affective learning or attitudinal development. In addition, there was a desire to be responsive to the evolving standards set forth by the North Central Association that assessment should rely on direct as well as indirect measures of student learning.

Assessment Instruments

The selection of instruments was based on their match to the four stated core goals, the general education curriculum content, and the other institutional considerations mentioned above. The selection of instruments was also guided by a belief that assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time (AAHE, 1996). Further, our approach uses multiple measures that recognize the difference in learning styles among students (Suskie, 2000; Anderson, 2001; Cheville, 2001). The strength of

combining student opinion surveys with testing is reportedly an appropriate way to assess general education (Muffo, 2001).

The Office of Institutional Research (IR), as advised by SAAC, gathered baseline data in 2001 from several instruments designed to assess the core goals for general education: the Educational Testing Service (ETS) *Academic Profile*, and the Graduating Senior and Baccalaureate Alumni Surveys. Other assessment measures that are also part of general education assessment include the National Survey of Student Engagement, composition portfolio, and program-level assessment of student learning.

Table 1 describes the assessment instruments as they relate to the four core goals for general education and the type of learning domain that the instrument assesses.

Table 1
General Education Goals and Related Assessment Measures

Core Goal for General Education	Academic Profile (cognitive) [direct]	Composition Portfolio (behavioral) [direct]	Graduating Senior and Baccalaureate Alumni Surveys (behavioral, attitudinal) [indirect]	National Survey of Student Engagement (behavioral, attitudinal) [indirect]	Program Assessment (cognitive, behavioral) [direct & indirect]
1- Students will be able to read, write, listen and speak in a manner that demonstrates critical, analytical and creative thought.	✓	✓	✓	✓	✓
2- Students will achieve a depth of understanding in their majors and a breadth of experience in other fields.	✓	✓	✓		✓
3- Students will understand and apply the tools and methodologies used to obtain knowledge.	✓		✓	✓	
4- Students will be prepared to participate as responsible members of a pluralistic society-locally, nationally, and globally.			✓	✓	

ETS Academic Profile

The Academic Profile is a forty-minute standardized test that measures college-level reading, writing, critical thinking and mathematics within the context of humanities, social science, and natural science questions. This short form version of the *Academic*

Profile has a total score reliability coefficient of 0.82 (Educational Testing Service, 1998) and is identified as having adequate content and construct validity.

The *Academic Profile* is administered annually to a total of 240 students (60 per college). The sampling technique employed is convenience sampling, where the test is administered in intact classrooms volunteered by professors. Samples to date have shown to be representative of the larger undergraduate population. Students completing the exam receive a \$10 gift certificate usable at any food facility on campus.

Scores for the *Academic Profile* come in two forms, *norm-referenced*¹ and *criterion-referenced*². Eight norm-referenced scores are reported, one for each of the skill and context areas mentioned above, plus a total score. These scores are expressed as “scale scores.” The total score is on a scale of 400-500; the subscores are on a scale of 100-130. Three criterion-referenced proficiency level scores are reported for the group tested in the areas of writing, mathematics, and reading/critical thinking³. Specific definitions of what abilities students have at each level for each skill dimension have been established and are described in a separate ETS *Academic Profile* report.

One major benefit of using the *Academic Profile* is the access to a large comparative database of over 200,000 student scores from a variety of institutions including research/doctorate universities and comprehensive colleges and universities. The availability of national benchmark data is well suited for student performance in general education within strategic indicators of institutional effectiveness.

Composition Portfolio

The CU-Colorado Springs Writing Program implemented the writing competency portfolio as a general education assessment process during the fall 2001 semester. Transfer students and native students alike must submit a writing portfolio within 30 hours of their completion of their writing requirements as defined by their undergraduate degree plans. Students select two essays that demonstrate their ability to independently manage writing problems beyond those assigned and assessed within their two, required, general education writing courses. These papers are analytical, argumentative or documented research papers they have written for general education courses at CU-

¹ Norm-referenced scores have meaning only when *compared* with scores of other students or the same students at different points in time. Examples include: SAT, GRE, and ACT.

² Criterion-referenced scores have intrinsic meaning in and of themselves. They are based on meeting certain criteria, such as proficiency levels.

³ Reading and critical thinking are treated as a single dimension because of the close relationship between the two. Critical thinking may be considered as a higher level reading process.

Colorado Springs or courses required within their undergraduate majors. The essays are assessed for various competencies, including: focus, organization, development of ideas, integration of sources, language control and conventions. The portfolio assesses writing competencies in the broader categories of rhetorical knowledge, critical thinking, writing processes, and knowledge of conventions. The portfolio enables the Writing Program to assess whole-text competencies beyond the sentence-level competencies currently assessed within ETS' *Academic Profile*. Baseline data is currently being collected using the portfolio results.

Graduating Senior and Baccalaureate Alumni Surveys

At the time of the Core Curriculum Committee deliberations, CU-Colorado Springs possessed an extensive database on student outcomes surveys that included responses to a number of issues concerning attitudinal development and rating of general education quality. Seniors are asked to complete their survey at the time they apply for their senior audit for graduation. Twelve to eighteen months later, the same baccalaureate alumni are surveyed again using many of the same questions from the Graduating Senior survey.

Analysis of responses from both the Graduating Senior and Baccalaureate Alumni surveys reveals there are no major statistical differences between what students are reporting as they are about to graduate from CU-Colorado Springs and how they respond 12-18 months later. This finding supports a high degree of validity in the survey design.

National Survey of Student Engagement

In spring 2002, CU-Colorado Springs participated in a national study of college students, along with 367 other four-year colleges and universities. First-year and senior students at CU-Colorado Springs were asked to share their views by completing *The College Student Report*. This survey is part of the National Survey of Student Engagement (NSSE) that is administered by the Indiana University at Bloomington. The questionnaire takes less than 15 minutes to complete and can be done using paper or the Web. The survey asks students about how and where they spend their time, the nature and quality of their interactions with faculty members and peers, and what they have gained from their classes and other aspects of their college experience. The ability

to compare CU-Colorado Springs to a set of NSSE urban and public institutions is a major benefit of participating in this study.

Program-level Assessment of Student Learning

All degree programs at CU-Colorado Springs submit an annual assessment report that highlights program goals, assessment measures, related data, and a summary of how the program has been improved based on assessment findings. Assessment progress reports submitted in 2001 reveal that programs at CU-Colorado Springs employ a variety of direct and indirect measures of student learning to assess their program goals and determine depth of understanding in the major. Examples of such methods include: thesis and research papers, portfolios, surveys, oral presentations, tests, interviews, and internships, to name a few. These assessment methods allow programs to measure student learning at multiple levels (cognitive, behavioral and attitudinal) and provide useful information as to how to improve the program based on assessment findings. More detailed information on program-level assessment can be found online at www.uccs.edu/%7Eirpage/IRPAGE/Assessment%20Report%202002.htm. Assessment information for programs that more directly relate to general education such as English, Mathematics, and Communication can also be viewed at the address above.

Currently, the ETS *Academic Profile* allows us to measure “breadth of education” as it measures overall general education knowledge. However, an examination of the various types of program-level assessment taking place at CU-Colorado Springs helps us evaluate “depth of understanding in the major” as stated in goal 2 as well as reading, writing, and speaking, as stated in goal 1.

Core Goals for General Education Benchmarks and Baseline Data

Table 2, beginning on the following page, describes specific benchmarks and baseline data under each core goal. Core goals have been broken down into specific areas with related benchmarks, baseline information, and a timeline for meeting the objectives.

The Student Achievement Assessment Committee recognizes the need to identify and implement additional assessment measures that more directly assess the core goals for general education. In particular, goals 3 and 4 are currently assessed mainly with survey data. Ideas include use of Excel center data as well as data from other centers and organizations on campus. However, this is an issue that will require further elaboration and exploration.

Table 2
Core Goals for General Education Benchmarks and Baseline Data

Core Goal for General Education	Area	Measure/Benchmark	Baseline	Objective / Timeline
1. Students will be able to read, write, listen and speak in a manner that demonstrates critical, analytical, and creative thought.	Reading	AP- Percent of students testing at a minimum college-level proficiency (level 2 or higher) [None]	67% tested at least at a level 2 college-level reading/critical thinking proficiency	Maintain or increase
		GSS- Percent of seniors reporting good or excellent in reading education quality [None]	79% reported good or excellent reading education quality	Maintain or increase
	Writing	WP- Percent of native students who earn Competent or Highly Competent on their writing assessment [Benchmark: 90%]	<i>Data currently being collected</i>	Meet or exceed benchmark
		WP- Percent of native students who earn Competent or Highly Competent on their writing assessment [Benchmark: percentage of transfer students who earn the same]	<i>Data currently being collected</i>	Meet or exceed the percentage of transfer students
		AP- Percent of students testing at a minimum college-level proficiency (level 2 or higher) [None]	46% tested at least at a level 2 college-level writing proficiency	Maintain or increase
		NSSE- Percent of seniors reporting quite a bit or very much personal development in writing clearly and effectively [NSSE Public benchmark: 72%]	70% reported quite a bit or very much personal development in writing clearly and effectively	Meet NSSE benchmark in 3 years
		NSSE- Student report of exposure to writing assignments in courses [NSSE Public benchmark: mean of 2.56]	Majority of students wrote between 1 and 4 papers (of 5-19 pages) during the previous year (mean of 2.59).	Maintain or increase
	Oral Communication	NSSE- Percent of seniors reporting quite a bit or very much personal development in speaking clearly and effectively [NSSE Public benchmark: 67%]	70% reported quite a bit or very much personal development in speaking clearly and effectively	Maintain or increase
		NSSE- Percent of seniors reporting they make class presentations often or very often [NSSE Public benchmark: 58%]	62% reported they made class presentation often or very often	Maintain or increase
	Analytical & Creative Thought	NSSE- Percent of seniors reporting quite a bit or very much personal development in thinking critically and analytically [NSSE Public benchmark: 84%]	83% reported quite a bit or very much personal development in thinking critically and analytically	Meet NSSE benchmark in 3 years

Key:

- AP- Academic Profile
- NSSE- National Survey of Student Engagement
- WP- Writing Portfolio
- GSS- Graduating Senior Survey
- BAS- Baccalaureate Alumni Survey

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2. Students will achieve a depth of understanding in their majors and a breadth of experience in other fields	Depth	GSS- Seniors reporting their program provided them a detailed understanding of their career [None]	80% of seniors reported their program provided them a detailed understanding of their career	Maintain or increase
		GSS- Seniors reporting CU-Colorado Springs prepared them well for their field of specialization [None]	88% of seniors reported CU-Colorado Springs prepared them well for their field of specialization	Maintain or increase
		BAS- Alumni reporting the specific knowledge they acquired has been useful in their present occupation [None]	71% of alumni reported that the specific knowledge they acquired has been useful in their present occupation	Maintain or increase
	Breadth	AP- Mean scores in the areas of humanities, social sciences, natural sciences, and using mathematical data [AP Upperclassmen benchmark: humanities 116.1, social sciences 115.1, natural sciences 117.5, and using mathematical data 114.9]	Mean scores for CU-Colorado Springs students: humanities 117.1, social sciences 116.9, natural sciences 118.8, using mathematical data 117.4	Maintain or increase
		AP- Meet research/doctorate universities' sophomore total score [AP benchmark: 463.1]	CU-Colorado Springs sophomores scored a mean total score of 454.4	Meet AP benchmark in 3 years
		AP- CU-Colorado Springs' native students will score above the mean total score of transfer students [Benchmark: total score of transfer students]	Native students scored a mean total score of 452.8 compared to transfers who scored a mean total score of 453	Meet or exceed the score of transfer students
		GSS- Seniors reporting they learned a variety of new intellectual concepts [None]	95% of seniors reported they learned a variety of new intellectual concepts at CU-Colorado Springs	Maintain or increase

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3. Students will understand and apply the tools and methodologies used to obtain knowledge	Quantitative abilities	NSSE- Percent of seniors reporting quite a bit or very much personal development in analyzing quantitative problems [NSSE Public benchmark: 67%]	65% of seniors reported quite a bit or very much personal development in analyzing quantitative problems	Meet NSSE benchmark in 3 years
	Technology	NSSE- Percent of seniors reporting quite a bit or very much personal development in using computing and information technology [NSSE Public benchmark: 72%]	73% of seniors reported quite a bit or very much personal development in using computing and information technology	Maintain or increase
		GSS- Seniors reporting the technical skills they learned were complete and up-to-date [None]	84% of seniors reported the technical skills they learned were complete and up-to-date	Maintain or increase
	Problem-Solving	AP- Scores demonstrate ability to use previously learned tools and knowledge in the context of multi-disciplinary problem-solving situations [AP Upperclassmen benchmark: humanities 116.1, social sciences 115.1, natural sciences 117.5, and using mathematical data 114.9]	Mean scores for CU-Colorado Springs students: humanities 117.1, social sciences 116.9, natural sciences 118.8, using mathematical data 117.4	Maintain or increase
		NSSE- Percent of seniors reporting quite a bit or very much personal development in solving complex real-world problems [NSSE Public benchmark: 56%]	54% of seniors reported quite a bit or very much personal development in solving complex real-world problems	Meet NSSE benchmark in 3 years
	Self-guided learning	NSSE- Percent of seniors reporting quite a bit or very much personal development in learning effectively on their own [NSSE Public benchmark: 76%]	72% of seniors reported quite a bit or very much personal development in learning effectively on their own	Meet NSSE benchmark in 3 years
	Learning Activities	NSSE- Percent of seniors reporting their coursework emphasized <i>memorizing</i> facts quite a bit or very much [NSSE Public benchmark: 63%]	61% of seniors reported their coursework emphasized <i>memorizing</i> facts quite a bit or very much	Meet NSSE benchmark in 3 years
		NSSE- Percent of seniors reporting their coursework emphasized <i>analyzing</i> ideas or theories quite a bit or very much [NSSE Public benchmark: 83%]	82% of seniors reported their coursework emphasized <i>analyzing</i> ideas or theories quite a bit or very much	Meet NSSE benchmark in 3 years

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		NSSE- Percent of seniors reporting their coursework emphasized <i>synthesizing</i> information quite a bit or very much [NSSE Public benchmark: 71%]	74% of seniors reported their coursework emphasized <i>synthesizing</i> information quite a bit or very much	Maintain or increase
		NSSE- Percent of seniors reporting their coursework emphasized <i>making judgments</i> quite a bit or very much [NSSE Public benchmark: 66%]	70% of seniors reported their coursework emphasized <i>making judgments</i> quite a bit or very much	Maintain or increase
		NSSE- Percent of seniors reporting their coursework emphasized <i>applying theories or concepts</i> quite a bit or very much [NSSE Public benchmark: 77%]	72% of seniors reported their coursework emphasized <i>applying theories or concepts</i> quite a bit or very much	Meet NSSE benchmark in 3 years

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4. Students will be prepared to participate as responsible members of a pluralistic society- locally, nationally, and globally	Community involvement	NSSE- Percent of seniors reporting they have (or plan to) participated in community service or volunteer work [NSSE Public benchmark: 57%]	49% of seniors reported they had (or planned to) participate in community service or volunteer work	Meet NSSE benchmark in 3 years
		NSSE- Percent of seniors reporting quite a bit or very much personal development in contributing to the welfare of their community [NSSE Public benchmark: 36%]	32% of seniors reported quite a bit or very much personal development in contributing to the welfare of their community	Meet NSSE benchmark in 3 years
	Values and Ethics	NSSE- Percent of seniors reporting quite a bit or very much development in their personal code of values and ethics [NSSE Public benchmark: 53%]	46% of seniors reported quite a bit or very much development in their personal code of values and ethics	Meet NSSE benchmark in 3 years
	Knowledge of Issues	GSS- Seniors reporting a high or very high gain in their knowledge of social/domestic issues	40% of seniors reported a high or very high gain in their knowledge of social/domestic issues	Maintain or increase
		GSS- Seniors reporting a high or very high gain in their knowledge of international relations	19% of seniors reported a high or very high gain in their knowledge of international relations	Maintain or increase
	Voting	NSSE- Percent of seniors reporting quite a bit or very much personal development in voting in local, state, or national elections [NSSE Public benchmark: 20%]	14% of seniors reported quite a bit or very much personal development in voting in local, state, or national elections	Meet NSSE benchmark in 3 years
	Working with Others	NSSE- Percent of seniors reporting quite a bit or very much personal development in working effectively with others [NSSE Public benchmark: 75%]	65% of seniors reported quite a bit or very much personal development in working effectively with others	Meet NSSE benchmark in 3 years
		NSSE- Percent of seniors reporting quite a bit or very much personal development in understanding people of other racial and ethnic backgrounds [NSSE Public benchmark: 54%]	47% of seniors reported quite a bit or very much personal development in understanding people of other racial and ethnic backgrounds	Meet NSSE benchmark in 3 years
		NSSE- Percent of seniors reporting they had serious conversations with students who are very different from them [NSSE Public benchmark: 50%]	56% of seniors reported they had serious conversations with students who are very different from them	Maintain or increase

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Data Collection, Dissemination, and Usage

Academic year 2001-2002 was the initial year that the CU-Colorado Springs general education program went into effect. The institution has developed a baseline database of student performance measures tied to each core goal of the program. The baseline data, and additional data currently being incorporated, will allow detailed monitoring of learning levels as students complete their general education requirements under the new plan. A number of comparisons will be possible for each set of college results. For the *Academic Profile*, the National Survey of Student Engagement, and to some extent the Writing Portfolio, there are external benchmarks and standards. For some data, longitudinal comparisons will be possible. For all data, cross-college comparisons will be possible. Once the assessment data has been updated annually, SAAC will review the results and issue a report to each college that includes a summary of the data, relevant comparisons, interpretations and recommendations.

Each college will make a formal response to the data and recommendations from SAAC. SAAC will create a template for the responses to guide colleges in commenting on both positive and negative findings in terms of meeting benchmarks, advance explanations or additional data to address areas of concern, and describe changes they are undertaking in their requirements and curriculum. SAAC will work with each college to insure that the college report adequately addresses all concerns. Once the college reports are finalized, SAAC will submit a campus report to the VCAA on the overall state of general education on the campus, summarizing the college responses and characterizing the degree of achievement of the general education goals at the campus level. In the rare case that SAAC does not believe that a college's final report contained an adequate response to the concerns raised, SAAC may include additional recommendations for that college in the final report. This report may also include recommendations for actions at the campus level that may impact general education. The VCAA will report these findings to the Faculty Assembly, along with his or her recommendations for any additional action.

Because the procedure outlined above brings SAAC into a formal governance role, the appointment process for the faculty representatives on SAAC should be modified. The distribution of faculty among the colleges will remain the same, but the appointing authority will now be the President of the Faculty Assembly. It is recommended that colleges continue to recommend specific faculty representatives to this committee, since experience and expertise in assessment is particularly important.

References

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