OFF CE OF
EDUCATIONAL
ASSESSMENT
Improving Learning Through Assessment

Assessment in the Majors 2011-2013

Catharine H. Beyer
October 2011

INTRODUCTION

Since 1992, the Dean and Vice Provost for Undergraduate Academic Affairs has collected assessment reports from all University of Washington departments offering undergraduate degrees. In their Biennial Assessment Reports, department chairs provide information about departmental learning goals for undergraduate majors, about the methods departments use to assess student learning, and about curricular changes that have been implemented over the previous two years or that are planned for implementation. This introduction provides a brief overview of departmental assessment reports for 2011-13.

After departments submit reports, they are compiled into three charts. The *Assessment in the Majors 2011-2013* chart presents information from the reports of all UW departments that offer undergraduate majors. A chart of *Departmental Learning Goals 2011-2013* categorizes the disciplinary goals of each department into the four broad areas of learning mandated by the Washington State Legislature (writing, critical thinking, quantitative reasoning, and research methods*), as well as noting departmental goals in other categories. The *Assessment Methods 2011-2013* chart lists the most frequently-given methods that departments use to assess teaching and learning.

ASSESSMENT IN THE MAJORS

As the *Assessment in the Majors 2011-2013* chart shows, all departments submitted assessment reports for 2011-2013, as they did in the previous biennium. In 2007-09, 90% of the departments submitted reports.

Departmental articulation of learning goals for their undergraduate majors is important because it provides faculty members with a framework for course and curricular planning, and it offers students a set of criteria against which they can assess their own learning in their majors. In the 2011-13 reports, all departments offering undergraduate majors identified specific learning goals for majors. About 97% of the undergraduate departments included learning goals that were fully-developed, compared with 88% of the undergraduate departments in 2009-11.

These data indicate a marked change in departmental identification of learning goals over the past few years. In 2004, 78% of all departments reported learning goals for majors, and in 2007, about 87% of the UW's undergraduate departments reported learning goals. Furthermore, in 2007, 68% of the departments reporting learning goals for majors had well-developed goals, compared with 88% in 2009 and 97% in 2011. This rapid increase in well-developed learning goals is illustrated by the fact that in 2007, we indicated which departments had particularly well-developed learning goals by adding a "+" beside their entries; however, so many departments would have received this designation in 2009 and 2011, we have eliminated it.

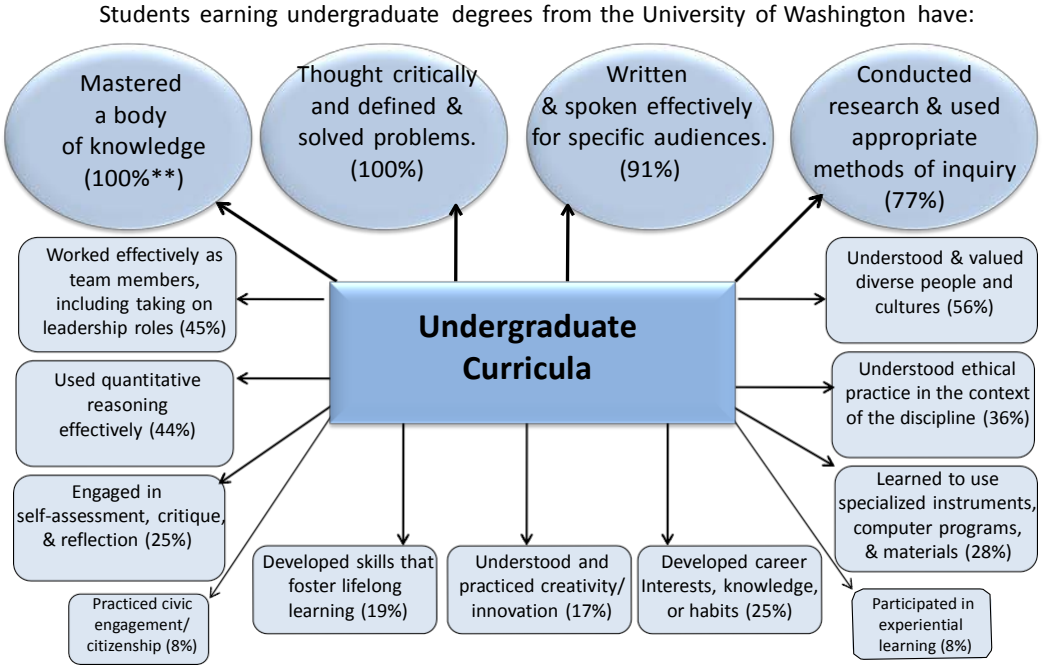
* Previously referred to as "information technology and literacy"

DEPARTMENTAL LEARNING GOALS

The chart of *Departmental Learning Goals 2011-2013* summarizes the learning goals included by each department in its assessment report. As Figure 1 shows, of the 64 departments offering undergraduate degrees at the UW:

- 100% include goals related to mastering a body of knowledge (compared with 100% in 2009)
- 100% have critical thinking and problem-solving goals (compared with 100% in 2009)
- 91% have written and oral communication goals (compared with 89% in 2009)
- 77% have research goals (compared with 77% in 2009)
- 56% have goals related to diversity, multiculturalism, or global awareness (compared with 41% in 2009)
- 45% have goals about team and leadership skills (compared with 38% in 2009)
- 44% have goals about quantitative reasoning (compared with 41% in 2009)
- 36% have goals about ethical practice in the discipline (compared with 28% in 2009)
- 28% have goals about use of specialized instruments, computer programs, or materials (not tracked in 2009)
- 25% have goals about self-assessment/critique/reflection (compared with 22% in 2009)
- 25% have goals for students related to career exploration or preparation (compared with 17% in 2009)
- 19% have goals related to lifelong learning for students (compared with 16% in 2009)
- 17% have goals related to the development of creativity and innovation (compared with 8% in 2009)
- 8% have goals about civic engagement or citizenship (not tracked in 2009)
- 8% have goals related to students' participation in experiential learning

Fig. 1. University of Washington Learning Goals for Undergraduates,*2011-13



* Developed from 2011-13 departmental learning goals for majors: http://www.washington.edu/oea/pdfs/reports/OEAReport11**.pdf
** Indicates the percentage of departments stating each goal.

As the actual departmental goals listed in the ***Assessment in the Majors 2011-2013*** chart make clear, the general goals in Figure 1 represent more specialized learning tasks that vary quite a bit across the disciplines. The table below illustrates this point by reproducing some of the critical thinking/problem solving goals that four departments included in their learning goals for majors.

Dance	Applied and Computational Mathematics	Psychology	Sociology
Develop and practice analytic, evaluative, and contextual skills requisite to critical thinking, kinesthetic understanding, and personal growth.	Critical thinking, problem solving, and modeling—casting a real world problem in a way that makes it amenable to mathematical, statistical, or computational analysis, and assessing the merits of the proposed solution.	Demonstrate scientific fluency by gathering information from scientific and/or popular sources, evaluating it (the validity, authoritativeness, relevance and usefulness of sources), synthesizing it, and using it.	Possess the analytic skills necessary to understand and evaluate sociological arguments and relevant empirical evidence. These include: • Ability to identify and assess the logic of an argument (or research design) • Familiarity with methods for systematic observation of the social world • Basic quantitative fluency

Even within a department, the meaning of general learning goals, such as critical thinking and problem-solving, can vary across areas of emphasis, as the following example of critical thinking/problem-solving learning goals from three divisions in the Art department illustrates:

Division of Art	Division of Art History	Division of Design
• Understand and practice an experimental approach to problem solving. • Learn to research, question, organize and synthesize information about existing ideas and practices, develop new ideas and areas of inquiry, write about and articulate issues to peers, faculty and the community at large. • Combine critical thinking and problem solving with the development of ideas and conceptual skill.	• Examine and understand art and visual culture through the observation and investigation of formal and stylistic qualities, iconography, provenance and patronage, theory and criticism, and historical context and influence. • Use the interdisciplinary reach of art history to intersect with related areas of study such as history, philosophy, literature, languages, music, gender studies, cultural studies, anthropology, comparative religion and new technologies, among others;	• The skills of problem identification, research and information gathering, analysis, generation of alternative solutions, prototyping, user testing and evaluation of outcomes • Ability to synthesize visual and verbal information into new forms, both 2-D and 3-D, static and interactive

ASSESSMENT METHODS

In terms of assessment, as the *Assessment Methods 2011-2013* chart shows, all departments reported using classroom assessment techniques and course evaluations to assess learning at the course-level, as well as a range of methods for assessing learning in the major. Classroom assessment techniques varied quite a bit but often included analysis of student performance on exams, papers, projects, and presentations, as well as use of clickers and other in-class methods so that on-the-spot adjustments could be made. The following direct and indirect methods of assessing student learning were reported by departments:

- 100% use various kinds of classroom assessment
- 100% use student course evaluations
- 86% use exit surveys or interviews of graduating seniors (compared with 81% in 2009).
- 66% use capstone courses or capstone-like experiences, including senior seminars, theses, projects, shows, or performances (compared with 67% in 2009). About 49% of the departments in the College of Arts and Sciences reported using capstone or capstone-like experiences to assess student learning. All departments in the Colleges of Built Environments include capstone or capstone-like experiences for majors. In addition, five of the six departments in the College of Engineering reported using capstones or senior seminars to assess learning, as did four of the five remaining programs—Informatics, Nursing, Public Health, and Social Welfare.
- 42% assess student satisfaction or performance at one or more key points midway through the major (compared with 31% in 2009).
- 38% use external reviewers to assess student work (compared with 30% reported in 2009).
- 33% reported using focus groups, interviews, or formal and informal meetings with students about the quality of their experience in the major (compared with 36% in 2009).
- 30% reported incorporating student self-assessment and reflection into their programs (compared with 25% in 2009).
- 30% use internships, co-ops, or practica and the evaluations of internship supervisors to assess student learning in the major (compared with 16% in 2009).
- 23% use alumni or employer surveys to gather assessment information about student learning (not tracked in 2009).
- 20% conduct focused studies of student work as in portfolio review or specifically targeted outcomes (compared with 45% in 2009).
- 11% use external standards, such as proficiency or professional exams, to assess learning (as was the case in 2009).
- 9% gather information about student learning via undergraduate representation on departmental committees (not tracked in 2009).

As was the case with learning goals, assessment methods often varied with the disciplines. For example, the arts integrate student self-assessment and critique into their courses both as a learning goal for majors and as a method for assessing learning. The arts also often make use of external reviewers of student work. Similarly, many engineering majors make use of external review, but they are also likely to include assessment via internships or co-ops in their assessment work.

In addition to the work of departments, the Office of Educational Assessment provides information to all departments on results of surveys of UW graduates one, five, and ten years after graduation, as well as to department chairs and Deans on course evaluation results. In addition to summaries of students' evaluations of instruction, course evaluation reports include a challenge index that lets faculty know how challenging students felt their courses were compared with other courses the students had taken.