Undergraduate Capstone Experience

Embracing a range of styles including reflective papers, service learning exercises, and discipline-specific seminar courses, capstone experiences are high impact practices that demonstrate a students' ability to write, speak, acquire and use knowledge, solve problems, and apply a variety of skills, including time management and task analysis. Regardless of the form of a capstone experience, the demonstrative student outcome integrates knowledge from the discipline specific and general education courses in a unique way (Association of American Colleges and Universities, 2007). According to the National Survey of Student Engagement (2011), 50% of incoming freshmen expect to complete a culminating experience such as a capstone project, while only 11% of these students do not plan to complete a culminating experience. At UCCS, 20 out of the 27 undergraduate degree programs have offered a capstone experience (Switzer High Impact Practices, 2010). In 2012, the GE taskforce administered a survey to explore how current capstone programs are administered, to understand what has led some programs to drop capstone experiences from their curriculum, and to identify how current and potential capstone experiences can help connect students to both discipline-specific and general education goals.
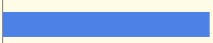
Types of Capstone Experiences
Senior seminars
Experiential or hands-on courses
Structured Internships
Off-Campus Programs
Structured Independent Study or Research
Service Learning
Honors Projects or Papers
Team/Group Projects
Portfolios/Dossiers
Travel/Immersion Experiences

Results from the 2012 GE Taskforce Capstone Survey

Twenty-Nine faculty members that were identified as key information sources regarding capstone experiences responded to a March-April survey on the current, past, and potential use of capstone experiences. (20 Department Chairs, 3 Undergraduate Directors, 6 Untitled Faculty Members). Participating departments included: Biology, Chemistry & Biochemistry, College of Business, Communication ,Counseling and human services, Curriculum and Instruction, Dff, Economics, English, Professional and Technical Writing Program, Gerontology, GES, Health Sciences, History, Languages and Cultures, Mechanical and Aerospace Engineering, Philosophy, Physics and Energy Science, Political Science, Psychology, ROTC/Military Science, School of Public Affairs, UG Nursing, and WEST.

81% of survey respondents rated the value of a capstone experience for their specific program as valuable.

Table 2. Description of Current Undergraduate Capstone Experiences		Response	%
Individual research project based		13	65%
Group research project based		6	30%
Service learning		3	15%
Travel/immersion experience		0	0%
Preparation for workforce (applied, e.g. website creation)		4	20%
Preparation for graduate school		4	20%
Other		4	20%

The two reasons cited *for making the capstone experience optional* was due to faculty workload in administering a senior thesis and the presence of several capstone experiences in the program that prevent students from engaging in a more extensive experience.

The central reasons provided for *discontinuing a capstone experience* included student resistance, lack of resources, and the emphasis of writing in other courses. The central reasons provided for *not having offered a capstone before include* lack of faculty resources (3 responses), lack of students in the program, lack clinical placements, and alignment with accreditation needs, past experience with capstone (2 responses), and perceived student resistance.

According to our survey respondents, the capstone experience most utilized at UCCS is a seminar course that includes an individual project, while the most underutilized model centers on a travel or immersion experience (See Table 2).

Assessment of current capstone experiences

From the surveyed departments offering a capstone experience, 65% of those programs have a standardized rubric for assessing the capstone experience, 6% offer informal assessment, and only 5% do not assess capstone work.

When asked about the reasonableness of including GE goals in the assessment of the Capstone Experience, respondents currently and not currently offering capstones thought that it was reasonable or somewhat reasonable to include critical thinking, writing, and creative thinking in capstone assessment (see chart below).

Reasonableness of Assessment of GE Goals in Capstone Experience

GE Goal	Current Capstone	Potential Capstone
sustainability	42%	43%
cultural responsiveness	47%	57%
creative engagement	74%	86%
social responsibility	63%	86%
social and economic institutions	42%	86%
humanities, arts, and culture	53%	57%
physical and natural world	37%	43%
Oral Communications	79%	71%
Qualitative reasoning	89%	71%
Quantitative reasoning	63%	71%
Creative thinking	95%	86%
Critical thinking	100%	100%
Reading	79%	86%
Writing	95%	86%