Oregon Institute of Technology
2013-14 Academic Assessment Report

Prepared by

The Director of Assessment

June 2014

Academic Assessment Report 2013-14
Oregon Tech Assessment Commission

Introduction
This report outlines Oregon Tech assessment activities and accomplishments during the 2013-14 academic year and is based on the goals set in the 2013-14 Academic Assessment Plan. This document was prepared by the Director of Assessment, reviewed by the Executive Committee of the Assessment Commission, submitted to the Provost, and posted on the Oregon Tech web site at www.oit.edu/provost/assessment.

Leadership of Academic Assessment Efforts
During 2013-14, Hallie Neupert began a three-year time as the Chair of the Assessment Commission. In this role she is the leader of the Executive Committee of the Assessment Commission as well as the full Assessment Commission. The Chair and Director worked closely together to coordinate assessment efforts. Membership of the Assessment Commission and Executive Committee is listed in Appendix A.

Communication of Assessment Matters
Oregon Tech continued to emphasize communication of assessment matters through the following means:
- The Director of Assessment continued as an active, voting member of the Provost's Council, Curriculum Planning Commission (CPC), and the General Education Advisory Council (GEAC).
- The Director continued to update the deans and Provost on important junctures in the assessment process and about various assessment matters. In addition, the Director also included chairs in the accountability process reminding coordinators of assessment deadlines and following up on overdue assessment reports.
- The Director regularly communicated with assessment coordinators through email, formal meetings, and regular one-to-one and small group work sessions.
- The Executive Committee of the Assessment Commission met frequently and included broad representation from the campus.
- As noted below in Assessment Reporting, the Director completed and disseminated Oregon Tech's annual assessment reports. These reports were posted on the Provost's web site and the link to these reports was sent to the faculty. During the fall 2013 convocation, the results were presented to the faculty as described below.
- The Director of Assessment ensured that the Institutional Student Learning Outcomes were communicated to students through posters on bulletin boards, bookmarks provided by advisors, a listing in the student academic planner, a display in the college catalog alongside the list of degree programs, and information on the assessment web site.
- The Director of Assessment maintained the assessment web site as an important communication vehicle for publishing student learning outcomes. The web site publishes student learning outcomes along with assessment reports for each program. The site also includes institutional assessment reports and documents.

Assessment Reporting
The commission completed the following reports and posted them on the Provost's web site:
- 2013-14 Academic Assessment Plan (Fall 2013)
- 2013-14 Academic Assessment Report (this report-June)
- 2013-14 Assessment of Critical Thinking

In addition, the commission ensured, per the assessment plan, that the following 2012-13 assessment information was shared with faculty during the fall 2013 convocation:
- 2012-13 Assessment of Teamwork, Professionalism and Ethics
- 2012-13 assessment accomplishments and plans for 2013-14

Liaison with Other Campus Bodies
The Director actively engaged in the work of the General Education Advisory Council (GEAC). The GEAC reviewed the structure and processes supporting General Education at Oregon Tech as part of the general education review.

In addition, Director continued to serve as co-chair of the General Education Review Task Force and worked with the Executive Committee on a comprehensive review of the ISLOs to provide input to the review.

The Director worked with the Vice President of Student Affairs to plan for administration of the Beginning College Survey of Student Engagement (BCSSE).

At the request of the Advising Coordinators Commission, the Director worked with the Executive Committee to include uniform advising questions on the Senior Exit Surveys.

Assessment and Curriculum Matters
The Director continued as a voting member of the Curriculum Planning Commission (CPC). The Director reviewed all CPC documents, attended CPC meetings, and provided an assessment perspective on CPC matters. CPC still requires the Assessment Director, along with other academic officers, to sign final approvals for new programs and significant revisions of current programs.

The Director was available to provide review and technical assistance to faculty members in responding to assessment questions in their proposals. There was one dual major and one specialization approved during this academic year.

Resources in Support of Assessment
The Provost's Office continued to provide budget and staff resources to the Assessment Commission and to departments to help design, revise, and implement assessment programs.

Institutional Assessment

The Executive Committee engaged in or completed the following institutional assessment work during the 2013-14 academic year:

- As noted above in "Assessment Reporting," the committee led a faculty session on assessment during convocation. The presentation included a summary of 2012-13 activities and accomplishments, discussed plans for 2013-14, presented assessment results on teamwork, professionalism, and ethics, and presented results of the student survey conducted spring 2013.
- The committee completed the 2013-14 assessment plans in October, received Provost approval, and posted the plan on the assessment web site.
- The committee reviewed and approved the Mission Statement and Charter for the Assessment Commission (Appendix B). The committee posted the document on the assessment web site.
- The committee completed the 2013-14 assessment report (this report) and posted it on the assessment website.
- The committee planned and implemented the assessment of critical thinking beginning with a Commission on College Teaching sponsored workshop at Convocation. Dr. Matthew Barker of Concordia University led faculty in an exercise to develop critical thinking assignments aligned to their particular program. The Executive Committee followed up with a directive defining program participation in this ISLO assessment (Appendix C).
- Oregon Tech's survey software (Qualtrics) was used to collect results from the ISLO assessment of critical thinking. While the software solved some of the problems with secure data collection, it was cumbersome for both submitting and extracting results. The Provost agreed to support the Executive Committee in exploring the potential adoption of a comprehensive assessment software. A sub-committee will be formed to look at options beginning Fall 2014.
- The Director was one of the Oregon representatives who participated in a working group working on a national level assessment initiative, the Multi-State Collaborative to Advance Learning Outcomes Assessment (MSC). Oregon Tech is one of six Oregon institutions (three 4-year and three 2-year) asked to participate in a pilot study Fall 2014.
- A sub-committee convened to discuss plans for the 2014-15 ISLO assessment activities for science. The sub-committee found there was significant overlap with the criteria and assessment methods currently being used to assess critical thinking and recommended merging these two ISLOs. Based on these recommendations and an opportunity to participate in a national level initiative (MSC), the Executive Committee agreed to interrupt the ISLO cycle for one year.
- The Director of Assessment and Vice President of Student Affairs planned participation in the BCSSE beginning with new student registration events over the summer. Participation in the BCSSE will replace the CIRP formerly used to survey incoming students.
- The Director supported programs in administering senior exit surveys during spring term. Program senior exit surveys continue to contain a common section including questions from the Career Services Student Success Survey and student

self-rating of proficiency on ISLOs. In addition, uniform advising questions were added based on a request from the Advising Coordinator Commission.

- At the request of the General Education Review Task Force, the committee conducted a comprehensive review of the ISLOs aligning to national frameworks and Oregon Tech's current general education requirements. The recommendations from this review were submitted to the General Education Review Task Force in May and are included in Appendix D.
- The Executive Committee formed a sub-committee which conducted a review of the Oregon Tech assessment website and made recommendations to include licensure and exam pass rates, select NSSE results, and a visual display of ISLO results. The Director began work with the Marketing Department to create an updated look for the assessment webpages and better visual representation of results.
- The Director lead a committee in planning a statewide faculty conference (Teaching T.A.L.K.S. II) focused on assignment design. Twenty faculty from Oregon Tech attended the conference in May 2014.
- The Director tracked "closing the loop" items from 2012-13 program reports and provided reminders to assessment coordinators.
- The committee followed the work of the statewide Learning Outcomes and Assessment committee, with Sandra Bailey providing updates from this group.
- The Director reported on national-level accountability trends and best practices gleaned from working on state and national initiatives and attending the 2013 Assessment Institute.
- The DQP campus team attended the statewide DQP conference and completed the year two work plan and report which included mapping Oregon Tech's ISLOs to the DQP. This work is connected to our review of ISLOs this year and supports the charge of the General Education Review Task Force.
- The Director provided an assessment orientation for new faculty as part of the September Institute (new faculty orientation).

Program Assessment
During the fall convocation, the Director laid out the 2013-14 tasks and timelines to all assessment coordinators. This plan included the ongoing requirement that all undergraduate and graduate degree programs create a manageable assessment plan focusing on program-specific learning outcomes created by each academic department. As in previous years, Oregon Tech's structured process centered on submission of small assignments at regular intervals for each degree program in an ongoing report, including these first items:

- Program mission, educational objectives, and student learning outcomes (SLOs)
- Three-year rotational plan for assessing student learning outcomes
- SLO-curriculum matrices for 2013-14 SLOs
- Performance criteria for 2013-14 SLOs
- Plans for direct and indirect measures of 2013-14 SLOs
- Plans for implementation of improvements from 2012-13 assessment activities ("closing the loop")

- Periodic assessment write-ups, including data summaries, evaluation of data, and action plans for program improvement

The Director also provided assessment coordinators with the following information:
- NSSE reports by program
- ISLO assessment instructions for critical thinking
- Training on recommended refinements in assessment, including:
  - Dental Hygiene continuous improvement example
- Training for new assessment coordinators, new faculty, and others as invited by specific departments

By the end of fall 2013, the majority of academic programs had completed the above items and performed one or more assessment measure(s) per their assessment plan for the year. The director reviewed assessment reports and provided feedback to coordinators on technical issues with their assessment activities and offered suggestions for improvement. The director also provided updates on the status of each program to the department chairs and deans.

During winter and spring terms, the coordinators continued to execute their 2013-14 assessment plans. In addition to their core assessment activities, the coordinators also completed the following tasks:

- Organized a spring department meeting to review assessment data and make plans for program improvement
- Submitted periodic additions of data summaries, evaluations and action plans to the ongoing assessment report
- Wrote a final assessment report

Summary
During the 2013-14 academic year, Oregon Tech continued its systematic work in assessment. The institution made continued progress in refining assessment efforts at both institutional and program levels. The major accomplishments for the year were:

- Assessment of the institutional student learning outcomes in critical thinking led by faculty professional development at Convocation
- Conducted a comprehensive review of ISLOs recommending potential changes to better align with general education requirements
- Increased communication about assessment throughout the institution
- Conducted a review of the Oregon Tech assessment website and made recommendations to improve communication to target audiences
- Participated in the planning of the pilot study of the Multi-State Collaborative to Advance Learning Outcomes Assessment
- Participated in the statewide Teaching T.A.L.K.S. II conference
- Completion of all planned assessment reports
- Frequent liaison with other campus bodies

As the Executive Committee concludes the academic year, the committee looks forward to the 2014-15 year. We will present assessment results for critical thinking during convocation. We will revisit the annual assessment plan in early fall, and goals for the year will be established. In addition, we will participate in the MSC pilot study. The Executive Committee is pleased with level of interest across the institution in participating in assessment activities and using results to improve student learning and success.

Appendix A

Assessment Commission Membership, 2013-14

Executive Committee

Seth Anthony	Assistant Professor and Assessment Coordinator, Science General Education
Sandra Bailey	Director, Assessment
Maria Lynn Kessler	Professor and Assessment Coordinator, Applied Psychology BS
Veronica Koehn	Assistant Professor and Assessment Coordinator, Communication Studies BS
Ryan Madden	General Education Program Director, Portland
Don McDonnell	Assistant Professor and Assessment Coordinator Radiologic Science BS
Hallie Neupert	Professor, Chair Executive Committee and Assessment Coordinator, Mgmt
Sean St Clair	Department Chair and Assessment Coordinator, Civil Engineering BS
Mehmet Vurkac	Assistant Professor and Assessment Coordinator, Electrical Engineering BS
David Waite	Director, Institutional Research
Gregg Waterman	Associate Professor and Assessment Coordinator, Math General Education

Assessment Coordinators

Cara Calvo	Department Chair, Clinical Lab Sciences BS
Barry Canaday	Assistant Professor, Echocardiography BS
Chris Caster	Associate Professor, Vascular Technology BS
Burt Clark	Professor, Biology-Health Sciences BS
Robyn Cole	Associate Professor, Diagnostic Medical Sonography BS & Degree Completion
Jan Cope	Department Chair, Dental Hygiene BS & Degree Completion
Hope Corsair	Assistant Professor, Renewable Energy Engineering MS
David Culler	Associate Professor, Mechanical Engineering Technology BS
Jeff Dickson	Assistant Professor, Information Technology BS
Jim Fisher	Associate Professor, Applied Mathematics BS
Suzanne Hopper	Associate Professor, Dental Hygiene AAS
Rick Hoylman	Associate Professor, Nuclear Medicine Technology BS
Michael Hughes	Assistant Professor, Environmental Sciences BS
Jim Hulse	Department Chair, Respiratory Care Degree Completion
Janette Isaacson	Assistant Professor, Echocardiography & Vascular Tech Degree Completion
Jamie Kennel	Program Director, Paramedic Education AAS
Roger Lindgren	Professor, Civil Engineering MS
Jim Long	Professor, Embedded Systems Engineering Technology BS
Doug Lynn	Associate Professor, Computer Engineering Technology AE & BS
Mason Marker	Associate Professor, Geomatics BS
Marla Miller	Department Chair, Health Care Management BS
Brian Moravec	Department Chair, Manufacturing Engineering Technology MS
Sophie Nathenson	Assistant Professor, Social Sciences General Education
Mark Neupert	Department Chair, Humanities General Education
Phong Nguyen	Associate Professor, Software Engineering Technology AE & BS
Jeff Pardy	Assistant Professor, Respiratory Care BS
Jane Perri	Associate Professor, Polysomnographic Technology AAS
Frank Rytkonen	Assistant Professor, Renewable Energy Engineering
Pat Schaeffer	Assistant Professor, Operations Management BS
Aaron Scher	Assistant Professor, Electronics Engineering Technology BS
Matt Search	Assistant Professor, Communication General Education
Maureen Sevigny	Professor, BAS in Technology & Management
Sean Sloan	Assistant Professor, Mechanical Engineering BS
Joe Stuart	Associate Professor, Manufacturing Engineering Technology BS
Gary Zimmerman	Professor, Radiologic Science Degree Completion

Appendix B
Mission Statement and Charter for the
Assessment Commission
Revision Approved 11/03/11

Mission
The Assessment Commission will develop, review, and implement an institutional assessment plan. The Commission will recommend the process for department and administrative evaluation of mission statements, objectives, and outcomes, and will prepare an annual report on institutional progress to the Provost.

Charter
Assessment Commission Membership
The Commission is composed of the Director of Institutional Research, the Director of Assessment, and all assessment coordinators. The Provost shall appoint one faculty member to serve as Chair.

Assessment Executive Committee Membership
The Assessment Executive Committee is composed of the Chair of the Assessment Commission, the Director of Institutional Research, the Director of Assessment, and at least one faculty member from each school, and at least one faculty member from a non-Klamath Falls campus, selected by the Chair.

Terms of Service
Assessment Commission
The terms of service for assessment coordinators are determined by the academic department. The Chair serves a three-year term and may be reappointed.

Executive Committee of the Assessment Commission
Faculty members shall serve on the Assessment Executive Committee for terms of three years and may be reappointed.

Leadership
The Executive Committee of the Assessment Commission, the Chair of the Assessment Commission, and the Director of Assessment have responsibility and authority to guide assessment activities on the campus. The Provost supports the work of the commission and ensures accountability for assessment activities across the institution.

The specific responsibilities of the Executive Committee are to:
- Develop, review, and implement the institutional assessment plan.
- Recommend processes for departmental and administrative evaluation of mission statements, objectives, and outcomes.
- Organize and administer all academic assessment outside of departmental efforts.
- Recommend specific improvements based on assessment findings to the Provost.
- Report to the Provost.
- Recommend changes in institutional research and assessment efforts.

- Decide which data to collect to best study issues of institutional importance.

To ensure the efficiency and quality of the Executive Committee's work, the committee is granted a degree of autonomy over its own operations.

The Chair of the Assessment Commission provides broad leadership for assessment activities, promotes a culture of assessment among the faculty, and chairs meetings of the Assessment Commission and the Executive Committee of the Assessment Commission.

The Director of Assessment is responsible for overall planning, budgeting, organizing, faculty development, and coordination of activities required for an effective and comprehensive educational assessment program. These activities include determining and evaluating learning outcomes, incorporating outcomes into curriculum planning, and providing regular and systematic feedback leading to documented program improvements. The Director works closely with the Executive Committee to administer institutional outcomes assessment and with academic departments to administer program outcomes assessment. The Director represents the Assessment Commission at the Provost's Council, the Curriculum Planning Commission, and the General Education Advisory Council.

Meetings
The Assessment Commission will meet during convocation week and at least once per term.

The Executive Committee of the Assessment Commission will meet regularly throughout the academic year.

Information
The Assessment Commission gathers, analyzes, and disseminates assessment information relevant to the institution. The Assessment Commission gathers information by:
- Collection of institutional student learning outcome (ISLO) data from campus-wide assessment efforts.
- Collection of ISLO data from program assessment efforts.
- Direct requests to university administrators, academic department heads, and/or any group or association of Oregon Tech faculty, staff, or students.
- Development and utilization of questionnaires and surveys.
- Use of previously published information or data.

The Assessment Commission analyzes information and data through statistical summaries, compilation of written materials, or other established methods. Analyses may provide the University with information pertinent to specific issues, or it may substantiate recommendations for administrative actions.

The Assessment Commission disseminates information by means of:
- Reports on the results of ISLO assessment activities.

- An assessment web site, containing information on general assessment matters, institutional student learning outcomes, and program learning outcomes.
- Written reports to Provost's Council at each of its meetings.
- Verbal reports on assessment activities by the Director of Assessment to the Provost.
- Responses or reports to departments, activities, or committees based upon requests for information.
- Reports generated from within the Assessment Commission.
- Periodic status reports to the University as specified in its charter.

Annual Reports

The Assessment Commission will prepare the following annual reports summarizing its activities for the most recent academic year:
- Annual Assessment Plan
- Annual Assessment Report
- Report(s) on ISLO assessment activities

These reports are kept in the office of the Director of Assessment and posted on the Oregon Tech web site at www.oit.edu/assessment.

Amending the Charter

The Assessment Commission may modify its charter in consultation with the Provost. Proposals for changes to the commission charter go to the Chair, who negotiates suggested changes with the Executive Committee and any affected administrative bodies. The Chair forwards consensus requests to the Provost for approval. In case of lack of consensus, the Chair forwards competing proposals to the Provost for consideration.

9/18/08 Charter revised to remove references to "Associate Provost," a position that was eliminated during academic restructuring in 2007-08.

10/5/09 Charter revised to remove reference to the Director of Assessment providing verbal reports to the President's Cabinet. The director is no longer a member of this group. The Director now provides these verbal reports to the Provost.

10/18/10 Charter revised to replace "Academic Council" with "Provost's Council." The chair is no longer a member of the Academic Council; the Provost's Council is the new committee to replace the former "full" Academic Council.

10/3/11 Charter revised to remove the Provost from membership in the Assessment Commission and the Executive Committee. In addition, the chair is no longer designated as a member of the Curriculum Planning Commission, Provost's Council, and the General Education Advisory Council.

Appendix C

Assessment of Critical Thinking, Academic Year 2013/14

Definition of Critical Thinking
During this year's convocation many of you attended a session on critical thinking by Dr. Matthew Barker of Concordia University. During that talk he outlined critical thinking as consisting of the three cognitive tasks:

1. **Identification:** Identify the goal of inquiry, the problem being solved, the theory to support, etc.
2. **Clarification:** Take the evidence, argument, algorithm, etc. to be evaluated and analyze it.
3. **Evaluation:** Reach a conclusion and support it, based on your analysis of the evidence. When relevant, qualify your conclusion with respect to personal biases.

A group of your faculty colleagues have been examining prospective assignments and have found some common threads, as follows:

Identification of the goal of the activity. Possible aspects are:
- Purpose
- Problem definition
- Source/context
- Background/theory
- Grasp of technicalities of language/situations/techniques

Clarification by analyzing arguments from different sources, data gathered, observations of a situation, etc. Possible aspects are:
- Quantify solutions
- Multiple points of view/aspects/methods
- Determination of relevance: assumptions, claims, evidence and lack thereof, connections
- Gathering of sources/data

This portion of the assignment should exhibit sufficient complexity or "robustness."

Evaluation of evidence obtained during clarification. Possible aspects are:
- Scrutinize sources, data, etc.
- Making choices/decisions/judgments
- Justification/support of choices/decisions/judgments
- Identification of further possibilities for inquiry

These can be used as guidelines in creating assignments and performance criteria.

Critical Thinking ISLO Assessment

A. Create an assignment* in your discipline that you believe involves the three components   1) identification, 2) clarification and 3) evaluation (ICE), as previously described.
- For assessment in a degree program, the assignment should be given in an upper level course.
- For assessment in a general education program, the assignment can be given at any level.
- The assignment should be assigned to, and completed by, students individually.
- The assignment should be administered in Fall 2013 or Winter 2014 term.
- *The assignment must be a graded activity: practicum exam, exam question, in-class assignment, take-home assignment, etc.

Sample assignments are available through MyOIT, Faculty/Staff tab, Assessment Commission.

B. Determine specific performance criteria that you will use to grade students' work, with each criterion falling into one of the three components (ICE). You may have additional criteria for the purposes of assigning students a grade that don't fit in any of those components. However, only criteria addressing performance in the ICE components should be used for the purposes of assessment. The three ICE components can be addressed in any order in the assignment.

C. Using the criteria, create a rubric that can be used to assign each student a numerical score for each of the three components as follows:

1   -   Limited or no proficiency
2   -   Developing proficiency
3   -   Proficiency
4   -   High Proficiency

with "Proficiency" (3) being minimal acceptable proficiency. The rubric should be arranged with criteria down the left side, scores a cross the top, and cells describing student performance for the corresponding criterion and score. A sample has been provided through MyOIT, Faculty/Staff tab, Assessment Commission.

D. A copy of the assignment and rubric should be sent to Sandra Bailey, Director of Assessment prior to *administering* the assignment. You can request feedback on your assignment and/or rubric from the Critical Thinking Committee before using them, if you wish. For this, materials need to be submitted sufficiently ahead of implementation.

E. The Director of Assessment will provide a tool for submitting student scores and a description of the scoring method. The student work should be scored by program faculty, using multiple raters if practical. The tool will ask more specific questions about how the assignment was administered and scored. The following items will be collected:
- Assignment and rubric (already turned in earlier)
- Completed score sheet/description
- Student work in pdf format if reasonable

Appendix D

Recommendations from the Assessment Commission
to the General Education Review Task Force
May 28, 2014

ISLO 1: Oregon Tech students will demonstrate effective oral, written and visual communication.

Recommend changing ISLO to "Oregon Tech students will demonstrate effective oral and written communication." Visual performance criteria added to both oral and written (as appropriate). Use common language for information literacy criteria for relevant ISLOs.

Recommendations for changes to general education requirements: Vertical integration of written communication to improve gaps identified in information literacy and technical writing.

ISLO 2: Oregon Tech students will demonstrate the ability to work effectively in teams and/or groups.

No changes recommended for this ISLO.

Consider creating a general education requirement, if not feasible then the Assessment Commission will reconsider keeping as an ISLO.

ISLO 3: Oregon Tech students will demonstrate an understanding of professionalism and ethical practice.

No changes recommended for this ISLO.

Recommend adding ethics as a general education requirement. Consider creating a general education requirement for professionalism, if not feasible, then the Assessment Commission will reconsider including professionalism in this ISLO. (Note: consider combining professionalism with #5).

ISLO 4: Oregon Tech students will demonstrate critical thinking and problem solving.

Change this ISLO to "Inquiry and analysis" to incorporate yet to be determined aspects of critical thinking, problem solving, lifelong learning, and scientific inquiry.

Recommend aligning general education requirements with this new outcome to provide explicit justification for humanities, sciences (both social and natural), consider vertical integration including information literacy.

ISLO 5: Oregon Tech students will demonstrate knowledge and understanding of career development and lifelong learning.

Recommend eliminating as an ISLO and consider incorporating career development in #3.

Lifelong learning should be basis of the rationale for general education.

ISLO 6: Oregon Tech students will demonstrate mathematical knowledge and skills.

Recommend changing outcome to "Quantitative literacy."

Recommend aligning general education requirements with this new outcome, consider vertical integration.

ISLO 7: Oregon Tech students will demonstrate scientific knowledge and skills in scientific reasoning.

Recommend eliminating as an ISLO, incorporate into new "Inquiry and analysis" ISLO.

Recommend aligning science general education requirements with this new outcome.

ISLO 8: Oregon Tech students will demonstrate cultural awareness.

Keep as an ISLO, Assessment Commission subcommittee led by Ben Bunting to explore definition of outcome, criteria, and expectations fall 2014.

Recommend creating a general education requirement to align with this outcome as defined by the subcommittee.