

Program Assessment 2022-23

Echocardiography Degree Completion Assessment Report

Submitter: Janette Isaacson

Section 1 – Program Mission

- **Program Mission:** The [Echocardiography](#) bachelor's degree completion program enables registered professionals in echocardiography to further their knowledge and skills necessary for career advancement, to become effective communicators, problem solvers, critical thinkers, responsible managers and leaders, and to value lifelong learning.
 - **Mission Alignment:** [Core Theme 1: Applied Degree Programs](#) Oregon Tech offers innovative and rigorous applied degree programs. The teaching and learning model at Oregon Tech prepare students to apply the knowledge gained in the classroom to the workplace.
 - **Changes to the Mission:** No changes have been made to the mission statement.
- Program History & Description:** program. The program was originally developed at the request of students. Students who are accepted into the Echocardiography Degree Completion program are already registered Cardiac Sonographers working in the field who have passed their national registry exam in Cardiac Ultrasound. The program is in its 21st year. This program has seen steady growth since it started with more than 100 students currently enrolled, approx. 70 active students a quarter. Average salaries are \$60,000 a year and 100% are employed. On the student exit survey,

Student Quotes

I was very nervous when I started this course. I have away from school for so long and each time I registered to start, something happened. But Dr Isaacson furnish us with the course videos and materials we needed to better understand the course. I learned a lot from this class. Thank Dr. Isaacson for teaching us this course.

The class was a fun journey. The course materials were engaging and sparked creativity.

Great course materials in preparing for future management.

This is my first class coming back to college after 20 years. Dr. Isaacson has been a fabulous instructor with so much knowledge and information to absorb.

Echo Lab Management was an excellent class to take right after Health Care Management class. This was a amazing two semesters learning about leadership and all the laws and rights with employment. Dr. Isaacson was an excellent teacher that keep the class learning.

Dr. Isaacson was a great professor for this class. She answered emails in a timely manner and was very kind and helpful throughout the course. I am eager to take more classes with her as she alleviates the anxiety of expectations in her course.

I learned a lot about how to be an effective manager. Thanks so much Dr. Isaacson.

Love having Dr. Isaacson as an instructor! To the point, transparent, the assignments were relevant and forced me to learn about areas I don't normally get to spend time in.

I really think that Dr. Isaacson understands that healthcare professionals have demanding schedules and the fact that she doesn't break up each week with several deadlines is very helpful. Her modules are open and can be done early if needed and this semester that was extremely helpful or I would have had to possibly remove myself from program. I am very thankful for her expertise in teaching.

Professor Isaacson is an exceptional instructor who knows how to engage her students and make them want to perform better in her class.

Outstanding

Love Dr. Isaacson- she is smart, kind and a fantastic instructor!

Dr. Isaacson is an excellent instructor.

Dr. Isaacson provided exceptional resources and material to further my education. I truly enjoyed the class and the material given.

Dr. Isaacson's knowledge and experience are unmatched, but she also promotes and creates an environment of trust and learning. Always there to answer questions and help us get through. I feel like because of her I was able to not only graduate, but she makes me believe I \can achieve more.

Dr. Isaacson is an asset to OIT. She is the best cheerleader and advocate for the students. She has enriched my knowledge and encouraged me to be strong to the finish. Due to many things, I have had to overcome she has encouraged my perseverance and even checked in on me. She is the absolute best! She is a instrumental part of continuing to persevere. She means a lot to me, and I am forever grateful!

Great Professor Dr. Isaacson is exceptional!! Her passion for the subject, and her desire for students to understand and excel is obvious.

Showcase Student Learning Opportunities in publishing, national speaking and attendance at national meetings.

There are many professional meetings but the one that most students attend is the Society for Echocardiography meeting. Both the national SVU meeting, and the regional Pacific Northwest meeting are resuming in person meetings. These are large meetings that brings physicians and technologists together in large numbers. In the lab management course, students are asked to interview experts in human resources, lab management, workplace discrimination policy and practice. In the externship course students publish professional case studies in scientific journals. In the externship courses students are writing at an advanced level and improving their communication skills. Many of their case studies are accepted to present at the annual meeting, which is a great opportunity to advance their careers. In addition, many students go on to publish their work in scientific scholarly journals while still attending school. There is a big push in the degree completion program for students to enhance their scholarly literature review skills and to publish.

Online peer tutoring is available for students in this program.

There is a scope of practice and professional standards for this program and those are following plus implemented into the program learning outcomes.

High Impact Practices in the form common intellectual experiences publishing case studies, writing intensive courses, culminating projects, and collaborative experiences in this program. HIPs are happening in the echo degree completion program in the 420 A and B courses. Students are preparing and submitting case studies for professional publications or presentations at national or regional meetings. Students work on team projects in the Echo 334 course.

Section 2 – Program Student Learning Outcomes- Measurable, Actionable, Aligned to ISLOs

Program Learning Outcomes are publicly available on the OIT website.

[*Masters in Allied Health, BS Online Echo & Vascular Technology*](#)

1. The student will demonstrate the ability to communicate effectively in oral, written, and visual forms.
2. The student will demonstrate the ability to work effectively in teams.
3. The student will demonstrate an ability to provide basic patient care and comfort.
4. The student will employ professional judgment and discretion including ethics.
5. The student will demonstrate knowledge and understanding of human gross anatomy, sectional anatomy, and normal and abnormal cardiovascular anatomy.
6. The student will demonstrate knowledge and understanding of cardiovascular physiology, pathology, and pathophysiology.
7. The student will demonstrate knowledge and understanding of cardiovascular physical principles and instrumentation.
8. The student will demonstrate knowledge and understanding of clinical cardiovascular diagnostic procedures and testing.
9. The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society.
10. The student will be able to perform scholarly research and to contribute that knowledge to the field of echocardiography.

Echocardiography Degree Completion Program Student Learning Outcomes Assessment Schedule	2022-2023	2023-2024	2024-2025
1. The student will demonstrate the ability to communicate effectively in oral, written and visual forms.			420A (Winter) 420 B (Spring)
2.The student will demonstrate the ability to work effectively in teams.			334 (Fall)
3. The student will demonstrate an ability to provide basic patient care and comfort.		420 A (Winter) 420 B (Spring)	
4. The student will employ professional judgment, and discretion including ethics.			420 A (Winter) 420 B (Spring)
5. The student will demonstrate knowledge and understanding of human gross anatomy sectional anatomy and normal and abnormal cardiovascular anatomy.	Echo 325 (Fall)		
6. The student will demonstrate knowledge and understanding of cardiovascular physiology, pathology, and pathophysiology.		Echo 325 (Fall)	
7. The student will demonstrate knowledge and understanding of cardiovascular physical principles and instrumentation.		Echo 385 (spring)	
8. The student will demonstrate knowledge and understanding of clinical Echocardiography diagnostic procedures and testing.	420A (Winter) 420 B (Spring)		
9. The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society.	385 (spring)		
10. The student will be able to perform scholarly research and to contribute that knowledge to the field of echocardiography.	420A (Winter) 420 B (Spring)		

Section 3 – Curriculum Map

University	ISLO Communication	ISLO Teamwork		ISLO Ethical Reasoning	ISLO Quantitative Literacy	ISLO Quantitative Literacy	ISLO Inquiry & Analysis		ISLO Diverse Perspectives	
Program	PSLO 1	PSLO 2	PSLO3	PSLO4	PSLO5	PSLO6	PSLO7	PSLO8	PSLO9	PSLO10
COURSE										
420A	C		C	C				C		C
420B	C		C	C				C		C
334		P								
325					P	P				
385							F		F	
376					P					

Section 4 – Assessment Cycle

		Act	Collect	Plan
ISLO	PSLO	2021-2022	2022-2023	2023-2024
Communication	PSLO 1	Echo 420 A & B		
Teamwork	PSLO 2	Echo 334		
		Echo 334		
	PSLO3			Echo 420 A & B
Ethical Reasoning	PSLO4	Echo 420 A & B		
	PSLO5		Echo 325	
Inquiry and Analysis	PSLO6			Echo 325
Quantitative Literacy	PSLO7			Echo 385
	PSLO8		420A (Winter) 420 B (Spring)	
Diversity	PSLO9		385 (spring)	
	PSLO10		420A (Winter) 420 B (Spring)	

Table 3 Assessment Cycle

Section 5 – Assessment Data Collection Processes

Program Faculty Review and Industry Advisory Board Review

Program Student Learning Outcomes and Objectives were reviewed by program faculty during Fall Convocation Program Assessment Meeting.

Degree Completion Echocardiography Faculty met in the fall of 2022-20223 to review the program. The Degree Completion Echo Faculty met with the advisory board to be able to get feedback in all learning outcomes and discuss the needs of industry. The Advisory Board met in Sept and again in May, were the results of assessment and student learning were discussed. Most of the discussion centered on how to support the needs of students and retention. The Advisory Board consists of 5 OIT degree completion program graduates who serve the echo and vascular technology degree completion program. In addition, there are 2 industry leaders that serve on the Board.

Board Members had a lot of thoughts on marketing the program and suggest attendance to the national meetings this year as an exhibitor. The members would like more people to know about the program. Some members were interested in talking about an advanced practice degree but so far this has been thought to be too expensive to launch. Further suggestions will take place at the next meeting in the spring. All students in the echo degree completion program are healthcare workers and this pandemic has greatly impacted them. Many are in recovery from the pandemic, taking only one class at a time as they are working full time. We are seeing a lot of burn out of these healthcare workers.

Board members and Industry members are surveyed annually for input into industry needs at annual and regional meetings.

Direct Measures

Indirect Measures

Faculty Grades – Rubric	Faculty Grades- DFWI
Standardized tests, exams	Surveys and Reflections
Pre and Post Test Designs	Course Evaluations
Competency Based Demonstration	Graduation Rates
Portfolios	Retention Rates

Planning for next year: The Echo faculty are planning for next year's **(2023-2024)** ISLOs assessment in the areas:

- Planning: Communication Teamwork Ethical Reasoning
- Assessing: Inquiry and Analysis
- Acting: Diverse Perspectives, Cultural Sensitivity and Global Awareness
- PSLOs Assessment Plan
- PSLO#3 Echo 420 A (winter 2024)
- PSLO#6 Echo 325 (Fall)
- PLSO#7 Echo 385(Fall)

The 2022-23 Data that was assessed were the following.

- ISLO Diversity, Cultural Sensitivity and Cultural Awareness
- PSLO #5. The student will demonstrate knowledge and understanding of human gross anatomy sectional anatomy and normal and abnormal cardiovascular anatomy.
- PSLO #8 The student will demonstrate knowledge and understanding of clinical echocardiography diagnostic procedures and testing.
- PSLO #9 PLO#9: The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society.
- PSLO#10 The student will be able to perform scholarly research and to contribute that knowledge to the field of echocardiography.

Performance Target: Students need to score over 80% on the assignment, test or HIP to meet the mastery goals.

Direct Assessment:

Diversity ISLO: Students in Echo 385 Fall and Spring term, a total of 31 students, were given two assignments on diversity related topics. They were to watch two separate you tube video and participate in an online discussion on both. The students were scored with the below rubric.

Assignment Rubric Details

Discussion Board Rubric				
Criteria	Ratings			Pts
Activity	6.7 pts Posted with adequate time for classmates to respond and engage in actual discussion.	4.02 pts Posted a response	0 pts No Marks	6.7 pts
Engagement	6.7 pts Frequently responsive to classmates with detailed remarks about their writing or discussion; presents relevant viewpoints for consideration by group; interacts freely.	4.02 pts Occasionally makes substantive posts responsive to classmates; marginal effort to become involved with group.	0 pts No postings respond to fellow student(s) or responses are not a substantive (e.g., "Good, I really liked your comment.")	6.7 pts
Content	6.7 pts Postings are characterized by clarity of argument, depth of insight into course content, relevance, and unusual insights. Arguments and facts are supported by resources / references.	4.02 pts Postings produce good general answers but may not always directly address discussion questions. Dominated by opinions rather than by analysis and scholarly thought. Assertions are not supported by evidence.	0 pts No Marks	6.7 pts
Total Points: 20.1				

Grading Rubric ISLO Diversity

Sample Size 31 students on 2 diversity assignment discussions.

ISLO Assessment Diversity continued

Diversity Discussion, Two Separate Assignments Echo 385 Fall and Spring Terms	
<ul style="list-style-type: none"> Performance Target: 80% mastery Activity: Two Diversity Assignments, Echo 385 Sample: 12 Fall Term and 19 Spring Term = 31 total students Accountability: Graders are the instructors for that class that quarter typically using a scoring rubric. Representation: . Dr. Isaacson Rubric: 80% on each criterion of the rubric 	

Direct Assessment Assignment 1: Diversity Discussion, Cultural Sensitivity, Global Awareness Discussion

Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Activity	Grading Rubric	1-6.7 scale	80% with 3.0 or higher	94%
Engagement	Grading Rubric	1-6.7 scale	80% with 3.0 or higher	94%
Content	Grading Rubric	1-6.7 scale	80% with 3.0 or higher	94%

ISLO Diversity, 31 students

Direct Assessment Assignment 2: Diversity Discussion, Cultural Sensitivity, Global Awareness Discussion

Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Activity	Grading Rubric	1-6.7 scale	80% with 3.0 or higher	94%
Engagement	Grading Rubric	1-6.7 scale	80% with 3.0 or higher	94%
Content	Grading Rubric	1-6.7 scale	80% with 3.0 or higher	94%

ISLO Diversity, 31 students

Direct Assessment PSLO #5. Echo

Direct Measurement #1

PSLO# 5: The student will demonstrate knowledge and understanding of human gross anatomy sectional anatomy and normal and abnormal cardiovascular anatomy.

- **Performance Target:** 80% mastery
- **Activity:** Students Visit a pediatric lab and interview staff then write up a paper
- **Sample:** 15 students fall quarter Echo 325 course
- **Accountability:** Graders are the instructors for that class that quarter typically using a scoring rubric.
- **Representation:** Dr. Connors
- **Rubric:** Each assignment is scored with a rubric

Direct Assessment PSLO #5. Echo 325 The student will demonstrate knowledge and understanding of human gross anatomy sectional anatomy and normal and abnormal cardiovascular anatomy.

PSLO# 5: The student will demonstrate knowledge and understanding of human gross anatomy sectional anatomy and normal and abnormal cardiovascular anatomy.

Direct Measure #1,

A grading rubric was developed to assess student's (15 total students) knowledge of special circulatory problems as they relate to cardiovascular physiology, pathology, and pathophysiology during Echo 325 during Fall quarter.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Atrial Defects Pathology and Physiology	Grading rubric	1 - 4 scale	80% at 3 or 4	87%
Great Artery Defects Pathology and Physiology	Grading rubric	1 - 4 scale	80% at 3 or 4	93%
Congenital and Genetic Pathology and Physiology	Grading rubric	1 - 4 scale	80% at 3 or 4	80%
Ventricular and Arterial Shunts	Grading rubric	1 - 4 scale	80% at 3 or 4	80%
Aorta Defects Pathology and Physiology	Grading rubric	1 - 4 scale	80% at 3 or 4	80%

- **Performance Target:** 80% mastery
- **Activity:** Students Visit a pediatric lab and interview staff then write up a paper
- **Sample:** 15 students fall quarter Echo 325 course
- **Accountability:** Graders are the instructors for that class that quarter typically using a scoring rubric.
- **Representation:** There are core faculty and roughly 8 adjuncts faculty members online.
- **Rubric:** Each assignment is scored with a rubric

Direct Measure #2 PSLO #5

A grading rubric was developed to assess student's (77 total students) knowledge of cardiovascular anatomy in Echo420.

Direct Assessment

#2 PSLO #5

Performance Target: 80% mastery

Activity: Students complete professional case studies

Sample: 77 students fall quarter Echo 420 course

Accountability: Graders are the instructors for that class that quarter typically using a scoring rubric.

Representation: Dr. Isaacson

Rubric: Each assignment is scored with a rubric

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Demonstrates and ability to discuss the case and all its aspects including anatomy of the abnormal cardiovascular system.	Rubric	1-4	80% at 3 or 4	97%
Including research from the databases, citing this research in the written case study (Understanding scholarly medical research)	Rubric	1-4	80% at 3 or 4	97%
Written components contain all parts of scientific writing	Rubric	1-4	80% at 3 or 4	97%

Direct Assessment PSLO#8**The student will demonstrate knowledge and understanding of clinical echo diagnostic procedures and testing.**

- **Performance Target:** 80% mastery
- **Activity:** Students complete professional case studies
- **Sample:** 77 students fall quarter Echo 420 course
- **Accountability:** Graders are the instructors for that class that quarter typically using a scoring rubric.
- **Representation:** Dr. Isaacson
- **Rubric:** Each assignment is scored with a rubric

Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Demonstrates Understandings of Cardiac Scanning Protocols	rubric	1-4	80% at 3 or 4	97%%
Demonstrates accurate understand of cardiac interpretation	rubric	1-4	80% at 3 or 4	97%%
Demonstrates understanding of historical background and relevancy of the case.	rubric	1-4	80% at 3 or 4	97%%
Demonstrates and ability to discuss the case and all its aspects.	rubric	1-4	80% at 3 or 4	97%
Including research from the databases, citing this research in the written case study (Understanding scholarly medical research)	rubric	1-4	80% at 3 or 4	97%%
Written components contain all parts of scientific writing	Rubric	1-4	80% at 3 or 4	97%

Indirect Measurement PSLO #8

77 students received surveys to rate their own confidence in learning outcome 8. This was executed in their externship courses in 2022-2023 academic year on 33 students in Echo 420A and Echo 420 B. The survey used is in the below table.

- **Performance Target:** 50% of students scoring 3 or higher
- **Activity:** Students complete a survey and rate their own performance
- **Sample:** 37 in winter, 40 in spring = total of 77
- **Accountability:** Graders are the students rating themselves.
- **Representation:** Not all the student surveys were returned. Students rated themselves.
- **Rubric:** Each survey is self-scored.

Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Demonstrates Understandings of Cardiac Scanning Protocols	Survey	1-4	80% at 3 or 4	97%
Demonstrates accurate understand of cardiac interpretation	Survey	1-4	80% at 3 or 4	97%
Demonstrates understanding of historical background and relevancy of the case.	Survey	1-4	80% at 3 or 4	97%
Demonstrates and ability to discuss the case and all its aspects.	Survey	1-4	80% at 3 or 4	97%
Including research from the databases, citing this research in the written case study (Understanding scholarly medical research)	Survey	1-4	80% at 3 or 4	97%
Written components contain all parts of scientific writing	Survey	1-4	80% at 3 or 4	97%

Direct Assessment PSLO #9 Echo 385 The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society.

The faculty assessed this outcome in Echo 385 on 12 students during fall and 19 during Spring quarters 2022-2023 using a cultural awareness assignment and grading rubric. The faculty rated the proficiency of students using the performance criteria described in Table #7 below.

- **Performance Target:** 80% of students scoring 3 or higher.
- **Activity:** Healthcare Recruiting Assignment,
- **Sample:** 12 Fall Term and 19 Spring Term = 31 total students
- **Accountability:** Graders are the instructors for that class that quarter typically using a scoring rubric.
- **Representation:** Dr. Isaacson
- **Rubric:** 80% for each criterion

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Appropriately works to gather patient history from patients from diverse backgrounds	Grading Rubric	1- 4 scale	80% at 3 or 4	94%
Avoids demonstration of prejudice	Grading Rubric	1- 4 scale	80% at 3 or 4	94%
Recognizes different cultures and traditions in medicine	Grading Rubric	1- 4 scale	80% at 3 or 4	94%
Recognize how cultural differences can influence hiring practices	Grading Rubric	1- 4 scale	80% at 3 or 4	94%

Direct Assessment PSLO#10

Student Learning Outcome #10: The student will be able to perform scholarly research and to contribute that knowledge to the field of echocardiography.

Direct Assessment

The Echocardiography Degree Completion faculty conducted an analysis of where this outcome is reflected in the degree completion curriculum. The student learning outcome was directly measured in assignments in Echo 420A and Echo 420B in the 2022-2023. Academic Year on 33 total students. The grading rubric was scored in the table below.

- **Performance Target:** 80% of students scoring 3 or higher.
- **Activity:** Case Studies
- **Sample:** 77 total students Echo 420
- **Accountability:** Graders are the instructors for that class that quarter typically using a scoring rubric.
- **Representation:** There are core faculty and roughly 8 adjuncts faculty members online.
- **Rubric:** 80% for each criterion

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Ability to obtain good scholarly research information throughout the library databases (12 databases)	Grading rubric	1-4 scale	80%, at 3 or 4	97%
The ability to pull out and show knowledge of the important information including statistical Information	Grading rubric	1-4 scale	80%, at 3 or 4	97%
Apply the scholarly Information	Grading rubric	1-4 scale	80%, at 3 or 4	97%
Ability to interpret scholarly data	Grading rubric	1-4 scale	80%, at 3 or 4	97%
Ability to present/summary the scholarly information	Grading rubric	1-4 scale	80%, at 3 or 4	97%

Direct assessment SLO#10 2022-2023 Academic Year.

Indirect Assessment

The Echocardiography Degree Completion faculty sent 77 students surveys to self-rate their confidence on this learning outcome. The student learning outcome was directly measured in assignments in Echo 420A and Echo 420B in the 2022-2023 Academic Year on 77 total students. The survey was scored in the table below.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Ability to obtain good scholarly research information throughout the library databases (12 databases)	Survey	1-4 scale	80%, at 3 or 4	97%
The ability to pull out and show knowledge of the important information including statistical information	Survey	1-4 scale	80%, at 3 or 4	97%
Apply the scholarly information	Survey	1-4 scale	80%, at 3 or 4	97%
Ability to interpret scholarly data	Survey	1-4 scale	80%, at 3 or 4	97%
Ability to present/summary the scholarly information	Survey	1-4 scale	80%, at 3 or 4	97%

Indirect assessment SLO#10 2022-23 Academic Year.

Indirect Measures Echo Courses DFWI PSLO #5, #8, #9 and #10

SUBJECT	NUMBER	TITLE	COURSES	PASS_GRADE	NO_GRADE	DFWI	TOTAL	% DFWI
ECHO	227	Basic ECG Recognition/Testing	1	6	0	0	6	0.0%
ECHO	334	Echocardiography IV	1	25	0	2	27	7.4%
ECHO	376	Survey of Vascular Testing	1	8	0	1	9	11.1%
ECHO	385	Echo Lab Management	1	15	0	1	16	6.3%
ECHO	385	Echocardiography Lab Mgmt	1	8	0	0	8	0.0%
ECHO	420A	Echo Externship	1	21	0	1	22	4.5%
ECHO	420B	Echo Externship	1	19	0	1	20	5.0%
Total			7	102	0	6	108	5.6%

Reliability: The instructors who teaches these classes score the student's work and fill out the CLOs worksheet at the end of the term. There are core faculty and 8 adjuncts. Faculty are trained on scoring rubrics.

Rubrics: Assignments are scored using a rubric both for discussions and assignments included in this report.

Student Surveys: Students are asked to rate themselves.

Indirect Measures are also DFWI rates.

Student Exit surveys are completed for all students who graduate.

Section 6 – Assessment Data and Interpretations

Assessment Data, Interpretation and Analysis

Program Enrollments

	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021
Online	74	78	78	85	76
Full-Time	2	10	6	2	
Part-Time	72	68	72	83	76

Program Graduates

The data below is not separated out for the degree completion students. We graduate students every quarter and not just at the end of the year.

Employment Rates and Salaries

The data below is not separated out of the degree completion students. However, all the students in the program are employed and salaries range from \$60,000 to \$71,000, with the average at \$60,000. The students in this program are already licensed and working in the field prior to embarking in the degree completion programs.

Pass Rates on Board and Licensure Exam

All the degree completion students have passed their licensure exams prior to starting in the degree completion program.

Retention Trends (part time online students), Graduation Rates and DFWI

2021-22 (Retention)	20-21	2019-20	2018-19	2017-2018
57%	58.3%	54.3%	54.1%	61.8%
Disaggregated Data	Disaggregated Data	Disaggregated Data	Disaggregated Data	Disaggregated Data
1 st term stop out is highest for 1 st generation	1 st term stop out is highest for 1 st generation	1 st term stop out is not highest for 1 st generation	1 st term stop out is not highest for 1 st generation	1 st term stop out is highest for 1 st generation
1 st term stop out is highest for Hispanic (9), Asian (5), African American (4).	1 st term stop out is highest for Hispanic (6) African American (9),	1 st term stop out is highest African American (4), Hispanic (2) and the same for	1 st term stop out is highest for Hispanic (8) African American (2),	1 st term stop out is highest African American (3), Hispanic (3). Asian (2) and the

	and the same for the other minority groups.	the other minority groups.	and the same for the other minority groups.	same for the other minority groups.
Gender low number of males compared to females.	Gender low number of males compared to females.	Gender low number of males compared to females.	Gender low number of males compared to females.	Gender low number of males compared to females.
Socio-economic status is not a factor	Socio-economic status is not a factor	Socio-economic status is not a factor	Socio-economic status is not a factor	Socio-economic status is not a factor
Graduation Rates 2016-17	2015-16	2014-15	2013-14	2012-13
48.7%	32.4%	34.4%	36%	35.3%
DFWI 22-23,	21-22	20-21	19-20	18-19
6.6 (average) 6.0 (average)	4.4 (average)	5.1 (average)	10.6 (average)	8.4 (average)
DFWI highest for first generation, Asians, Hispanics, male and not for low socio-economic status.	DFWI not higher for first generation students. DFWI is higher for African Americans, Hispanics, females and pell awarded.	DFWI highest for first generation, male students Asian, Hispanics and no socio-economic status difference.	DFWI highest for first generation, male students American Indian, African American, Hispanics and no socio-economic status difference.	DFWI highest for first generation, male students Asians, African American, Hispanics and pell awarded.

Faculty Impressions

Six Year Graduation rates In this program are improving from 35.3 %(2012-2013) to 48.7% (2016-2017).

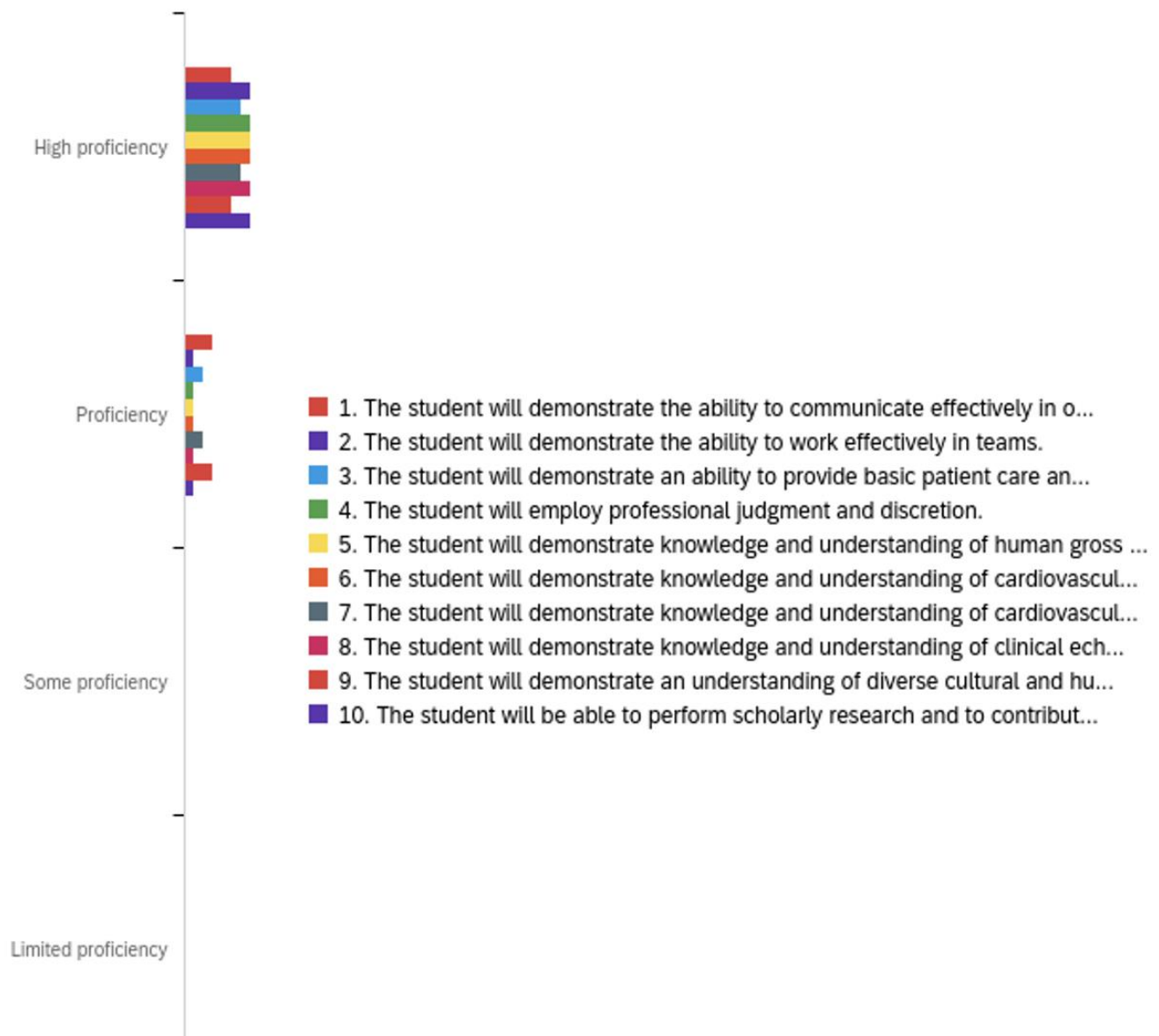
DFWI rates are improving from 8.4 average in 2018-19 down to 6.0 in 2022-2023.

Students with higher DFWI are seen in the first generation (except for year 21-22), African American, Hispanics, American Indian and Asians.

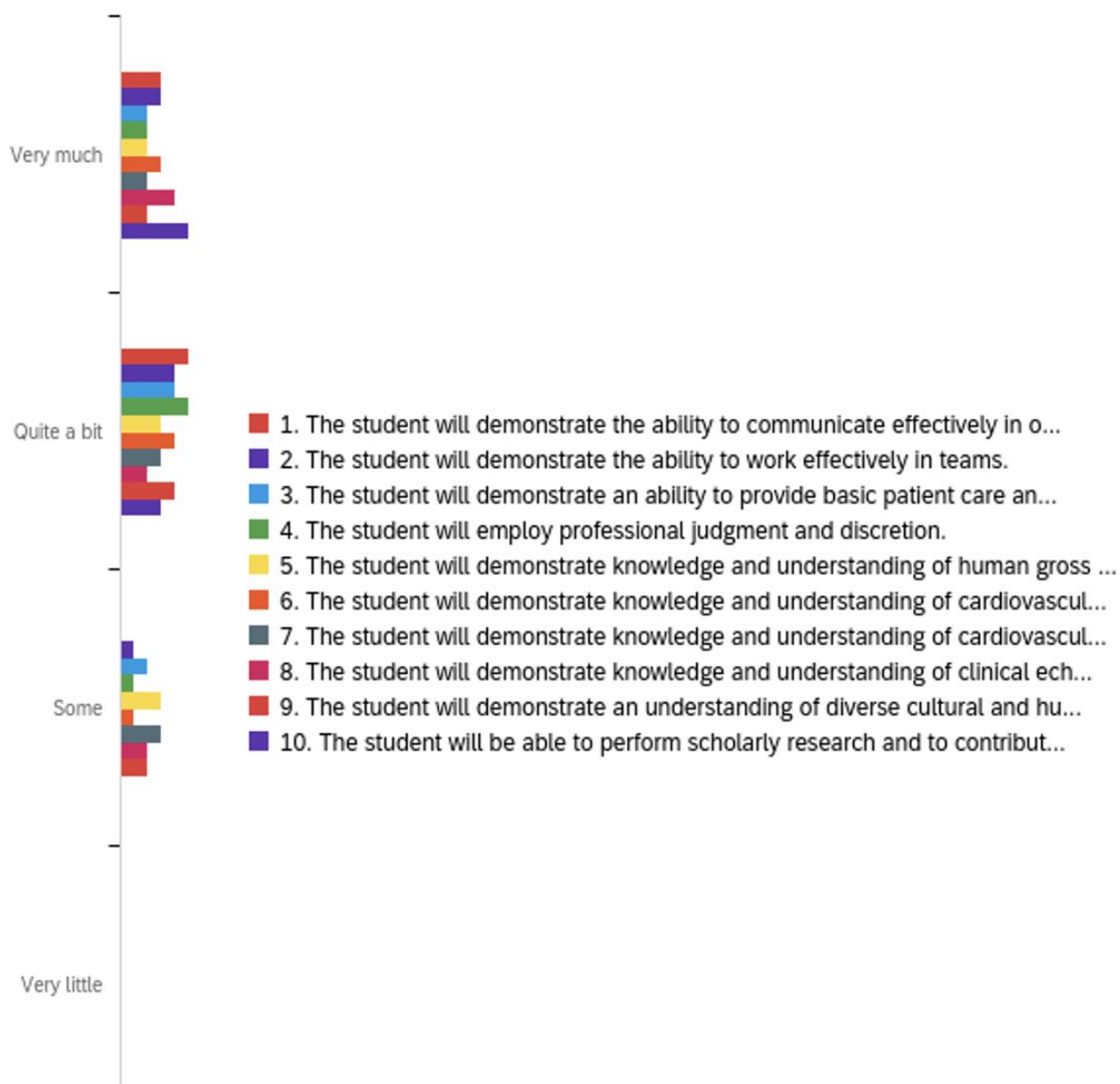
Retention has been stable from 2017-2022, with first term stop outs higher for first generation, male students, Hispanic, Asian, African American. Low socio-economic status is not a factor.

CLOs worksheets are completed on all courses that support PSLOs every quarter with new strategies being tried to lower equity gaps.

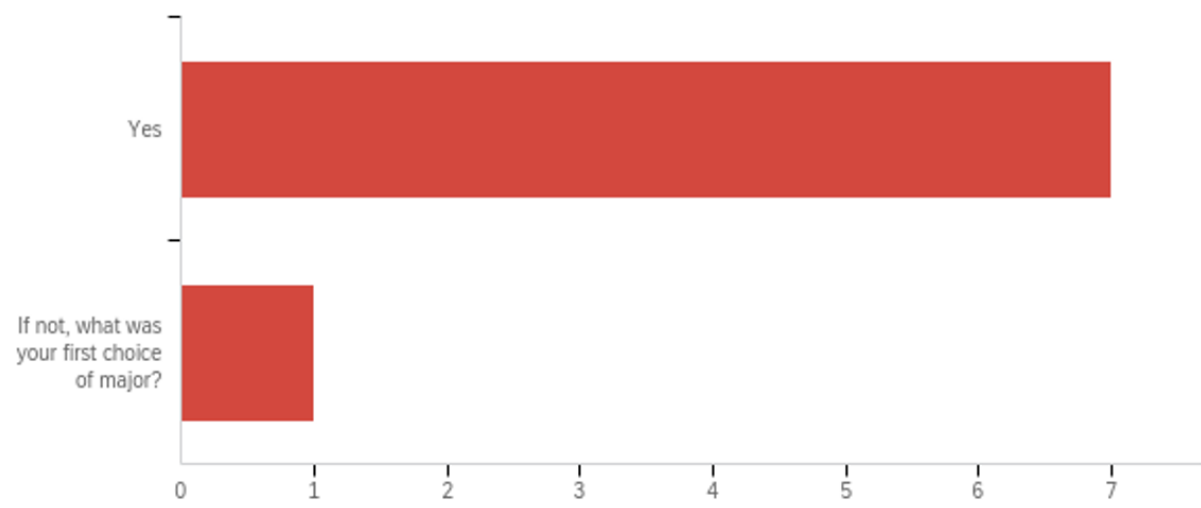
Q BECO 1 - Program Student Learning Outcomes for Echocardiography B.S. Degree Completion Please rate your proficiency in the following areas.



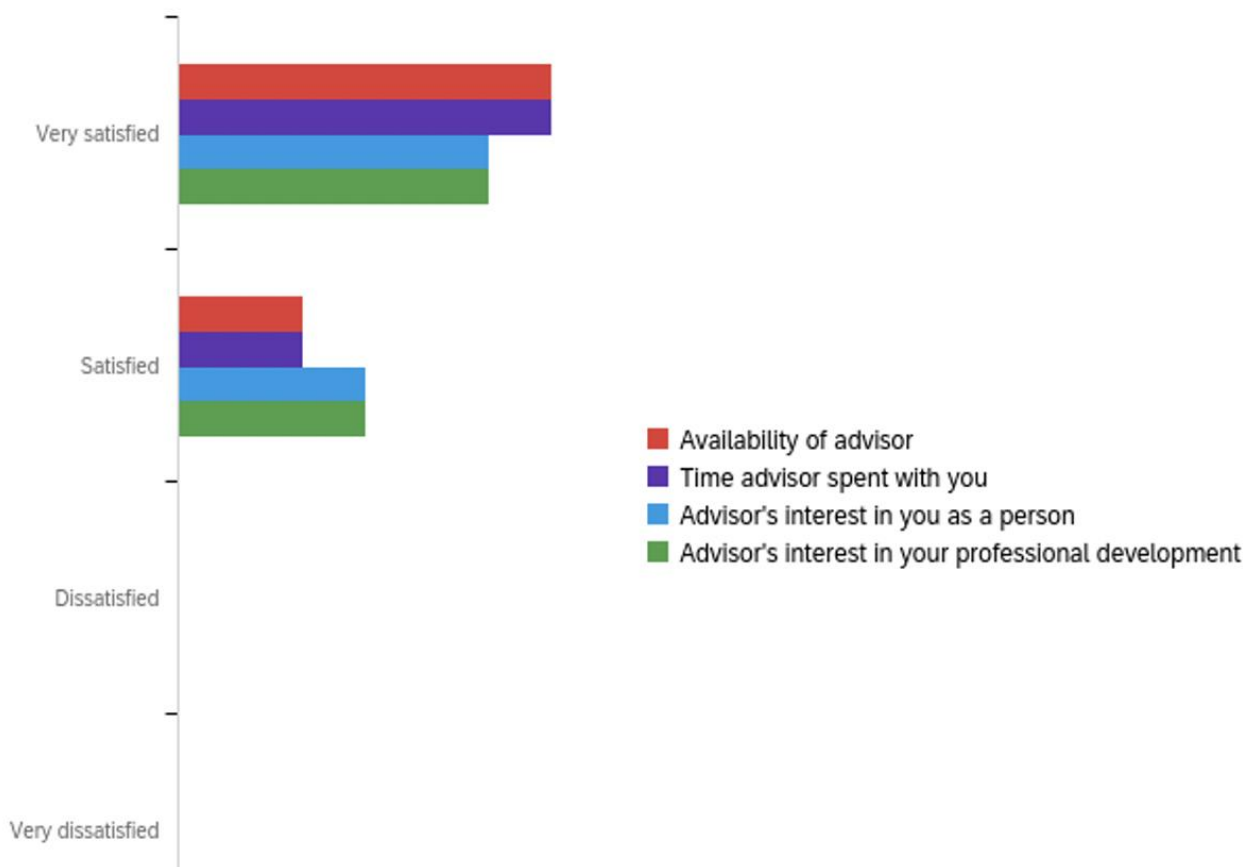
Q BECO 2 - Program Student Learning Outcomes for Echocardiography B.S. Degree Completion
How much has your experience at Oregon Tech contributed to your knowledge, skills, and personal development in these areas?



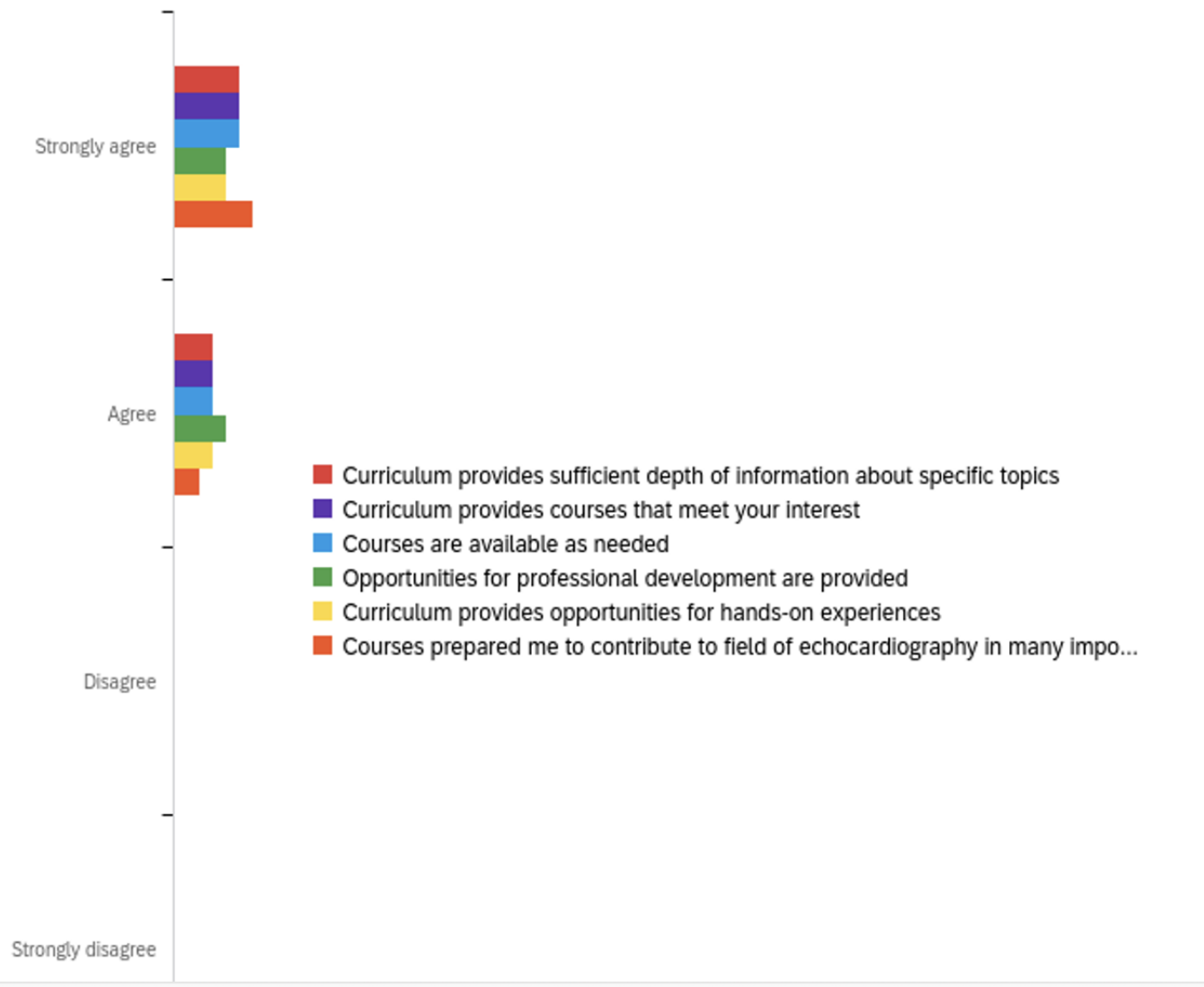
Q BECO 5 - Was Echocardiography Degree Completion your first choice of major?



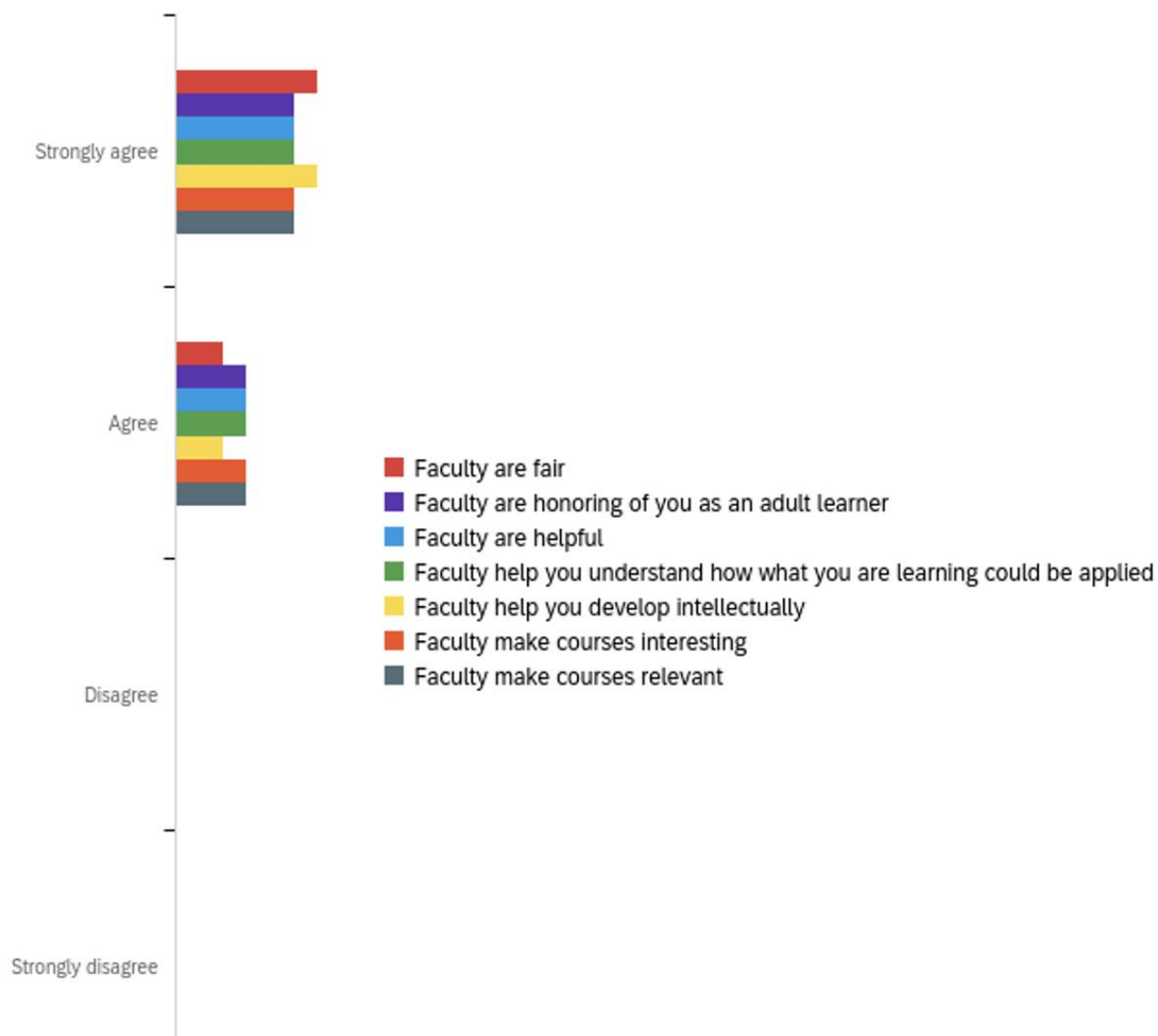
Q BECO 7 - Please indicate your level of satisfaction with advising in the Echocardiography Degree Completion program.



Q BECO 9 - Please provide feedback about the Echocardiography Degree Completion program by indicating how much you agree with each one of the following statements.



Q BECO 10 - Please provide feedback on the Echocardiography Degree Completion faculty.



Q BECO 13 - Has your confidence grown in yourself since completing your degree? If so, please explain.

Has your confidence grown in yourself since completing your degree? If so, please explain.

Yes - in writing

I do feel that the professional development aspect has been very helpful in my understanding on team dynamics and how to manage effectively.

My confidence has grown by guiding with the resources and the experience I needed. I had areas that I struggled in to be confident and the classes I participated in allowed me to improve.

Yes, I entered this program because I wanted to be a bigger voice in the field of echocardiography. I was already in a position of leadership but I started receiving invitation to speak at different conferences. Because I didn't have a degree, I suffered from 'imposter syndrome'. Now that I am finished, I feel equipped to speak to any audience regarding my field. I truly feel like an expert.

Q BECO 14 - Do you feel you could contribute to the advancing of the field or your work environment in new ways with all that you have learned in your degree?

Do you feel you could contribute to the advancing of the field or your work environment in new ways with all that you have learned in your degree?

Yes

Yes, this program forced me to do a large amount of research and technical writing. I do feel that I could follow this if it were a passion.

I do feel I can contribute to advancing the field. I have worked in this field for 23 years and now have the ability to use my knowledge and skills to advance further.

Yes

Q BECO 16 - What have been the three best things about your major? These might be experiences, particular courses or professors, general characteristics or features of the program--anything at all that was important to you.

What have been the three best things about your major? These might be experiences, particular courses or professors, general characteristics or features of the program--anything at all that was important to you.

Dr. Isaacson was a standout. Her classes were always my favorite. You could tell she was in the field, knowledgeable, and cared a lot about us as individuals.

I really enjoyed the professors who made an attempt to personalize their courses by sending out introduction videos and engaging classmates by having discussion boards.

Dr. Isaacson has been an absolute gem. This program is everything because of her. She is so positive and supportive. I had to take intro to literature and dreaded it. However, it was a wonderful experience because of my professor Leo Dubray. He did not make me feel shameful that this was not my area of expertise. I learned to enjoy the 3 classes I took and even kept the book. Thank you.

1. Dr. Isaacson and her relentless support and dedication to my success. 2. All the professors of the Echo courses tailored to program to help foster a habit of research and documentation. 3. All my professors were helpful and provided feedback that helped me improved in areas that I was falling short.

Performance Criteria	Assessment Methods	Performance Target	Results	Interpretation Met	Equity Gap?
ISLO Diversity	Two Direct Measures Two Assignments 1 Indirect Measure Course DFWI	>80% <11%	>80% >80% <11%	Yes Yes Yes Yes	Yes
PSLO 5	Two Direct Measures Two Assignments Echo 325 Echo 420 Two Indirect Measures	>80% <11%	>80% >80% <11%	Yes Yes Yes Yes	Yes
PSLO 8	Direct Measure Assignment Echo 420 A Echo 420 B Two indirect Evaluation	>80% <11%	80% <11%	Yes Yes Yes	Yes
PSLO 9	Direct Assignment Echo 385 Indirect Evaluation	>80% <11%	>80% <11%	Yes Yes	Yes
PSLO10	Direct Assignment Echo 420A Echo 420B Indirect Assignment	>80% <11%	>80% <11%	Yes Yes	Yes
Graduation Rate	University Dashboard	6-year rate >44.7% part time	48.7%	Yes	Yes
DFWI	University Dashboard	Institutional Avg. <11%	Echo average <11%	Yes	Yes
Retention	University Dashboard	Online average 60%	Echo Average 57-62%	Yes	Yes

Benchmarking Peer Institutions, Institutional Average and Echo Program

Measure	Benchmark	OIT Benchmark parttime students	Echo Program Benchmark
Retention	Bemidji State U Part time 50% Fairmont State University Part Time 7.1% Midwestern State University Part Time 34.5%	44.7% part time	57-62%
Gender	Bemidji State U 42% Men 58% Women Fairmont State University 40% Male 60% Female Midwestern State University 35.4% Male, 64.6 Female	47.9% men 52.1% women	15% male 85% female
Graduation Rate	Bemidji State University Men 42.3, Women 52.2 Fairmont State University Men 44.8% , Women 45.9% Midwestern State University Men 39.8%, Women 52.4%	48.7% part time	49%

Table 9 - Oregon Tech Current and Target Goals for Six-Year Graduation Rates

Race/Ethnic Background	Oregon Tech Current Indicator (%)	University Performance Targets (%)	Institution Selected to Set Indicator Target
American Indian	100.0	Highest*	Oregon Tech
Asian	50.0	55.0	Univ. of South Carolina-Upstate
African American	0.0	9.1	Shawnee State University
Hispanic	46.2	52.9	Univ. of South Carolina-Upstate
Hawaiian Pacific Islander	25.0	100	Fairmount State University Nicholls State University Shawnee State University
White	57.6	59.8	Montana Tech. University
Two or More	57.9	Highest	Oregon Tech
Unknown	75.0	Highest	Oregon Tech

Faculty Impressions

The students in this program take one or two classes at a time as they are already licensed and working full time. Most of these students are healthcare heroes through the pandemic and RSV epidemic last year. They suffer from high stress and burnout. Retention and Graduation rates are similar or better compared to peers. Minority enrollments are lower compared to peers. In general, male enrollment in healthcare is lower compared to females, but effort needs to be place to improve those enrollments. The other disadvantage this program has is it is online, so faculty must work extra hard to connect with students to develop a strong relationship, especially to those students who need extra effort. The program is more difficult for first generation, African American and Hispanic students. Socio-economic status does not seem to influence student achievement.

PSLOs are met and so are ISLOs for this program, over many years of data collection.

Marketing is desperately need to increase minority and male enrollments as marketing has not been done to this target population for three years now.

English as a first language needs addressing to help the Hispanic students and tutoring geared toward students with English as a second language

Evidence of Improvement in Student Learning

History of Results: Data from PSLOs #5, 8, 9, 10 historically are met and are met again this last year. The Industry Board members need to be surveyed again in the spring to get additional ideas to improve these skill sets in our students.

History of results are presented over the last 5 years in tables above.

- Enrollment was affected by the pandemic, and it has not bounced back yet, all students are healthcare workers.
- **Marketing has not been done for this program (mailed flyers) in several years.**
- Resources are needed to market this program, a booth at the national meeting to recruit.
- More male students and minorities need to be recruited for this healthcare program.
- English as a second language tutoring has not been addressed yet as an institution.

Evaluation of Past Actions: Curricular improvements have been completed on all courses in the program, including syllabi, content, power points, interactive activities, presence in the courses and more. Quick communication both for students in classes and out of class to improve retention has been implemented. Weekly surveys are implemented in the classes for feedback from students on areas of learning difficulty. Concerns are addressed each week. Retention Office (Inspire) are used to track and follow at risk students and to communicate with them. Great effort was made this last year to improve advising and to communicate more often with all students. New faculty have been recruited, hired and are being mentored.

English as a first language needs addressing to help the Hispanic students and tutoring geared toward students with English as a second language. This student population is not retaining well and tutoring efforts are still not in place to help them.

Section 7 – Data-driven Action Plans:

Action: Communication, Teamwork, Ethical Reasoning Action Plans

1. To improve gender equity gaps, more male students and students of minority status need to be recruited.
2. Continue using backward design strategies to improve student learning.
3. Continue filling out the CLOs worksheet and trying different equity gap strategies.
4. Help low performing students with tutoring information and additional flexibility when needed.
5. Improve communication with quick turnaround on response to questions.
6. Stay active in the course and present for students.
7. Work with marketing to gather the resources to initiate a marketing goal for the program.
8. Using AAC&U rubrics for teamwork and having students create a team contract at the beginning of the quarter.
9. Using AAC&U rubric for ethical reasoning and applying this to additional assignments in more courses.
10. To target English as a second language students to help them bridge the gaps.
11. Survey students weekly in courses asking for suggestions for improvements (what worked well and what did not).
12. Address any concerns from IDEA evaluations and from student exit surveys, those typically score well.
13. Student Achievement targets include improving retention, graduation rates, DFWI rates for first generation, African American, Hispanic and Male Students.
14. Recruitment for minorities and male students are needed.
15. **English as a second language tutoring has not been addressed yet as an institution. Hispanic students are in the greatest need.**
16. Tilt assignment design and HIPs continue to be implemented.

PSLO: Enhance Instruction: Data is collected from weekly surveys in the classes. Students have identified several assignments that need instruction made more clearly. Some students are saying that the course is requiring too much time, so the faculty will look at that workload question again. TILT assignment design will be used again this year.

PSLO: Improve Assignment, Review Rubric: Improvements are needed in the discussion rubrics across courses to gain more student participation.

Review and Revise PSLOs: Over the last year, faculty have discussed whether to add additional PSLOs, but most have felt that the ones present are adequate, so no changes are scheduled.

Review application process: Our retention data overall is good; however, we do not want to lose any students. We are looking at reviewing the application process, increasing advising/communication, and getting marketing underway. We will be addressing this in the next application cycle. We want to recruit every quarter and retain every student. It may require more flexibility for working adults.

Marketing Need: This program can take students every quarter and marketing should be targeted at students who really need the 26 skill sets this program offers. A marketing push at least once a year is needed.

Resources needed: \$10,000 is needed to properly market this program and recruit new students.

Section 8 – Closing the Loop: Reflection on previous work.

- **Discuss last year's Action Plans:** All action plans from the previous year were completed. We need more marketing, and we need to recruit more minorities and men into this healthcare program. Getting English as a second language tutors has not happened yet, the Hispanic students are in the greatest need. Additional efforts are needed to retain African American students.
- **Discuss programmatic Improvements** Additional adjuncts were recruited and hired to fill courses picking qualified people with real life experience that they share with students.
Improvements:
New faculty recruited, hired, and mentored. Salaries are low for adjuncts so difficult to recruit.
Additional qualified staff has been an issue, and it took 9 months but got them.
Rubric improvements and training of faculty.
Curricular improvements in all classes completed.
Retention and Equity gap elimination strategies are attempted every quarter with every class that supports a program learning out.
Timeline for retention and equity gaps issues are completed every quarter in all courses, documented in CLOs worksheet.
Continued effort on improvement of graduation rates, retention and DFWI (lowering).
Benchmarking efforts for the disaggregated data, comparing my scores with the institutional average, and other schools.
- **Improvements in Assessment Process:** Emails only go to Dept. Chairs; as a suggestion they need to go to whomever is working on the assessment reports as well. Incorrect information was given at convocation for the ISLO actions. Template changes need to be given to faculty a year in advance and not posted in a new Canvas shell a week before reports are due. New changes in template cannot be implemented at short notice.
Faculty Discussion: Equity gaps were identified even though numbers are small. Strategies are attempted each quarter to improve them and create a positive inclusive learning environment. The CLOs worksheets are being completed by all faculty and adjuncts in the program. Using TILT assignment design and HIPs in all courses. Faculty discussions are done every quarter, with the Board of Directors (twice a year) for the program and every with all involved fall at convocation. All courses are redesigned with backwards thinking strategies. Student Achievement discussion include improving retention, graduation rates, DFWI rates for first generation, African American, Hispanic and Male Students. Recruitment for minorities and male students are needed.

Faculty resources needed to strengthen this program.

Justification for Resources \$5000 annually (purchase of mailing list, postcards, and cost of mailing)

- Marketing needs to recruit for more diversity, male students and we need marketing this online programs.
- Marketing for this online program has not been done in years now. New students are word of mouth.
- A flyer needs to be mailed to recruit new students each year, attendance at national meetings is helpful to recruit as well.
- More men and minorities need to be recruited.
- Marketing directly to those students who meet this program is wise.

Program Assessment Report Feedback Rubric

2022-23 Assessment Report

Program:

Department Chair:

Program Assessment Report Author:

Rubric Measure	Well Developed, Progressing or Not included.
Program mission is aligned to University Mission	Page 1
Educational Objectives Wording is Actionable	Page 2,3
PSLO's are justified by Professional Standards	Page 3
PSLO'S are aligned to ISLO	Page 3
Curriculum Map: Scaffolding indicates Foundational, Practice, and Capstone Assessments by course	Page 4-5
Assessment Cycle is three years or less to cover all PSLO and ISLO	Page 2-5
Actions taken by programs on assessment during each year of the cycle are specified	Page 2-5
During collection year, courses/assignments are specified that align to PSLO at FP&C levels	Page 7-14, student exit surveys 17-23
Rubric: Criteria for grading the assignment is described (may include as an appendix)	Pages 7-14
Sample: Number of samples reviewed is specified	Pages 7-14
Accountability: Reviewer of the assignment are specified	Pages 7-14
Assessment data is collected across all locations and modalities	One modality and one location only online Pages 7-14
Performance Targets of acceptability are indicated	Pages 7-14
Results include Graduation, Retention/Persistence, DFWI, Post Grad Success, Equity Gaps, PSLO, ISLO	Page 15-15, 24 Post Grad Success is Salary information. 100% of students are employed
Interpretation: Current results are compared against performance targets	Pages 7-14
Interpretation: Current results are compared against previous years of data	Page 25
Interpretation: Current results are compared against some external comparator	Page 24-27
Action drivers: Items not meeting performance targets have actions planned	Page 24-27
Action drivers: Additional action plans for overall department improvement are indicated	Page 24-27
Action plans: Specifics of accountability and timelines are indicated	Page 24-27
Action plans: Actions are linked to identification of resources needed	Page 33
Faculty discuss trends in the data	Page 1, 24-27
Faculty discuss previous action plan success given new data	Page 1, 24-27
Faculty discuss the assessment process and make any improvements necessary	Page 1, 24-27
Resources are needed for marketing and English as a second language tutoring.	Page 24-33