



2020 Ad Hoc Self-Evaluation Report

Submitted to
Northwest Commission on Colleges and Universities

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Introduction

This self-study report is prepared in response to the findings of the Northwest Commission on Colleges and Universities (NWCCU), dated July 10, 2019, following the Spring 2019 Mid-Cycle Evaluation and the Spring 2019 Ad Hoc Evaluation of Oregon Institute of Technology (Oregon Tech). The scope of this report is therefore strictly focused on answering questions raised related to NWCCU's Recommendation 1. Specifically, NWCCU recommended that Oregon Tech, "Continue to review its assessment processes, particularly those newly planned and implemented, to ensure they yield both timely and meaningful results that lead to improvement (Standard 4.A.6)." Oregon Tech took immediate actions to carefully evaluate the NWCCU reviewers' observations, identify assessment areas needing improvement, reexamine Oregon Tech's assessment activities, data and their collection frequency, and employ data-informed decisions to refine, sharpen and focus the methods used to evaluate the effectiveness of the University's assessment processes to improve student success. In addition, being mindful of the effective date of the NWCCU 2020 Standards, released January 2020, it was sensible to align Oregon Tech's assessment processes for compliance with NWCCU's new Standards, where appropriate. These tasks are completed, and we now have implemented Oregon Tech's new plan to evaluate and improve the effectiveness of the University's assessment processes to produce timely and meaningful results leading to continuous institutional improvement. Summaries of these steps, accompanied by supporting information, are presented in the sections that follow.

I. Recommendation, Identification of Issues and Statement of Response

Recommendation: *The Commission recommended that Oregon Institute of Technology:*

1. *Continue to review its assessment processes, particularly those newly planned and implemented, to ensure they yield both timely and meaningful results that lead to improvement (Standard 4.A.6).*

Through a comprehensive review of NWCCU 2019 Site Visit Evaluators' report and a follow-up meeting with NWCCU's Vice President (Valerie Martinez), we determined improvement was needed in the following areas:

- 1) regularly review assessment processes,
- 2) ensure assessment processes appraise authentic achievements,
- 3) ensure assessment processes yield meaningful results, and
- 4) ensure assessment processes lead to improvement.

This document outlines Oregon Tech's process of methodically identifying areas needing improvements—guided by scrutiny of existing assessment activities and data—and process improvement actions taken during the allotted period for the Ad Hoc Report, as well as Oregon Tech's accomplishments as a result of these actions. During the 2019-2020 academic year, Oregon Tech assessment processes, goals and implementation plans have been redefined, focusing on evidence-based methods of evaluating effectiveness of assessment processes. To ensure long-term, continuous improvement of the assessment processes, these activities incorporate regular annual evaluation and an opportunity for refinement of implemented assessment processes. As described later in this report (Section III), annual evaluations of students' success, academic programs and the University structures that support academic affairs not only document student achievements but also determine the effectiveness of assessment goals and methods in ensuring student success and allow opportunities for data-informed assessment process improvement. The dynamic evaluation of assessment processes is conducted at all levels of the University (academic and non-academic) every year and the annual evidence-based findings and implemented improvements are fully integrated into a three-year cycle of continuous improvement, which includes a review of assessment processes.

II. Brief Historical Review of Assessment Processes at Oregon Tech

Consistent with Oregon Tech's student-centered focus, the primary purpose of academic assessment at Oregon Tech is to improve the student learning experience within Oregon Tech's academic programs. Academic assessment activities also help fulfill accreditation mandates laid out by the new NWCCU 2020 standards. These dual purposes are not in tension with each other, but, in fact, have the same goal: student success and achievement consistent with fulfillment of Oregon Tech's mission.

Assessment at Oregon Tech is a collaborative effort (Figure 1). Historically, faculty members have been expected to contribute to assessment of institutional (essential) student learning outcomes (ESLOs) as they are manifested in their programs. Essential learning outcomes are the terms used at Oregon Tech to refer to broad institutional learning outcomes expected of all students. Faculty members are also responsible for assessment of their program's success and have the expertise in their disciplines to judge whether their students are achieving program student learning outcomes (PSLOs). Assessment activities are oriented towards the success of a degree program as a whole; thus, requiring the participation and collaboration of faculty from multiple disciplines.

The Assessment Executive Commission has provided guidance to campus efforts in institutional academic assessment. The major focus of these efforts has been the ongoing assessment of institutional (essential) learning outcomes or ESLOs. The Commission has provided a cycle for assessment of the ESLOs, and, in conjunction with the ESLO committees, designed an assessment report template with rubrics and success criteria for each ESLO, distributed rubrics for assessment at program levels, and provided guidance for scoring and analysis of student work. Finally, in cooperation with the Commission on College Teaching (CCT) and the General Education Advisory Council (GEAC), the Assessment Executive Commission has assisted academic programs with development and implementation plans for improvements to address any documented deficiencies and support ongoing improvements. The ESLOs and the past assessment schedule are shown in Figure 2. As demonstrated in the figure, the ESLO continuous improvement cycle consisted of six staggered steps, beginning with design of assessment process, and ending with a reflection to determine the effectiveness of the assessment process of each ESLO. One committee comprising multidisciplinary faculty formed for each ESLO, provided evaluation and feedback on improving assessment of the committee's ESLO. The Assessment Executive Commission reviewed and disseminated information from these assessments of the ESLOs and made recommendations for changes in curriculum and general education requirements, as appropriate.



Figure 1 Faculty meeting on Assessment Day

Figure 2 Past ESLO Six Year Continuous Improvement Cycle (Began in 2015 and ended June 2020)

Essential Student Learning Outcome	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 ended	2020-21
Communication		Design	Collect	Analyze	Engage	Evaluate	Reflect
Inquiry & Analysis			Design	Collect	Analyze	Engage	Evaluate
Ethical Reasoning				Design	Collect	Analyze	Engage
Teamwork					Design	Collect	Analyze
Quantitative Literacy						Design	Collect
Diverse Perspectives	Design	Collect	Analyze	Engage	Evaluate	Reflect	Design

In addition, the Assessment Executive Commission worked with the Commission on College Teaching to develop and administer faculty professional development opportunities to support student attainment of the ESLOs. Since ESLOs are broad institutional learning outcomes, campus-wide discussions were conducted including scoring and norming sessions. One of the largest attended, "Assessment Days," was conducted at the University Convocation every fall, where the previous year's assessment results were disseminated to faculty and faculty were provided with an opportunity to discuss and give feedback to the Assessment office. However, as the 2019 NWCCU Mid-Cycle Peer Evaluation Report indicated, only about 20 faculty members attended the event.

Like the ESLOs, programs have been evaluating their program student learning outcomes (PSLOs). Program Assessment Coordinators have reported annually to the Assessment Executive Commission the assessment of ESLOs and PSLOs, including data on students' work, analysis of assessment data and any actions programs have taken or planned to take to improve student success and achievement in their programs. An example of the Assessment Executive Commission's review and feedback to a program's annual assessment report is shown in Figure 3.

Program Assessment Report Feedback	
2018-19 Assessment Report	
Program: B.S. Medical Laboratory Science	
Rubric Measure	Score (Out of 4)
Program mission and educational objectives	4
Outcomes: Clarity	4
Outcomes: Student-centered orientation	4
Outcomes aligned with mission/industry/student success	4
Outcomes mapped to course/learning experiences	3
Current year's plan	4
Multi-year cycle plan	4
Valid relationship between outcomes and assignments	4
Valid relationship between outcomes and rubric	4
Types of measures: 2 direct, 1 indirect	4
Alignment of assessment across sites/modes	4
Specification of desired results for objectives	3
Data collection and research design	3
Reliability evidence	2
Presentation of results	3
History of results	4
Document how results are shared with faculty/stakeholders	3
Interpretation of results	3
Closing the loop	2
Weaknesses result in action plans	2
Action plans are linked to assessment findings	2
Plans for improvement of assessment	2
Accountability on improvement	2
Planning/budgeting alignment	2

Figure 3 Example of Annual Report Review and Feedback

In addition to program-level assessment, Oregon Tech has been using institution level activities and measures to evaluate students' success. One such measure is the online National Survey of Student Engagement (NSSE). Oregon Tech has been assessing and continues to assess the level of student engagement at the freshman and senior levels using NSSE and sharing the results from this survey with the Assessment Commission, the Commission on College Teaching, the General Education Advisory Council, the Student Affairs Division, and the Oregon Tech faculty.

The Executive Commission in collaboration with Institutional Research, Career Services, and other campus offices, conducts an annual Student Exit Survey. The Student Exit Survey includes questions related to students' achievement of program and institutional learning outcomes. The results of the Student Exit Surveys are provided to individual programs as input for program assessment activities. The Career Services office conducts its own graduate survey, using Handshake, to gather placement and salary information on Oregon Tech graduates. This information is disseminated to academic programs and used in the assessment process.

Faculty professional development related to assessment of student learning outcomes has been another responsibility of the Assessment Executive Commission. Professional Assessment Days have been conducted throughout the year and included professional development, rubric training, assignment-design training, norming and scoring sessions. The Commission Chair has been supporting program assessment efforts; including bi-monthly formal meetings of the Assessment Commission, regular one-to-one work sessions and consultations with program faculty responsible for assessment, training on assessment topics, regular reminders of assessment tasks and timelines, feedback on assessment efforts, and tracking of progress by each program.

Following is a summary of the Assessment Executive Commission's additional responsibilities:

- Provides assessment orientation as a component of new faculty orientation and at Convocation each year.
- Provides training for new department assessment coordinators.
- Provides professional development for faculty along with norming & scoring sessions.
- Shares the previous year's ESLO scored results with faculty at Convocation each Fall.
- During Winter and Spring quarters, completes Oregon Tech's annual campus-wide review on all program assessment reports and provides feedback to all programs using an institutional rubric adapted from a best practice rubric from James Madison University.
- Develops and annually updates the Assessment Guide to help faculty with assessment tools, processes, and information to meet the University's assessment requirements.

III. Differences in Previous Assessment Processes and NWCCU Recommendation, and Oregon Tech Actions

Each of the four areas of action to achieve compliance with the NWCCU's Recommendation identified in Section I are addressed below.

1. *Regularly review assessment processes*

Implementation of Three-Year Review Cycle. The previous assessment processes evaluated program student learning outcomes (PSLOs) and institutional (essential) learning outcomes (ESLOs) annually. Data from academic programs were gathered, analyzed, and discussed campus wide at the University's fall term convocation. A six-year ESLO review cycle was used. Beginning in Year 1 of the cycle, each year one ESLO was added to the student learning outcomes evaluation pool for assessment that year. This required a six-step process to evaluate Oregon Tech's six institutional learning outcomes, which took six years to complete. Although the previous assessment processes were complete at the conclusion of the sixth year, there was insufficient time in NWCCU's seven-year accreditation review cycle to influence the assessment processes using measurable, actionable data obtained from an analysis of the preceding six year performance data, or determine effectiveness of any process changes. The NWCCU's peer review report indicated Oregon Tech's "systematic and participatory" process but noted it needed "further exploration and testing to determine its effectiveness." To improve this process, a shortened assessment cycle for the review of institutional learning outcomes was deemed necessary. Building on the previous regular, annual assessment processes, a new, three-year assessment cycle followed by a process review was defined and implemented in Winter 2020. (Appendix A). This cycle allows continuous annual evaluation of assessment processes culminating in a complete evaluation in three years. Evidence-based assessment process improvements can be continuously identified and implemented. Effectiveness of

resulting improvement actions are then evaluated in the next cycle, thus enabling closing of the assessment process review loop in one NWCCU seven-year accreditation cycle. An added benefit of our new assessment cycle is efficiency as it includes a year for planning, a year of assessing/analyzing and a year of acting (closing loops) built into each of the three years. This review cycle also aligns evaluation of our assessment processes with assessment of program student learning outcomes and student's achievement of those learning outcomes.

Student Success Dashboards. The new assessment processes include data dashboards created to provide stakeholders with access to key performance indicators (Appendix B). These dashboards report student achievement data such as DFWI, persistence, retention, and graduation rates. The availability of NWCCU 2020 Standards in January 2020 provided a timely opportunity to align our new assessment processes with the requirements of the new standards. Specifically, within two months of publication of the new standards, Oregon Tech developed and piloted new data dashboards, which include population-disaggregated student achievement data for underrepresented students, first generation students, and those of low socio-economic status. In addition, we have made available data on Oregon Tech graduates' job placement rates and student-loan default rates to programs from the Career Services Office and the Financial Aid Office, respectively. A comparison of disaggregated student achievement data helps academic programs identify equity gaps and enables the development of strategies to close them. The annual program assessment reports used in the previous assessment processes are expanded in scope in our new assessment process to include a discussion of dashboard data, program faculty's collective decision on improvement actions, and their implementation timeline. Thirteen (13) volunteer academic programs participated in piloting the data dashboards in a systematic way to assess student success in the preceding winter and spring terms. These programs articulated their findings on the use of student success data dashboards for their students in their program annual assessment reports. An example of the use and analysis of one of the data dashboards is included in Appendix C. In addition to assessment of data on student achievement presented through data dashboards, the three-year cycle discussed above enables the program faculty to regularly scrutinize and refine the assessment processes that drive improvements in students' achievement.

2. Ensure assessment processes appraise authentic achievements

Our previous assessment process included annual reporting from each program on assessment of both the program and institutional student learning outcomes and actions taken to improve the program. The reports were prepared by an assessment coordinator in each department and submitted to the Assessment Executive Commission for review and feedback. A visual snippet, of just one criterion summarized from the review of the 2018-19 academic year assessment reports, which the Assessment Executive Commission conducted in the academic year 2019-20, is provided in Figure 4. The feedback was sent back to program coordinators. There was no defined process to determine how and to what extent the Commission's feedback was used by programs.

Following a review of our past assessment processes to specifically improve our measurement of authentic achievements of all students, two major enhancements have been made.

(1) Student Performance Data. We have integrated in our assessment processes additional measures of student achievement. Our processes now include monitoring of DFWI rates in every course every time the course is offered during each academic year. The program annual assessment reports are now required to devote a section to specifically address classes where the target DFWI rate of achievement has not been met, include an analysis

of the corresponding disaggregated data to identify if equity gaps in achievement exist for underrepresented students, and discuss a plan of action to remedy the situation where equity gaps exist. Additional dashboards were created and made available to all faculty, which show other measures of student performance such as rates of retention, persistence, and graduation in all programs. Post-graduation success and student loan default rates of students in each program are prepared by the University’s Career Services and Institutional Research and shared with programs. An example of one of the dashboards that programs have already used in preceding winter and spring terms is provided in Appendix B.

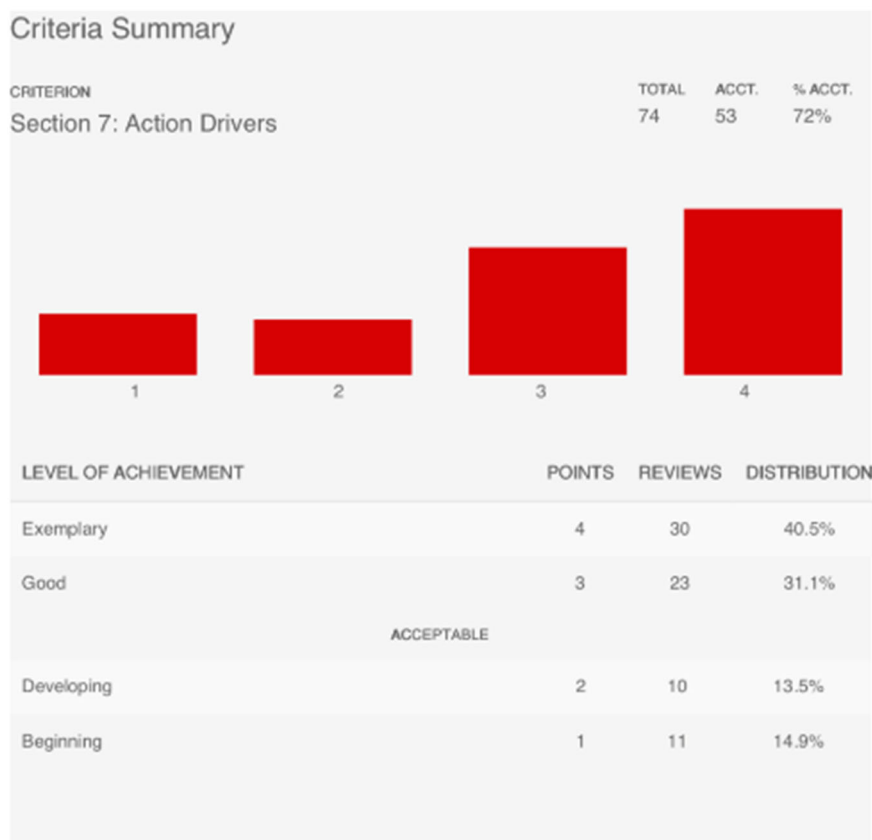


Figure 4 Summary of Annual Assessment Reports Review

- (2) **Assessment of Course Learning Outcomes.** The second major enhancement to accurately measure students’ achievement was adoption of a process to systematically assess students’ achievement of course learning outcomes in all required courses. Our assessment process requires program faculty to determine course student learning outcomes, map these course learning outcomes to the program and institutional learning outcomes, and specify standards of students’ success in achieving the learning outcomes. Moreover, the program faculty plan a schedule and collectively evaluate and review the program and institutional learning outcomes, student achievement of those outcomes, and assess the processes utilized to appraise student success within the three-year assessment cycle discussed in Section III.1 (Appendix A).

This step builds on what program faculty already do to assess student performance in a course to award a grade. Our process requires program faculty to evaluate student learning outcomes as an integral part of their assessment of students in their courses. Figure 5 provides an example of the guidance the Assessment Executive Commission has provided

to faculty for reporting achievement of student learning outcomes. This worksheet is the instrument our institution now uses to directly document faculty members' measures of course learning outcomes and student success on each learning outcome for every course that supports program and/or institutional learning outcomes. These worksheets are included in the annual assessment reports that every program prepares for review by the Assessment Executive Commission. Worksheets document achievement of each learning outcome, which can be further disaggregated for underrepresented students to provide additional data on equity gaps and foster program faculty discussions on what strategies are needed to close identified equity gaps.

STUDENT LEARNING OUTCOMES

Example

Upon completion of this course, the student will be able to:

- 1) Identify ethical and non-ethical choices used in...
- 2) Apply ethical reasoning when constructing arguments for...
- 3) Construct arguments using ethical principles to...

GRADING

Grading information is required on all student learning outcomes covered in the course. This includes detailed information about how student performance is evaluated.

Example:

STUDENT LEARNING OUTCOMES	Quizzes	Midterm Exam	Final Exam	OUTCOME ACHIEVED (YES=1, NO=0)
SLO 1		70%	76%	1
SLO 2	70%		80%	1
SLO 3	68%		65%	0
STANDARD	70%	70%	70%	

STANDARD OF SUCCESS: A minimum of 70% of the students achieve 75% or better answering questions.

INSTRUCTOR'S COMMENTS:

1. **Student Learning Outcomes.** Students achieved all SLOs except SLO 3. Additional practice is expected to improve their score.
2. **Student Success Gaps.** What is your DFW rate for this course this quarter for this class? _____
 - a. If over 20%, what is your plan to improve (Strategies) the DFWI rate of this course.
 - b. If it is over 20%, please break it down across gender, racial groups, first generation students, and socio-economic status.
 - c. Is there an equity gap?

☐ No

☐ Yes. If yes, how do you plan to close the equity gap (strategies) in this course?

Figure 5 Example of Course Student Learning Outcomes and Grading Worksheet

3. Ensure assessment processes yield meaningful results

In our previous assessment processes, academic programs collected measurable, actionable data on institutional learning outcomes as prescribed by ESLO committees or recommended by the Assessment Executive Commission, as described in Section II. However, annual assessment reports had recorded little improvement actions or changes to design and delivery of courses, programs or services delivered to students. Review of available evidence demonstrated that although progress was being made, the previous assessment processes did

not either effectively use measures to identify specific areas needing improvement or successfully lead to significant improvements. Consequently, the new assessment processes use a different approach to assessment. Although assessment processes continue to benefit from input and guidance of the previous ESLO committees and Assessment Executive Commission, these processes were revised to weigh heavily on program faculty-defined indicators, course and program-level data analyses, and regular and inclusive program faculty discussions to more effectively drive program improvements. Accordingly, in our current assessment processes in every academic program, assessment of course-level student learning outcomes forms the foundation of evaluating students' success and achievement of both program and institutional learning outcomes. Program faculty define course learning outcomes that incorporate program and institutional student learning outcomes, decide the proper measures and criteria for student success, assemble and analyze student achievement data, and collectively decide on plan and actions for improvements. A schematic of these assessment processes conducted by the program faculty is shown in Appendix D. Institutional learning outcomes are broader outcomes determined by faculty from multiple disciplines, but the program faculty still play a critical role in establishing the measures of success and evaluating students' achievement of institutional learning outcomes.

Similar to assessment of students' success in achieving learning outcomes, effectiveness of nonacademic areas is systematically and regularly assessed using performance indicators and measures defined by the members of the non-academic divisions and their stakeholders. Corresponding to the assessment cycle designed and implemented for academic programs, a three-year assessment review cycle was developed for non-academic divisions to allow coordination of process improvement actions (Appendix E). Each of the nonacademic units at Oregon tech produces an annual report which includes the following:

- Assessment data collected during the year to show what structures and practices were in place and what actions and timelines were used to assess and improve the quality of their support of student success (Standard 1.B.1).
- A comparison of planning and process improvements with local and national peer institutions along with other stakeholders and constituents to gather input. Demonstrated implementation of improvements needed to ensure the quality of student success compared to local and regional peer institutions and in alignment with stakeholders and constituents (Standard 1.B.2).
- Description of evaluation (assessment) of planning and process improvements for each nonacademic unit, focusing on student success by providing data indicators used to evaluate planning and performance already in progress. Documentation of decisions informed by data to refine systems, practices and to assign resources. Documented evidence that improvements implemented were based on broad input from stakeholders and through discussions and data collection, then remeasured to show effective contribution to student success (Standard 1.B.3).

Oregon Tech nonacademic units that conduct regular and systematic assessment of their operations in support of student success are in three divisions: Student Affairs, Finance and Administration, and Academic Affairs. The Business Affairs Office, Information Technology Services are part of Finance and Administration. Students Services and Career Services are provided by Student Affairs. The Academic Affairs division includes the Colleges and other Offices including Financial Aid, Registrar, Institutional Research, Library, Admissions, Strategic Enrollment, and Educational Partnerships and Outreach, all of which support student

success. All the nonacademic units follow a similar process of assessment and continuous improvement on a three-year cycle. The annual nonacademic unit assessment reports document the units' assessment data, continuous improvement processes, improvement actions and process effectiveness and are due October 31st each year to the Accreditation Liaison Officer. Included in these reports are discussions of minutes of meetings within the reporting unit and/or with their stakeholders/constituents as further evidence of the continuous improvement process.

4. Ensure assessment processes lead to improvement

As stated earlier, a critical review of assessment process data we had accumulated over the past few years together with the NWCCU 2020 Standards requirements led to the creation of a shortened, three-year assessment cycle. The duration of the cycle is optimally suited to enable us to determine effectiveness of the assessment processes, take data-informed improvement actions where needed, and create an opportunity to regularly assess the impact of those actions on students' success. In contrast, our previous processes had offered little opportunity to evaluate the effectiveness of assessment processes to produce improvements or demonstrate whether those processes would lead to improvement within one accreditation cycle. In addition to a shortened review cycle, by employing multiple data dashboards and measuring learning outcomes at the course level in all required courses, our new assessment processes have created capacity to accurately determine student performance with the scale or level of data that ensures assessment processes accurately identify needed improvements. By design, our current assessment processes are founded on course-level assessment of student success as an essential part of students' achievement of larger program outcome success. Our assessment processes fully engage every program faculty member in the evaluation of students' achievement, making and implementing improvement decisions, and ensuring that our assessment processes lead to improvements. In addition, regular yearly planning, review, and improvement actions phases built into the three-year review cycle of student achievement of learning outcomes allow timely actions to improve student success.

Separate from the three-year assessment cycle discussed above, we introduced a new five-year review cycle focusing on progression of students' success in achieving program learning outcomes and completing their degree in the context of and in comparison with regional and national peers, evaluating alignment of program goals and outcomes with institutional strategic priorities, and effectiveness of continuous quality improvement programs of all Oregon Tech systems. As it relates to appraising student achievement of learning outcomes, we take advantage of the assessment processes of the three-year review cycle by examining how students demonstrate their knowledge and skills related to program learning outcomes at every level of a program from beginning, middle and end. In addition to focusing on success for all students, the program review measures the overall success of the program in achieving the University's strategic goals. The timeline summative data of improvements is used annually to inform programs of their challenges and progress in increasing student success and University mission fulfillment. Budget and resource allocation to promote student success and close documented equity gaps are evaluated annually in the five-year review process to align program resources with needed actions to achieve success for all students. Annual student satisfaction and well-being surveys are conducted and summarized each year as a part of the five-year program review process. Although our three-year review cycle of each non-academic division ensures continuous commitment to improving the University systems and services that support student learning, our five-year review cycle aims to assess how well educational effectiveness is integrated in all planning and operation of non-academic structures and

processes and how improvements made as a result of units' evidence-based ongoing and systematic review processes contribute to supporting student success. The five-year assessment plan is schematically shown in Appendix F.

IV. Influence of NWCCU 2020 Standards on Assessment Process Design and Implementation Timeline

As Oregon Tech's efforts to respond to the requirements of NWCCU Recommendation articulated in its correspondence of July 2019 were continuing, NWCCU instituted new accreditation standards, referred to as NWCCU 2020 Standards, effective January 2020. Although this Ad Hoc Report demonstrates steps Oregon Tech has taken to be in full compliance with the previous standards, specifically Standard 4.A.6, we have taken additional steps, when appropriate, to ensure that our new assessment processes are also aligned with NWCCU 2020 Standards. According to NWCCU's review schedule, Oregon Tech must show compliance with the 2020 Standards in its Year Six and Year Seven reports, which occur in 2022 and 2023, respectively. To have long-term benefit, where practical, adopted new assessment processes developed for the purposes of this Ad Hoc Report also incorporate the requirements of the new 2020 Standards. Therefore, relevant elements of the 2020 standards were taken into consideration in the design and implementation of the revised assessment process plan described in this report.

Broadly speaking, NWCCU 2020 Standards place significant focus on achievement of student learning outcomes, that is, what students have learned and how skilled they are in their disciplines of study by the time they graduate are of paramount importance. Correspondingly, the 2020 Standards includes a requirement of evidence of achievement of program learning outcomes in Standard 1.C. Although Oregon Tech's previous assessment processes included collecting data on program learning outcomes, they did not systematically evaluate the processes used to define outcomes, collect data, and evaluate program learning outcomes. A mapping of course student learning outcomes to institutional learning outcomes was required but a similar mapping to program learning outcomes was not explicitly required. Regular continuous improvement processes had been in place at Oregon Tech in non-academic divisions in the past, however, those processes were not evaluated in alignment with academic program needs and assessment processes. The new assessment processes include a systematic and thorough assessment of nonacademic processes as part of the University's data-informed improvement plan to identify operational opportunities to improve institutional effectiveness and determine the influence of assessment processes in realizing improvements.

V. Concluding Statement Confirming Compliance with NWCCU's Recommendation

This Ad Hoc Report confirms that Oregon Tech has fully met the requirements of the sole NWCCU Recommendation requiring this report. To accomplish the task, Oregon Tech adopted a fundamentally different approach to conduct regular reviews of its assessment processes. The previous assessment processes relied on centrally designed, implemented, and evaluated assessment processes devised by various committees comprised of faculty members from different disciplines. The Assessment Executive Commission held the all-encompassing role of evaluating all academic programs' success indicators, providing directions on design of appropriate metrics and methods of assessment, conducting review of programs' annual assessment reports, and providing feedback to all Oregon Tech programs. In addition, the Commission conducted campus-wide annual assessment of achievement of institutional student learning outcomes. The revised assessment processes shift the focus from the Commission's administered processes to those principally conducted by each program's

faculty. This provides increased engagement and ownership of assessment by faculty, leading to greater responsibility at the individual and program levels.

Instead of targeting specific improvement of previous assessment processes to fulfill NWCCU's Recommendation, Oregon Tech developed and implemented new assessment processes to realize meaningful and effective participation of all program faculty in shaping assessment processes that (1) determine student learning outcomes appropriate for students in their disciplines, (2) identify methods and indicators of measuring student success, (3) interpret and accurately evaluate student performance data, and (4) develop and implement improvement plans and action timelines most fitting to their program. Incorporating elements of NWCCU 2020 Standards Criterion 1.C, the new student learning outcome assessment process begins at the course level with proper mapping to ensure that by achieving required course learning outcomes in a program, a student will have achieved the program and institutional learning outcomes by the time they graduate (Appendix G). Moreover, since program learning outcomes are achieved in multiple courses, by design, the assessment processes involve participation of and input from all program faculty and occur throughout the program. The collective decisions of program faculty ensure data-informed achievement of program and institutional learning outcomes, identify needed improvements, and determine how and where to implement improvements. The new assessment processes require annual reporting on all program assessment processes, activities and data, improvement actions, and evaluation of assessment processes during that year, which are reviewed by University-wide Assessment Commission and other assessment committees. Regular assessments of nonacademic systems and their impact on student success conducted in our five-year program assessment plan enable Oregon Tech to integrate institutional operations, processes, and resources to direct them effectively to enhance student success. As a result of careful evaluation of Oregon Tech's previous assessment processes, we implemented significant changes that transformed Oregon Tech's assessment processes and how we evaluate their effectiveness. Our processes are systematically evaluated, created to appraise authentic student achievements, incorporate data-informed decisions to produce meaningful results, and ensure our assessment processes lead to improvements that support student success. This report presents some examples of realized process improvements and one instance of evaluation of our assessment processes and resulting improvements. Therefore, Oregon Tech's current assessment processes, developed and implemented during 2019-2020 academic year, meet the requirements of 2019 NWCCU's Ad Hoc Recommendation.

APPENDICES

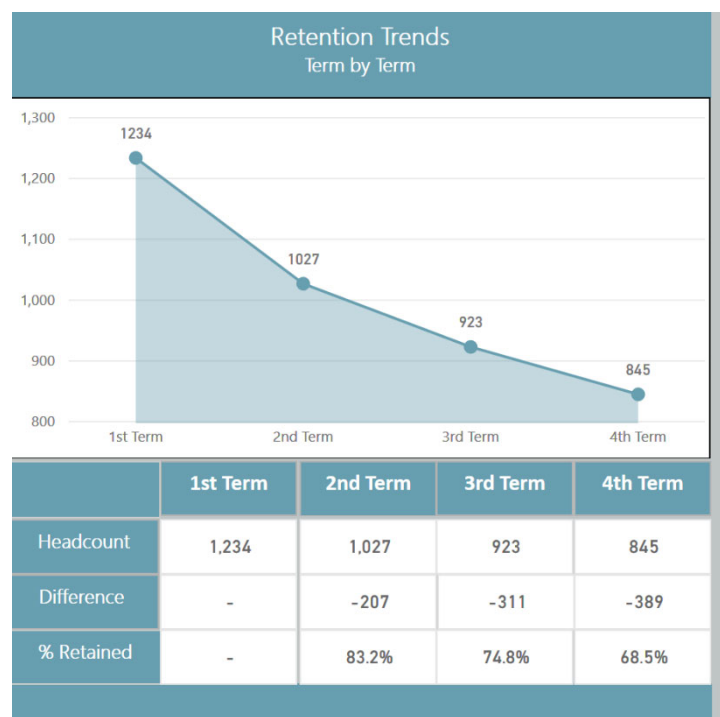
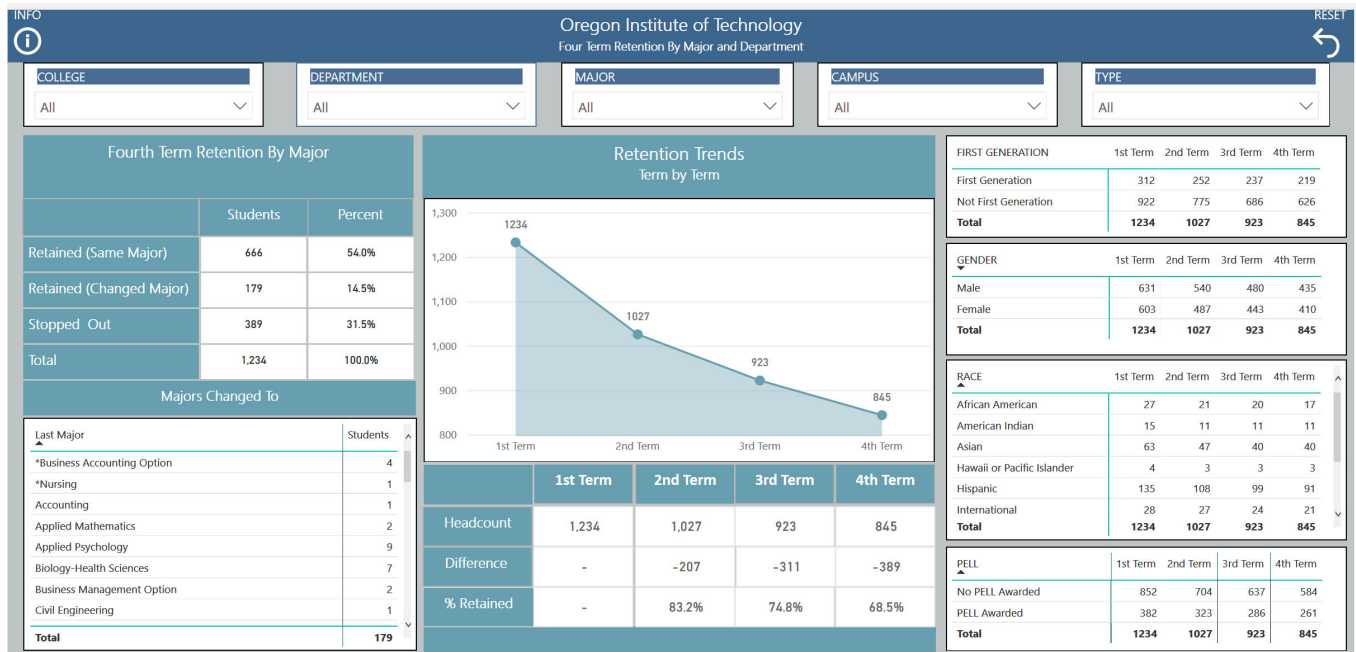
Appendix A – Three-Year Review Cycle

ISLO/ESLO Three Year Academic Assessment Cycle (Student Success)		
<u>Year 1</u> ISLO/ESLO's 2020-2021	<u>Year 2</u> ISLO/ESLO's 2021-2022	<u>Year 3</u> ISLO/ESLO's 2022-2023
Plan Communication, Teamwork, Ethical Reasoning Upcoming assignments & assessments; Reflect and Evaluate	Plan Diverse Perspectives including Cultural Sensitivity & Global Awareness Upcoming assignments & assessments; Reflect and Evaluate	Plan Inquiry & Analysis includes problem solving & Info literacy, critical analysis & logical thinking Quantitative Literacy & Reasoning Upcoming assignments & assessments; Reflect and Evaluate
PLAN: Course Selections, Assignment Design, Rubric Design. (Program Planning report due start of winter quarter, feedback given by spring term).		
Assess Inquiry & Analysis includes problem solving & Info literacy, critical analysis & logical thinking Quantitative Literacy & Reasoning Collect Academic Assessment (FALL & WINTER) Analyze (SPRING)	Assess Communication, Teamwork, Ethical Reasoning Collect Academic Assessment (FALL & WINTER) Analyze (SPRING)	Assess Diverse Perspectives including Cultural Sensitivity & Global Awareness Collect Academic Assessment (FALL & WINTER) Analyze (SPRING)
ASSESS: Direct Measures-(circle) Faculty Grades(Rubric), Standardized Tests, Exams, Pre and Post Test Designs, Competency-Based Demonstrations, Portfolios Indirect Measures-(circle) Faculty Grades-DFW, Surveys & Reflections, Course Evaluations, Graduation Rates, Retention Rates. Programs Collect and Analyze Report due at the end of spring term and feedback given by fall term.		
Act Diverse Perspectives including Cultural Sensitivity & Global Awareness Close loops, make improvements and remeasure Engage campus (professional development)	Act Inquiry & Analysis includes problem solving & Info literacy, critical analysis & logical thinking Quantitative Literacy & Reasoning Close loops, make improvements and remeasure Engage campus (professional development)	Act Communication, Teamwork, Ethical Reasoning Close loops, make improvements and remeasure Engage campus (professional development)
ACT: Program faculty collectively discuss and develop action plans for and implement evidence-based program improvements to increase student success and eliminate equity gaps		

Appendix B – Data Dashboards

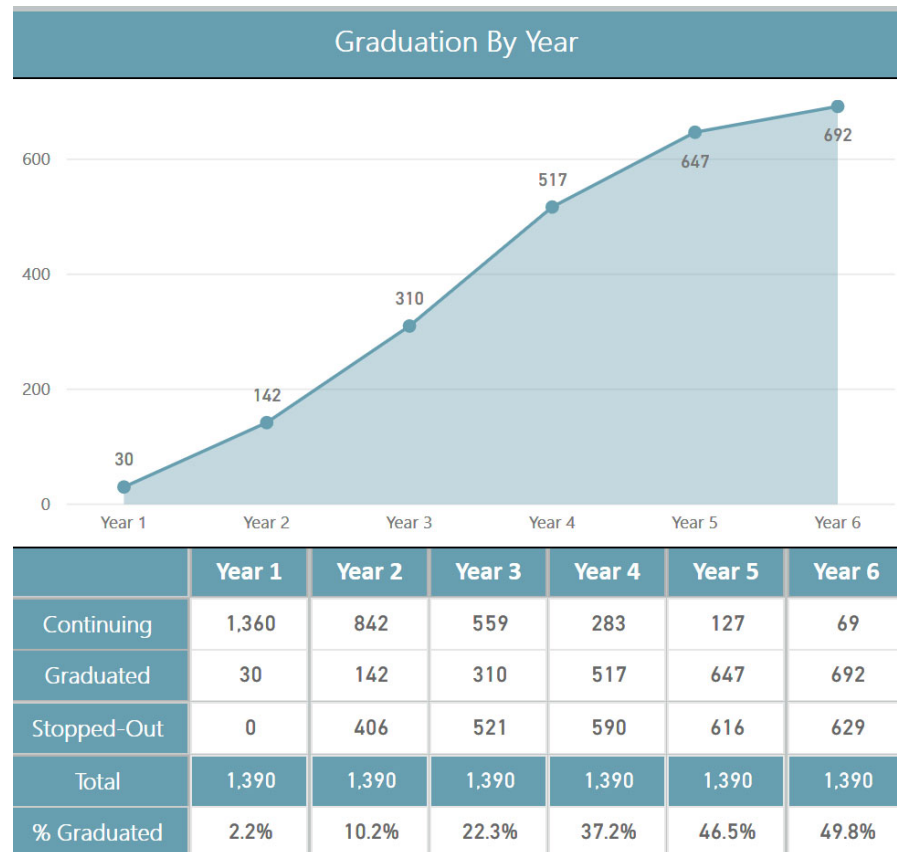
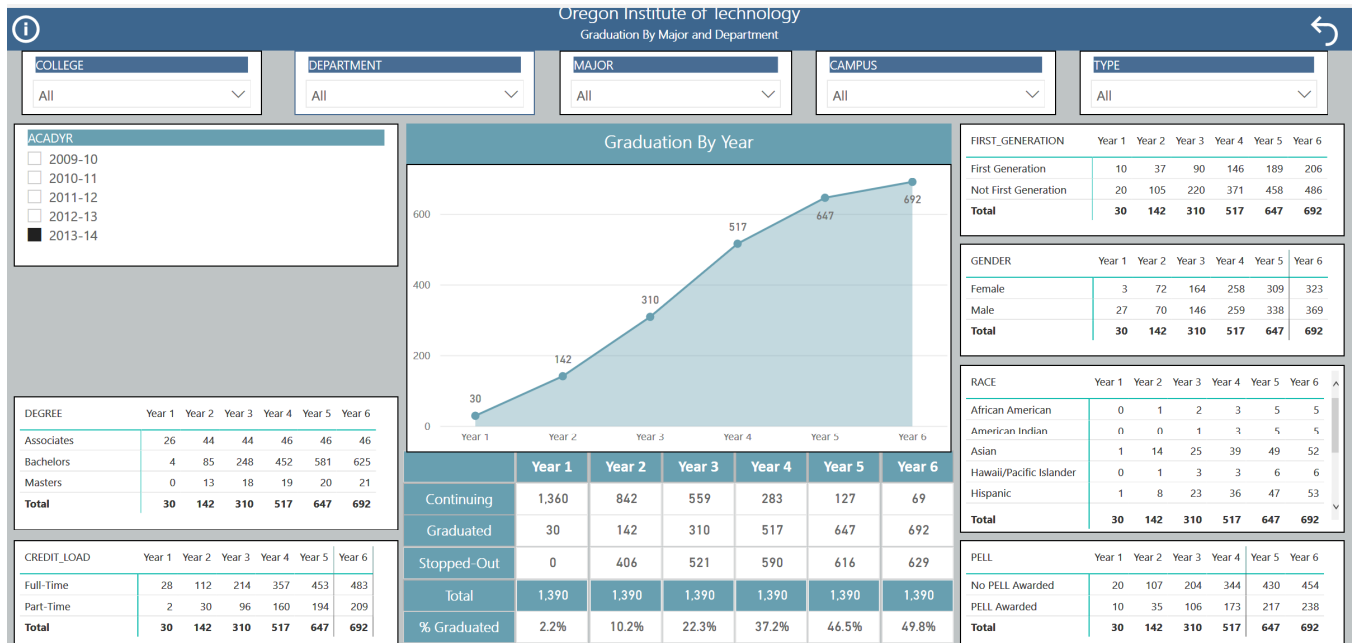
Data Dashboards: <https://www.oit.edu/faculty-staff/institutional-research/dashboards>

- **Retention**
Tracks retention of new degree seeking students over 4 terms
(Access restricted to chairs, deans and pilot programs only)

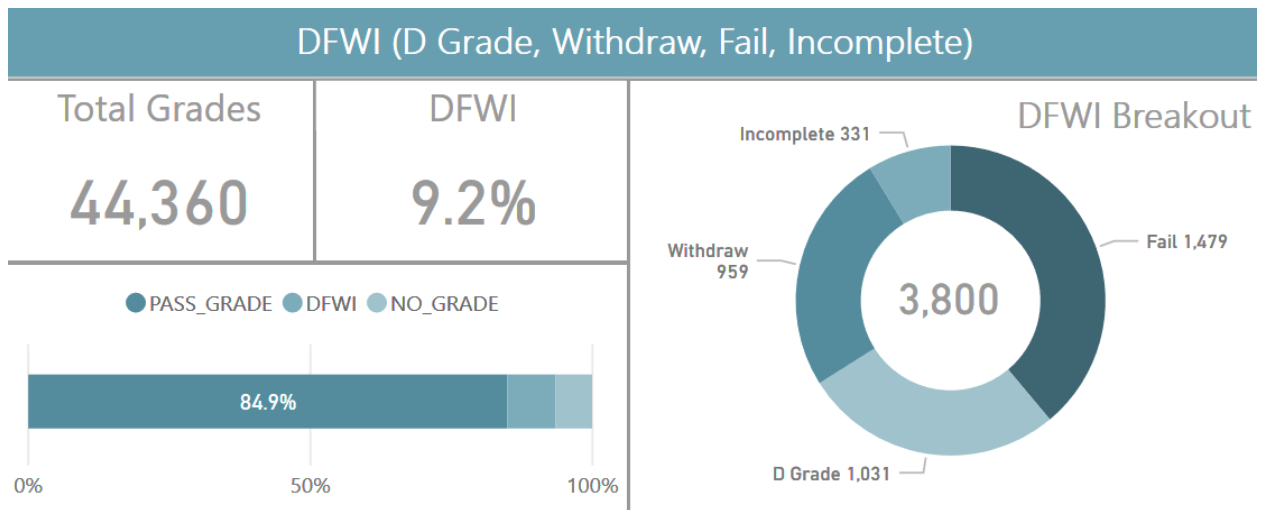
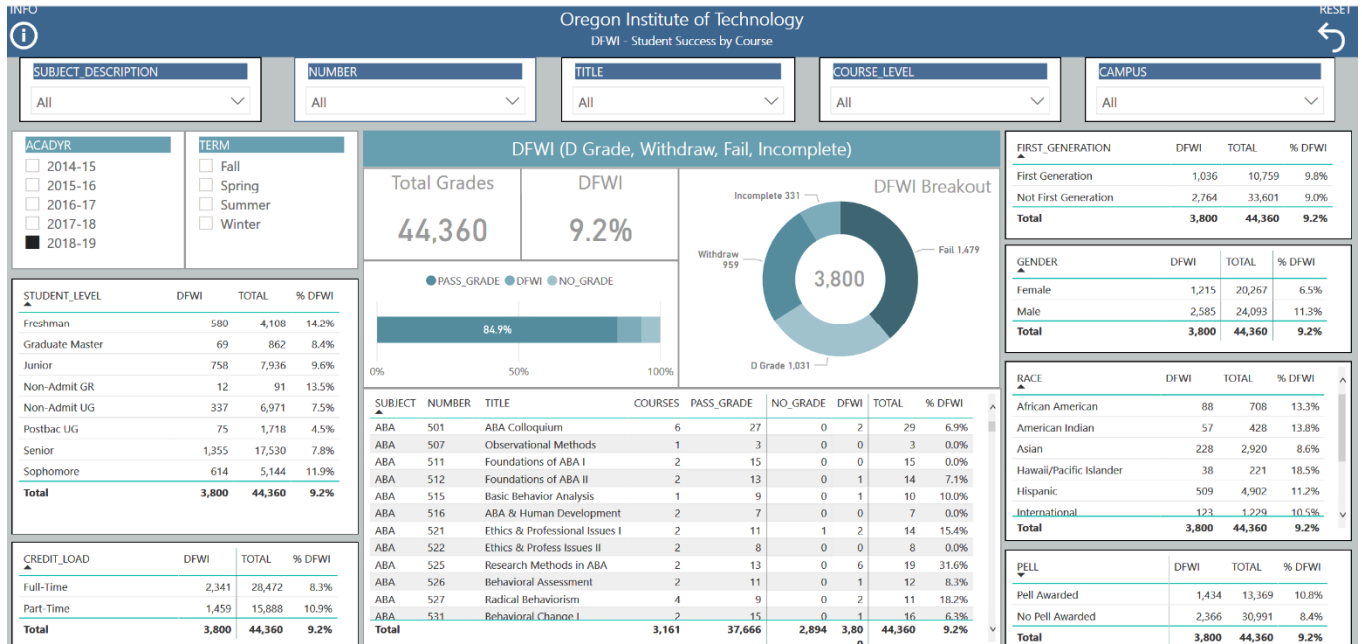


- [Graduation and Persistence](#)

Tracks persistence and completion of new degree seeking students
(Access restricted to chairs, deans and pilot programs only)



- [DFWI \(D Grade, Fail, Withdraw & Incomplete\)](#)
Provides DFWI rates by course
(Access restricted to chairs, deans and pilot programs only)



Equity Gap Dashboards Reflection Questions

1. Retention Dashboard:

- What is the retention rate for all students in your program?
- How do retention rates compare across gender, racial groups, for first-generation students, and for low socio-economic students (Pell grant eligible)?
- What opportunities did the comparative data create for improvement?
 - What actions do you plan to take to improve retention rates in your program this coming year?

2. Graduation Dashboard:

- What is the graduation rate for all students in your program?
- How do retention rates compare across gender, racial groups, for first-generation students, and for low socio-economic students (Pell grant eligible)?
- How do you plan to improve graduation rates in your program this coming year?

3. Student Success Dashboard:

- List courses with DFWI rates greater than 20% and include disaggregated data across gender, across all racial groups, for first-generation students, and for low socio-economic students (Pell Grant eligible)?
- What are the gatekeeper courses in your program? How do you plan to improve (strategies) the DFWI rates in courses in your program this coming quarter/year?

4. After looking at the dis-aggregated data from all three dashboards; list the top three equity gaps that the data show in your program and briefly discuss plans (strategies) to try to close them?

5. What feedback do you have for the Assessment Office to improve the dashboards and reflection questions?

DFWI Grade: D = D Grade F = Fail W = Withdraw I = Incomplete

Selections from Program Annual Retention Report

Bachelor of Science in Mechanical Engineering (BSME) Program
Manufacturing, Mechanical Engineering, and Technology (MMET) Department

By Robert A. Paxton, Ph.D., BSME Program Director

Table 1 below shows the overall retention of students enrolled in the BSME program (the graph does not account for students who change majors) across four consecutive terms (Fall 18 – Fall 19). The total number of new students enrolled in the BSME program and their corresponding population in the listed categories at the beginning of the academic year (fall term) are provided in the Table 2 to help better realize the significance of percentage data. The greatest loss of students in the BSME occurs between the end of the spring term and beginning of the fall term of the following academic year (labeled terms 2 and 3), corresponding with the summer break. This behavior is well-known at Universities and is mirrored across similar programs and across Oregon Tech as a whole. Despite this, the BSME still retains the 2nd greatest number of students (73.1%) and retains a greater percentage of students than the University average (68.7%). Of students not retained in the BSME Program, 6.5% stayed at Oregon Tech but opted to change majors within Oregon Tech, and of these, half changed their major to the Bachelor of Manufacturing Engineering Technology (also offered by the MMET Department).

Table 1. Percentage of BSME Program Students Retained

Labels	Term 1	Term 2	Term 3
First Generation			
Klamath	93.3	93.3	73.3
Portland	66.7	66.7	33.3
University	80.4	77.3	69.9
Non-white			
Klamath	90.5	85.7	76.2
Portland	100.0	100.0	100.0
University	80.3	73.2	67.6
PELL			
Klamath	93.5	87.1	67.7
Portland	50.0	100.0	50.0
University	83.9	75.6	67.8
Women			
Klamath	80.0	80.0	80.0
Portland	100.0	100.0	100.0
University	80.3	74.5	68.7
Dept Average	88.0	87.1	73.1

Table 2. First-term Enrollment

Labels	First Generation	Non-white	PELL	Women	Grand Total
Klamath	15	21	31	5	72
Portland	3	4	2	1	10
University	322	395	397	638	1752
Grand Total	322	395	397	638	1834

RESULTS

Retention of first-generation students in the BSME

The First-Generation students are those who have not had previous family members attend higher education. The data presented in the table demonstrate that the Klamath Falls campus does much better than the Portland-Metro campus. Because the Klamath Falls campus has five times the number of students that the Portland-Metro campus does (15 vs 3), so the percentage loss at Portland-Metro is not as significant as the percentages indicate. Both campuses experience their greatest retention loss between spring and fall, terms 2 and 3.

Retention of non-white students in the BSME

The non-white students' retention numbers represent retention of ethnic minorities. In this case, the data shown in the table account for any student who did not select 'White' as their race (American Indian, Asian, Hispanic, International, Two or more races, Unknown). The BSME program does consistently better than the University average in retaining ethnic minorities. The campus comparison of the data is not as helpful because of distortion caused by low sample numbers. The Portland-Metro campus had only four students who identified as 'non-white' but managed to retain all of them across all four terms. The Klamath Falls campus by contrast had 21 'non-white' students and managed to retain 16 of them.

Retention of Pell Grant students in the BSME

The Pell Grant students are those who receive a Federal Pell Grant to assist with their education. As before, a comparison of data across the two campuses suffers from distortion due to low sample sizes (2 students at Portland-Metro vs 31 at Klamath Falls). The Portland-Metro data in particular is interesting, as it shows that one of the students did not attend in the winter term, then returned for spring term, and then (presumably) did not return in the next fall term. This may be due to the inherent financial hardship experienced by these students, and the ready availability of work in the Portland-Metro area.

Retention of female students in the BSME

Retention of woman students is of interest to mechanical engineering which has historically had a low non-male enrollment. The data available do not account for students who do not identify as 'male' or 'female'. In this category, the Portland-Metro Campus does better than the Klamath Falls campus, but as with the actual enrollment data in the second table, this is not a meaningful conclusion and is an artifact of the extremely small sample size. Klamath Falls had 5 female students and retained 4 of them over the course of 4 terms (fall to fall). Portland-Metro only had a single student but managed to retain her over 4 terms (thus giving a 100% retention rate). Both campuses however exceed the University average for the retention of female students.

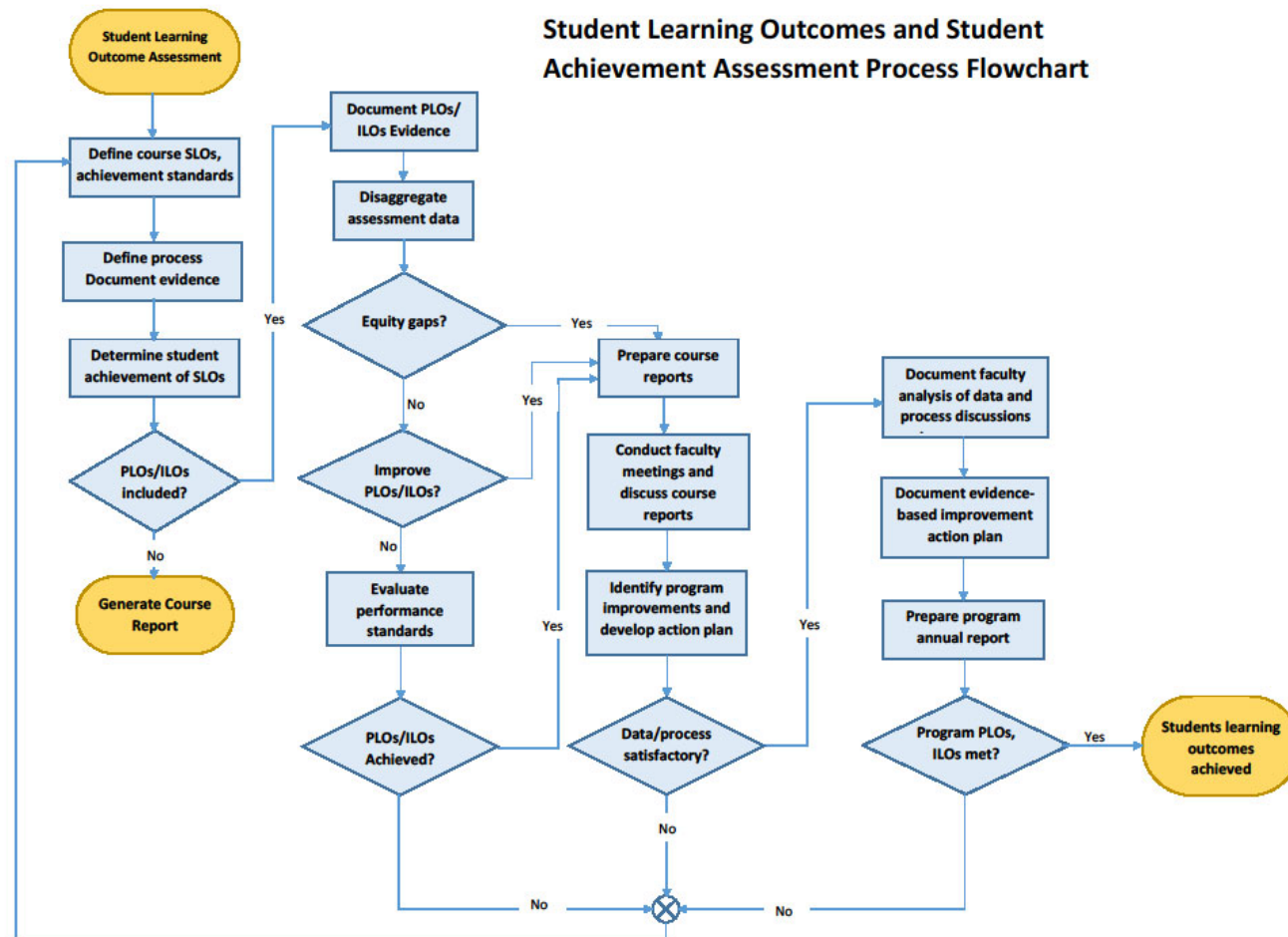
DISCUSSION AND SUGGESTIONS FOR IMPROVEMENT OF BSME PROGRAM RETENTION

Firstly, as has been discussed before in this report, the sample size is very low (particularly for the Portland-Metro campus). Thus, care should be taken when trying to draw any conclusions from these data. The BSME program is still relatively new at the Portland-Metro campus and is still relatively unknown. More effort must be made to market this program to increase visibility of the program in the Portland metropolitan areas.

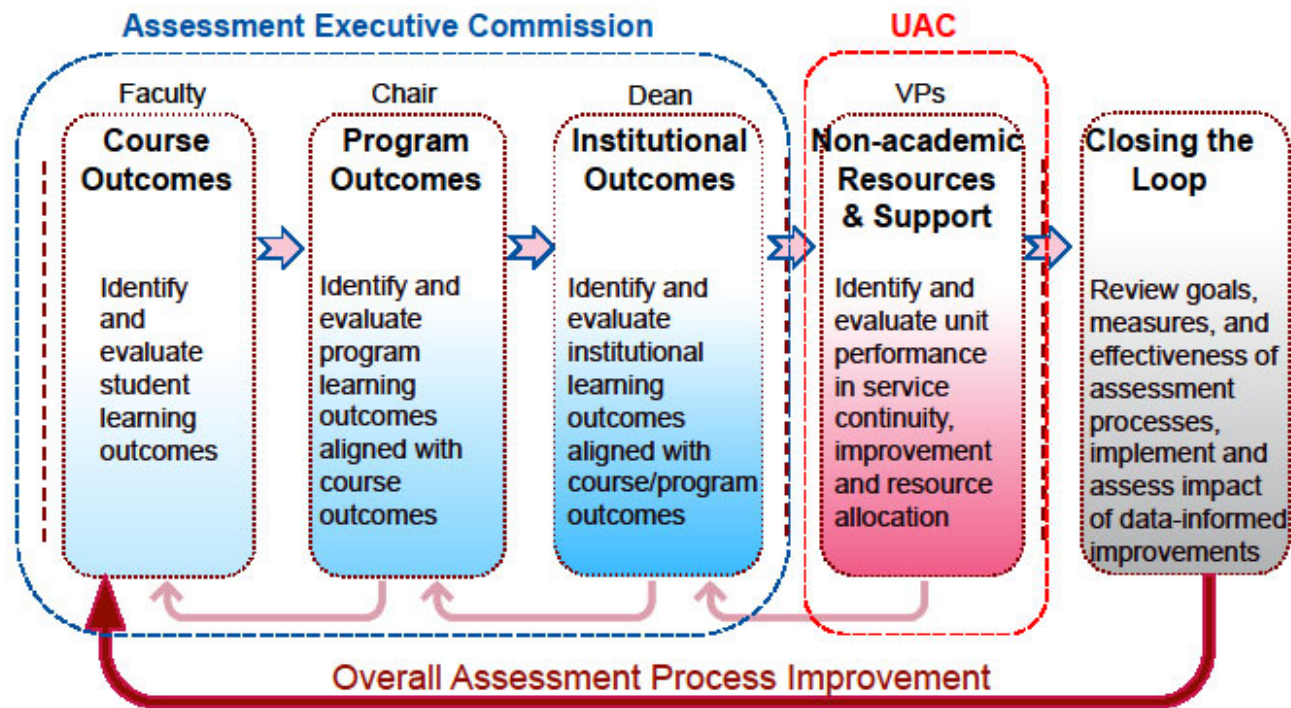
It is pleasing to see that the BSME appears to do a good job of retaining woman and minority students, particularly when compared with the University averages. It is apparent that the BSME loses the greatest number of students between the end of one academic year and the beginning of another (summer break) and that many of these students are first-generation and/or low-income students.

To improve retention, it is suggested that a method be found to maintain engagement between students and faculty over the summer break. First-generation students may feel overwhelmed after their first year and potentially may have performed poorly. It is important that faculty take the time to assess the student performance data and advising to reassure these students and help ensure their continued success. Low income students most likely would need to find work during the summer break. Continued employment after summer may be necessary to keep employment. Again, it is important for faculty to remain engaged with these students, so they do not feel the temptation to “just keep working”. It is important to remind these students of the proven long-term benefits of a university education to ensure that they return in the following term.

Appendix D - Program Faculty Flowchart of Student Learning Outcome Assessment

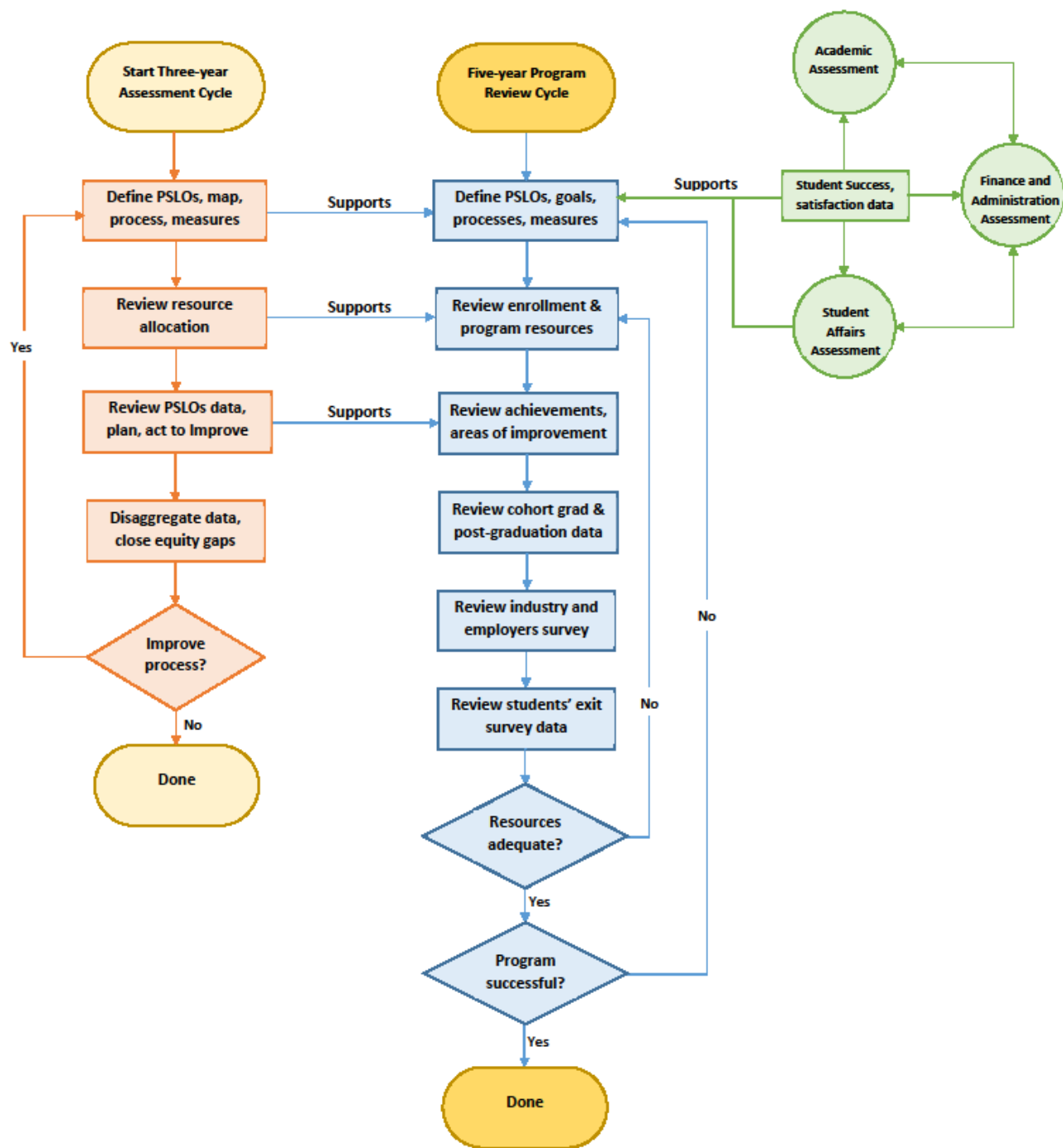


Framework for Continuous Improvement Processes



UAC – University Accreditation Committee
VPs – Divisional Vice Presidents

PROCESS FLOW OF FIVE-YEAR PROGRAM REVIEW CYCLE



STUDENT LEARNING OUTCOMES ASSESSMENT DATA FLOW

