

Assessment in the Majors 2013-15

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INTRODUCTION

For the past two decades, the Dean and Vice Provost for Undergraduate Academic Affairs has collected assessment reports from all University of Washington departments offering undergraduate degrees. In these Biennial Assessment Reports, department chairs provide information about departmental learning goals for their undergraduate majors, details about the methods their departments use to assess student learning, and information about curricular changes that have been implemented over the previous two years or that are planned for implementation. This introduction provides a brief summary of departmental assessment reports for 2013-15.

Once reports are submitted to the Dean and Vice Provost, the Office of Educational Assessment (OEA) compiles them into three charts. The *Assessment in the Majors 2013-15* chart summarizes the information from the UW departmental reports. As the chart shows, all 66 departments offering undergraduate majors completed reports. In addition to compiling the summary chart, OEA uses the unique disciplinary learning goals submitted by departments to generate a second chart entitled *Departmental Learning Goals 2013-15*, which shows general patterns in departmental goals. It should be noted that this second chart is inductively generated; it is not a measure of how well departments are meeting administrative-level goals for student learning. Rather, it shows general patterns as they emerge and change across the UW's rich and diverse undergraduate programs. The third chart, *Assessment Methods 2013-15*, tracks the most frequently-given methods that departments use to assess teaching and learning.

ASSESSMENT IN THE MAJORS

Departmental articulation of learning goals for undergraduate majors is important because it provides faculty members with a framework for curricular and course planning, as well as offering students a set of criteria against which they can assess their own learning in their majors. As the *Assessment in the Majors 2013-15* chart shows, all UW departments offering undergraduate degrees identified learning goals for majors, as they did in 2011. Learning goals for 98% of those departments' goals were fully-developed, compared with 68% in 2007, 88% in 2009, and 97% in 2013. This level of identification of learning goals across departments—100% since 2011—suggests that departmental identification of

learning goals has become normal practice over the past few years. In 2004, only 78% of UW's academic departments reported learning goals for majors, and by 2007 87% had developed learning goals.

DEPARTMENTAL LEARNING GOALS

The *Departmental Learning Goals for Majors 2013-15* chart shows the broad learning goals that OEA generated with the unique disciplinary goals that each of the 66 departments listed, as well as the departments whose goals could be classified in those categories. Again, it is important to note that the broad goals are not institutional goals established by administrators, but categories that emerged through analysis of the learning goals for majors that each department submitted in its own disciplinary terms. Therefore, although we may say that 100% of our undergraduate programs share the goal of critical thinking/problem-solving, the meaning of that goal and the specialized learning tasks that it represents vary across the disciplines. The table below illustrates this point by reproducing some of 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

In addition, even within a department, the meaning of general learning goals, such as critical thinking/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

Furthermore, it is important to note that sometimes faculty members understand one goal to be included in others. For example, for some departments the goals of thinking critically and conducting research in the discipline suggest the development of skills implicit in life-long learning, making listing "life-long learning" as a goal for majors unnecessary. Obviously, these implicit goals cannot be tracked.

Therefore, OEA's summary of learning goals across the undergraduate curriculum represents only a bird's eye view of learning aims across the UW's undergraduate programs, as well as a view of changes in those aims over time.

With these caveats in mind, we have created Figure 1, which shows the percentage of departments whose learning goals could be categorized under 16 broad learning categories that emerged from the learning goals each department submitted. As the figure shows:

- 100% of the departments include goals related to mastering a body of knowledge, compared with 100% in 2011 and in 2009.
- 100% have critical thinking and problem-solving goals, compared with 100% in 2011 and 89% in 2009.
- 92% have goals for written and oral communication, compared with 91% in 2011 and 89% in 2009.
- 91% have research-related goals for majors, compared with 77% in 2011 and in 2009.
- 62% have goals related to diversity, multiculturalism, or global awareness, compared with 56% in 2011 and 41% in 2009.
- 53% have quantitative reasoning goals, compared with 44% in 2011 and 41% in 2009.
- 46% have team and leadership goals, compared with 45% in 2011 and 38% in 2009.
- 39% have goals concerning the use of specialized instruments, computer programs, or materials, compared with 28% in 2011 and not tracked in 2009.

- 35% include goals about ethical practice in the discipline, compared with 36% in 2011 and 28% in 2009.
- 29% have goals concerning the application of the field to related contexts, which was not tracked in 2011 or in 2009.
- 26% have self-assessment/critique/reflection goals, compared with 25% in 2011 and 22% in 2009.
- 24% have goals for students related to career exploration or preparation, compared with 25% in 2011 and 17% in 2009.
- 18% have goals about life-long learning, compared with 19% in 2011 and 16% in 2009.
- 12% have creativity and innovation goals, compared with 17% in 2011 and 8% in 2009.
- 12% have goals related to students' participation in experiential learning, compared with 8% in 2011 and not tracked in 2009.
- 11% have goals concerning civic engagement or citizenship, compared with 8% in 2011 and not tracked in 2009.

Thought Conducted Written critically and research & used & spoken defined & solved appropriate effectively for specific problems. audiences. methods of inquiry (100%)(91%)(92%)Developed Mastered awareness of a body diversity and/or global of knowledge & multicultural issues (100%**) and realities Undergraduate (62%)Curricula Worked effectively Used quantitative reasoning as team members, including taking on effectively (53%) leadership roles (46%) Learned to use Understood ethical Engaged in Applied field Developed career specialized instruself-assessment. practice in the of study to related Interests, knowledge, ments, programs, context of the critique, contexts (29%) or habits (24%) & reflection (26%) & materials (39%) discipline (35%) Developed skills Understood and Participated in Practiced/learned that foster life-long practiced creativity/ experiential civic engagement/ learning (12%) learning (18%) innovation (12%) citizenship (11%)

Students earning undergraduate degrees from the University of Washington have:

Figure 1. UW Learning Goals from the 2013-15 Assessment in the Majors Chart

Developed from analysis of 2013-15 departmental learning goals for majors:

** Indicates the percentage of departments stating each goal.

ASSESSMENT METHODS

As the *Assessment Methods 2013-15* chart shows, all departments reported methods for assessing student learning. The following direct and indirect methods were reported by departments:

- 100% reported using various kinds of classroom-based assessment, including analysis of student performance on exams, papers, projects, and presentations, as well as clickers and other in-class active learning methods used so that on-the-spot adjustments could be made, compared with 100% in 2011.
- 100% reported using student course evaluations, compared with 100% in 2011.
- 100% use peer review of teaching, which was not reported in 2011.
- 89% use exit surveys, compared with 86% in 2011.
- 68% use capstone courses or capstone-like experiences, including senior seminars, theses, projects, shows, and performances, compared with 66% in 2011.
- 50% conducted focused studies of student work as in portfolio review or specifically targeting single outcomes, such as writing, compared with 20% in 2011 and 45% in 2009. This number includes departments that participated in the UW Academic Challenge and Engagement Study, an interview study conducted with graduating seniors that focused on challenge in the major.
- 44% assess student satisfaction or performance at one or more key points midway through the major, compared with 42% in 2011.
- 39% use external reviewers to assess student work, compared with 38% in 2011.
- 39% reported using some kind of experiential learning, such as co-ops, practica, or internships, to assess student learning in the major, compared with 30% in 2011. For several of these departments, these experiences either served as a capstone experience or as part of that experience and included supervisors' evaluations of students' performance.
- 35% reported using focus groups, interviews, or formal and informal meetings with students to discuss the quality of their experience in the major, compared with 33% in 2011.
- 32% incorporate student self-assessment, reflection, or critique into their programs, compared with 30% in 2011.
- 30% conduct alumni and/or employer surveys, compared with 23% in 2011.
- 15% gather information on student learning via undergraduate representation on departmental committees, compared with 9% in 2011.
- 12% use external standards, such as those set by proficiency or professional exams, to assess learning, compared with 11% in 2011.

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 reviewers, but they are also likely to include assessment via internships or co-ops in their assessment work.

OTHER MEANS OF ASSESSING LEARNING IN THE MAJOR

In addition to the assessment work reported by departments in 2013-15, all departments have curriculum or undergraduate committees that engage in continuous evaluation of their undergraduate programs. These committees regularly consider faculty reports, student feedback, national trends, fiscal constraints, and areas of expertise among current faculty as they evaluate and revise their undergraduate programs.

In addition, all departments complete 10-year Academic Program Reviews, which require self-studies that include questions about the quality of undergraduate learning along with external and internal reviewers' analyses of program effectiveness.

Finally, the Office of Educational Assessment provides departments the results of surveys of UW graduates one, five, and ten years after graduation and information on course evaluations to department chairs and Deans. OEA also generates and supports centralized but departmentally-focused studies, such as the UW Academic Challenge and Engagement Study, as well as working with academic departments on assessment projects that they initiate.