



2016-17 Program Assessment Report

Echocardiography B.S. Degree Completion

Mission, Objectives & Learning Outcomes

Oregon Tech Mission

Oregon Institute of Technology, an Oregon public university, offers innovative and rigorous applied degree programs in the areas of engineering, engineering technologies, health technologies, management, and the arts and sciences. To foster student and graduate success, the university provides an intimate, hands-on learning environment, focusing on application of theory to practice. Oregon Tech offers statewide educational opportunities for the emerging needs of Oregonians and provides information and technical expertise to state, national and international constituents.

Core Theme 1: Applied Degree Programs

Oregon Tech offers innovative and rigorous applied degree programs. The teaching and learning model at Oregon Tech prepares students to apply the knowledge gained in the classroom to the workplace.

Core Theme 2: Student and Graduate Success

Oregon Tech fosters student and graduate success by providing an intimate, hands-on learning environment, which focuses on application of theory to practice. The teaching and support services facilitate students' personal and academic development.

Core Theme 3: Statewide Educational Opportunities

Oregon Tech offers statewide educational opportunities for the emerging needs of Oregon's citizens. To accomplish this, Oregon Tech provides innovative and rigorous applied degree programs to students across the state of Oregon, including high-school programs, online degree programs, and partnership agreements with community colleges and universities.

Core Theme 4: Public Service

Oregon Tech will share information and technical expertise to state, national, and international constituents.

Program Alignment to Oregon Tech Mission and Core Themes

The Echocardiography Degree Completion program was implemented in Fall 2003 as an online 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. There have been over 100 graduates to date and the program is in its 13th year. This program has seen steady growth since it started with more than 100 students currently enrolled, approx. 40 active students a quarter.

Program Mission

The OIT echocardiography 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. This degree also furthers the working professionals advanced practice skills in the field and also enhances their general education and research skills.

Program Educational Objectives

Students will be able to:

1. Utilize diagnostic techniques, sound judgment and good decision making to provide patient services.
2. Demonstrate leaders in the field of echocardiography who contribute to the field on a local, regional or national level.
3. Synthesize, analyze and think critically, communicate effectively and exemplify professional ethics.
4. Demonstrate scholarly knowledge and become a lifelong learners and responsible citizens.

Program Faculty Review

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

The Echocardiography faculty reviewed the mission, objectives, and student learning outcomes in fall 2016 and reaffirmed them without changes. The faculty met in the fall of 2016 and agreed to continue with the student learning outcomes as suggested by the programmatic accrediting body known as the, "Joint Review Committee of Diagnostic Medical Sonography." The current version is listed below.

Showcase Learning Opportunities

As stated above the students in the degree completion programs are working licensed professionals already and are working toward completing their bachelors. There are many professional meetings but the one that most students attend is the American Society of Echocardiography meeting in June of every year. Students get an opportunity to look at the latest equipment and hear scientific sessions in all areas of the field. This is a large internal meeting 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 and workplace discrimination policy and practice.

In the senior project class students are asked to pick a topic that contributes to their own workplace community or to the field in general. During this class students interview experts on their topic, do an extensive literature review on their topic and present the results to the rest of the class sharing their most valuable learning experiences.

In the externship course students publish professional case studies in scientific journals.

Program History & Vision

Program History

The Echocardiography Degree Completion program was implemented in Fall 2003 as an online 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.

Meeting with Advisory Board

Program faculty held a meeting with their Advisory Board during the academic year.

Advisory Board Review

The Advisory Board reviewed the Program Mission and Objectives during the academic year.

Sept 19, 2017

The Advisory Board consists of 5 OIT degree completion program graduates who serve the echo and vascular degree completion program. They reviewed the assessment report and information regarding enrollments/retention and had no significant recommendations.

They had a lot of thoughts on marketing the program and suggest attending the national meetings this year as an exhibitor. They 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.

Program Enrollment

The attached enrollment information is not separated out for the degree completion students. There were 20 new degree completion students in degree completion program in the Fall of 2016.

[*Attachment 1_Enrollment_5_Year_History_by_Major*](#)

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. We had 12 graduates this last year in total.

[*Attachment 2_Graduates_10_Year_History_by_Major*](#)

Employment Rates and Salaries

The data below is not separated out for the degree completion students. However, all the students in the program are employed and salaries range from \$50,000 to 125,000.

[*Attachment 3_Grad_Data_First_Destination_3_Year_History_by_Major*](#)

Pass Rates on Board and Licensure Exam

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

Results of Board or Licensure Exam

N/A

Other Program Assessment Data

N/A

Closing the Loop

Describe any actions taken and re-assessment done during this academic year in response to assessment findings from prior academic years.

There were no areas to close the loop on from the previous year.

- 80% of the students were able to work effectively in teams.
- 80% of the students employ professional judgement and discretion including ethical decision making.
- 80% of students demonstrated an understanding of diverse cultural and humanistic traditions in the global society.

Changes Implemented

N/A

Assessment Findings

N/A

Program Student Learning Outcomes Assessment Cycle

PROGRAM STUDENT LEARNING OUTCOMES	2016-17	2017-18	2018-19
3-Year Cycle			
Echocardiography B.S. Degree Completion			
OIT-BECO 2016-17.1 The student will demonstrate the ability to communicate effectively in oral, written and visual forms.	ECHO 420 A ECHO 420 B ECHO 421		
OIT-BECO 2016-17.2 The student will demonstrate the ability to work effectively in teams.			
OIT-BECO 2016-17.3 The student will demonstrate an ability to provide basic patient care and comfort.			
OIT-BECO 2016-17.4 The student will employ professional judgment and discretion.			
OIT-BECO 2016-17.5 The student will demonstrate knowledge and understanding of human gross anatomy, sectional anatomy, and normal and abnormal cardiovascular anatomy.	ECHO 325 ECHO 365 ECHO 376		
OIT-BECO 2016-17.6 The student will demonstrate knowledge and understanding of cardiovascular physiology, pathology, and pathophysiology.			
OIT-BECO 2016-17.7 The student will demonstrate knowledge and understanding of cardiovascular physical principles and instrumentation.			

OIT-BECO 2016-17.8 The student will demonstrate knowledge and understanding of clinical echocardiography diagnostic procedures and testing.	ECHO 420 A ECHO 420B		
OIT-BECO 2016-17.9 The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society.			
OIT-BECO 2016-17.10 The student will be able to perform scholarly research and to contribute that knowledge to the field of echocardiography.	ECHO 420 A ECHO 420 B ECHO 421		

Assessment Map & Measure

F – Foundation – introduction of the learning outcome, typically at the lower-division level,

P – Practicing – reinforcement and elaboration of the learning outcome, or

C – Capstone – demonstration of the learning outcome at the target level for the degree

For each outcome, programs should identify at least 2 direct measures (student work that provides evidence of their knowledge and skills), and 1 indirect measure (student self-assessment of their knowledge and skills) for each outcome.

For every program, data from the Student Exit Survey will be an indirect measure at the capstone level.

OIT-BECO 2016-17.1 The student will demonstrate the ability to communicate effectively in oral, written and visual forms.	
Course/Event	ECHO 420A
Legend	C – Capstone
Assessment Measure	Direct – Assignment
Criterion	80% of students will score 80% or higher
Course/Event	
Course/Event	ECHO 420B
Legend	C – Capstone
Assessment Measure	Direct – Assignment
Criterion	80% of students will score 80% or higher
Course/Event	
Course/Event	ECHO 421
Legend	C – Capstone
Assessment Measure	Direct – Assignment
Criterion	80% of students will score 80% or higher
Course/Event	
Course/Event	Student Exit Survey
Legend	P – Practice
Assessment Measure	Indirect – Student Exit Survey
Criterion	N/A

OIT-BECO 2016-17.5 The student will demonstrate knowledge and understanding of human gross anatomy, sectional anatomy, and normal and abnormal cardiovascular anatomy.

Course/Event	ECHO 325
Legend	P – Practice
Assessment Measure	Direct – Assignment
Criterion	80% of students will score 80% or higher
Course/Event	ECHO 365
Legend	P – Practice
Assessment Measure	Direct – Assignment
Criterion	80% of students will score 80% or higher
Course/Event	ECHO 376
Legend	P – Practice
Assessment Measure	Direct – Assignment
Criterion	80% of students will score 80% or higher
Course/Event	Student Exit Survey
Legend	C – Capstone
Assessment Measure	Indirect – Student Exit Survey
Criterion	N/A

OIT-BECO 2016-17.8 The student will demonstrate knowledge and understanding of clinical echocardiography diagnostic procedures and testing.

Course/Event	ECHO 420A
Legend	C – Capstone
Assessment Measure	Direct – Assignment
Criterion	80% of students will score 80% or higher
Course/Event	ECHO 420B
Legend	C – Capstone
Assessment Measure	Direct – Assignment
Criterion	80% of students will score 80% or higher
Course/Event	Student Exit Survey
Legend	C – Capstone
Assessment Measure	Indirect – Student Exit Survey
Criterion	N/A

OIT-BECO 2016-17.10 The student will be able to perform scholarly research and to contribute that knowledge to the field of echocardiography.

Course/Event	ECHO 420A
Legend	C – Capstone
Assessment Measure	Direct – Assignment

Criterion	80% of students will score 80% or higher
Course/Event	ECHO 420B
Legend	C – Capstone
Assessment Measure	Direct – Assignment
Criterion	80% of students will score 80% or higher
Course/Event	ECHO 421
Legend	C – Capstone
Assessment Measure	Direct – Assignment
Criterion	80% of students will score 80% or higher
Course/Event	Student Exit Survey
Legend	P – Practice
Assessment Measure	Indirect – Student Exit Survey
Criterion	N/A

Analysis of Results

OIT-BECO 2016-17.1 The student will demonstrate the ability to communicate effectively in oral, written and visual forms.	
Criterion	Met
Summary	The purpose of the assessment was to evaluate 27 students in the academic 2016-2017 year in capstone courses Echo 420 A, Echo 420 B and Echo 421 for effective communication skills in oral, written and visual forms. Strengths: The students performed well on this task with >80% meeting the criterion. Plans for Improvement: None at this time Indirect Assessment Student Exit Survey Question 24 (1) was Rate your proficiency in the following areas and 99% of the students who returned the survey said they were either highly prepared or prepared in the ability to communicate effectively.
Improvement Narrative	Other: Students in general need more practice at oral and written communication before they graduate in their majors. I will be trying to add more possibilities for the students to gain practice in all courses in the major.
Attachment 4_Student_learning_Outcome_1	

OIT-BECO 2016-17.5 The student will demonstrate knowledge and understanding of human gross anatomy, sectional anatomy, and normal and abnormal cardiovascular anatomy.	
Criterion	Met
Summary	Indirect Assessment Student Exit Survey Question 24 (5) was Rate your proficiency in the following areas and 100% of the students who returned the survey said they were either highly prepared or prepared in the ability

	to demonstrate knowledge and understanding of human gross anatomy, sectional anatomy, and normal and abnormal cardiovascular anatomy. The purpose of the assessment was to evaluate 31 students in the academic 2016-2017 year in capstone courses Echo 325 and Echo 365 for the ability to to demonstrate knowledge of human gross anatomy, sectional anatomy and normal and abnormal cardiovascular anatomy. Strengths: The students performed well on this task with >80% meeting the criterion. Plans for Improvement: None at this time
Improvement Narrative	Other: Students did very well in scanning the anatomy but continued practice in advanced training will benefit these students on the job. Continue to keep scanning projects in courses were it is possible.
Attachment 5_Student_Learning_Outcome_5	

OIT-BECO 2016-17.8 The student will demonstrate knowledge and understanding of clinical echocardiography diagnostic procedures and testing.	
Criterion	Met
Summary	Indirect Assessment Student Exit Survey Question 24 (8) was Rate your proficiency in the following areas and 100 % of the students who returned the survey said they were highly prepared on the ability to demonstrate knowledge and understanding of clinical echocardiography diagnostic procedures and testings. Indirect Assessment through student exit survey shows that graduates scored above 80% on Institutional Learning Outcomes and they felt that Oregon Tech contributed to their knowledge, skills and personal development. The purpose of the assessment was to evaluate 21 students in the academic 2016-2017 year in capstone courses Echo 420 A and Echo 420 B for the ability to to demonstrate knowledge and understanding of clinical echocardiography diagnostic procedures and testing. Strengths: The students performed well on this task with >80% meeting the criterion. Plans for Improvement: None at this time
Improvement Narrative	- Other: Students did well on this assessment which encourages faculty to continue having students develop and present real cardiac cases as it furthers their knowledge and skill on the job. All of these students are already working professionals.
Attachment 6_Default_Report_1	
Attachment 7_Student_learning_Outcome_8	

OIT-BECO 2016-17.10 The student will be able to perform scholarly research and to contribute that knowledge to the field of echocardiography.	
Criterion	Met

Summary	The purpose of the assessment was to evaluate 27 students in the academic 2016-2017 year in capstone courses Echo 420 A, Echo 420 B and Echo 421 for the ability to perform scholarly research that contributes to the field of echocardiography. Strengths: The students performed well on this task with >80% meeting the criterion. Plans for Improvement: None at this time
Improvement Narrative	- Professional Development: All the students were encouraged to publish their work and many did. This lead to professional development and speaking opportunities within the field of echocardiography. Students need ongoing practice in publishing work and this will continue to be emphasized by the faculty.
<p><i>Attachment 8_Student_Learning_Outcome_10</i></p> <p><i>Attachment 9_Default_Report_Echo</i></p>	

References

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Office of Academic Excellence**

The following data represents majors declared by student as of Fall 4th week. Students with multiple/dual majors have been reported under each major in which they enrolled; therefore the student headcount will be duplicated. A small number of students that declared a third major have now been included in this report. Data reported is combined for all levels and all locations. Some programs may have had name changes such as CLS and have been reported as they were (historically).

Description	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	5 Year Difference	5 Year % Change
ABA Course Series	0	0	3	0	0	0	-
Accounting Certificate	0	0	0	0	1	1	-
Allied Health	0	0	0	0	3	3	-
Allied Health Management	11	5	3	2	1	-10	-90.9%
Applied Behavior Analysis	0	0	0	10	17	17	-
Applied Mathematics	41	38	47	42	33	-8	-19.5%
Applied Psychology	146	149	122	96	110	-36	-24.7%
Automat, Robot, & Cntrl Engr	0	0	0	0	1	1	-
Biology	15	8	1	1	0	-15	-100.0%
Biology-Health Sciences	136	150	150	138	151	15	11.0%
Civil Engineering	127	121	110	120	118	-9	-7.1%
Clinical Lab Science-Earlyadm	6	10	35	22	0	-6	-100.0%
Clinical Laboratory Science	62	85	94	95	2	-60	-96.8%
Communication Studies	55	42	39	47	40	-15	-27.3%
Computer Engineering Tech	82	82	81	86	63	-19	-23.2%
Dental Hygiene	226	240	211	221	202	-24	-10.6%
Diagnostic Medical Sonography	86	104	95	102	112	26	30.2%
Dispute Resolution Certificate	1	1	2	4	2	1	100.0%
Echocardiography	121	119	123	122	128	7	5.8%
Electrical Engineering	76	120	146	164	197	121	159.2%
Electronics Engineering Tech	67	58	51	37	32	-35	-52.2%
Embedded Systems Eng Tech	24	25	32	35	57	33	137.5%
Emergency Medical Services Mgt	0	0	17	20	34	34	-
EMT - Paramedic	29	30	29	28	28	-1	-3.4%
Environmental Sciences	49	49	51	48	42	-7	-14.3%
General Studies	495	736	632	1,031	1,414	919	185.7%
Geomatics	1	0	0	0	0	-1	-100.0%
Geomatics-option in GIS	13	14	10	10	7	-6	-46.2%
Geomatics-option in Surveying	49	39	26	31	30	-19	-38.8%
Health Care Mgmt-Admin Mgmt	0	10	14	19	18	18	-
Health Care Mgmt-Clinical Mgmt	0	4	10	11	25	25	-
Health Care Mgmt-Rad Science	0	3	6	12	12	12	-
Health Informatics	0	0	0	20	38	38	-
Health Sciences	1	1	0	1	2	1	100.0%
Information Technology	0	0	0	56	114	114	-
IT Accounting Option	8	4	2	1	1	-7	-87.5%
IT Applications Dev Opt	91	75	71	48	20	-71	-78.0%
IT Bus/Systems Analysis Opt	58	59	69	51	28	-30	-51.7%
IT Health Informatics Opt	54	68	59	32	17	-37	-68.5%
Magnetic Resonance Imagng Spec	0	0	0	0	4	4	-
Manufacturing Engineering Tech	129	99	109	107	101	-28	-21.7%
Marriage and Family Therapy	0	0	0	0	10	10	-
Mechanical Engineering	208	303	331	323	354	146	70.2%
Mechanical Engineering Tech	145	112	121	121	104	-41	-28.3%
Medical Lab Science-Earlyadm	0	0	0	0	17	17	-
Medical Laboratory Science	0	0	0	0	86	86	-
Mgmt Info Sys/Mgmt Acc Option	1	0	0	0	0	-1	-100.0%
Mgmt/Accounting Option	32	38	35	32	19	-13	-40.6%
Mgmt/Marketing Option	34	34	36	34	37	3	8.8%
Mgmt/Small Bus Mgmt Option	54	43	38	37	33	-21	-38.9%
MIT Applicant	0	0	1	2	0	0	-
Nuclear Medicine Technology	47	51	48	48	49	2	4.3%
Nursing	50	49	52	61	69	19	38.0%
Operations Management	61	66	65	69	70	9	14.8%
Optical Engineering	0	0	3	3	3	3	-
Picture Archive/Comm Sys Spec	0	0	1	2	3	3	-
Polysomnographic Technology	19	13	6	12	5	-14	-73.7%
Population Health Management	0	0	3	24	31	31	-
Pre-Clinical Lab Science	0	8	1	20	2	2	-
Pre-Dental Hygiene	62	65	35	37	48	-14	-22.6%
Pre-Medical Imaging Tech	273	287	253	237	226	-47	-17.2%
Pre-Medical Lab Science	0	0	0	0	27	27	-
Pre-Nursing	56	60	53	69	78	22	39.3%
Pre-Paramedic Education	0	3	3	7	0	0	-
Pre-Renewable Energy Eng	111	0	0	0	0	-111	-100.0%
Pre-Respiratory Care	11	12	8	11	9	-2	-18.2%
Radiologic Science	164	163	154	160	152	-12	-7.3%
Renewable Energy Engineering	110	206	203	180	166	56	50.9%
Respiratory Care	85	84	88	103	117	32	37.6%
Sleep Health-Polysom Tech Opt	0	0	4	6	17	17	-
Software Engineering Tech	260	268	289	309	285	25	9.6%
Spec in Entrepreneur/Small Bus	0	0	0	1	2	2	-
Specialization in Accounting	0	0	0	2	2	2	-
Specialization in Marketing	0	0	1	1	1	1	-
Specialization Travel/Tourism	0	1	0	0	0	0	-
System Engr & Technical Mgmt	0	0	2	3	0	0	-
Technology and Management	16	30	43	46	46	30	187.5%
Vascular Technology	88	95	80	93	98	10	11.4%
Total (Duplicated)	4,146	4,539	4,407	4,923	5,371	1,225	29.5%
Total (Unduplicated)	4,001	4,414	4,273	4,786	5,232	1,231	30.8%

Attachment 2_Graduates_10_Year_History_by_Major



10 Year History By Major and Degree Type
As of September 5, 2016

Specializations

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Picture Archive/Comm Sys Spec	-	-	-	-	-	-	4	4	3	-
Specialization in Accounting	-	-	-	-	-	-	-	1	-	-
Specialization in Marketing	-	-	-	-	-	-	-	2	-	-
Total	0	0	0	0	0	0	4	7	3	0

Certificates

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Accounting Certificate	-	-	-	-	-	-	-	-	-	-
Dispute Resolution Certificate	1	2	1	2	4	1	6	11	1	2
Marketing Certificate	-	-	-	-	-	-	-	-	-	-
Polysomnographic Technology	-	-	4	14	13	11	8	6	3	9
Total	1	2	5	16	17	12	14	17	4	11

Associates

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Associate of Arts	13	8	2	5	-	1	-	-	1	1
Computer Engineering Tech	7	5	3	2	3	-	5	7	6	6
Dental Hygiene	25	26	22	25	18	27	18	23	21	9
Electronics Engineering Tech	3	1	2	1	-	-	-	-	-	-
EMT - Paramedic	19	21	22	25	27	17	28	26	26	29
Office Systems Technology	-	2	2	-	-	-	-	-	-	-
Polysomnographic Technology	-	-	1	2	3	5	6	2	4	-
Respiratory Care	23	16	15	17	-	-	-	-	-	-
Sleep Health-Polysom Tech Opt	-	-	-	-	-	-	-	-	-	3
Software Engineering Tech	7	2	3	2	2	-	-	2	9	2
Total	97	81	72	79	53	50	57	60	67	50

Bachelors

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Allied Health Management	-	-	-	1	2	4	3	2	1	-
Applied Environmental Science	1	-	-	-	-	-	-	-	-	-
Applied Mathematics	-	-	7	1	5	4	7	4	4	5
Applied Psychology	46	42	37	30	36	38	30	40	37	31
Biology	10	6	16	14	11	11	3	4	1	2
Biology-Health Sciences	-	-	-	-	-	-	10	14	20	18
Civil Engineering	23	23	29	28	20	14	23	17	15	25
Clinical Laboratory Science	23	24	24	22	22	35	27	34	49	46
Communication Studies	13	13	9	10	13	8	19	13	4	8
Computer Engineering Tech	15	7	14	8	13	3	4	3	3	3
Dental Hygiene	35	38	45	55	49	54	51	76	62	65
Diagnostic Medical Sonography	21	24	21	27	29	24	19	31	25	24
Echocardiography	6	4	16	9	21	32	31	32	29	35
Electrical Engineering	-	-	-	6	11	9	11	17	17	26
Electronics Engineering Tech	18	17	13	10	18	16	11	10	10	13

Bachelors

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Embedded Systems Eng Tech	-	-	-	1	2	2	4	1	5	3
Emergency Medical Services Mgt	-	-	-	-	-	-	-	-	-	1
Environmental Sciences	1	1	3	1	5	5	4	5	11	14
Geomatics	10	8	5	5	1	-	-	-	-	-
Geomatics-option in GIS	-	-	2	1	1	3	3	5	1	2
Geomatics-option in Surveying	-	-	1	11	13	14	10	13	1	12
Health Care Mgmt-Admin Mgmt	-	-	-	-	-	-	-	-	1	2
Health Care Mgmt-Clinical Mgmt	-	-	-	-	-	-	-	-	1	-
Health Sciences	1	3	2	2	2	6	1	1	-	-
Industrial Management	-	-	-	1	-	-	-	-	-	-
Information Technology	4	4	1	2	-	1	-	-	-	-
IT Accounting Option	-	1	2	1	1	2	1	2	-	-
IT Applications Dev Opt	8	5	13	5	6	8	21	12	8	11
IT Bus/Systems Analysis Opt	1	1	4	10	12	6	12	14	13	8
IT Health Informatics Opt	-	-	-	-	2	4	9	6	14	7
Management Information System	12	2	8	3	-	2	-	-	-	-
Manufacturing Engineering Tech	30	15	16	18	18	9	13	5	11	12
Mechanical Engineering	3	3	17	12	11	19	14	27	23	45
Mechanical Engineering Tech	31	19	31	23	24	19	24	18	17	21
Mgmt Info Sys/Mgmt Acc Option	-	3	-	-	-	-	-	-	-	-
Mgmt/Accounting Option	8	4	3	8	4	9	9	12	5	8
Mgmt/Marketing Option	9	7	5	5	7	8	7	4	7	7
Mgmt/Small Bus Mgmt Option	9	11	11	18	8	6	8	12	4	7
Nuclear Medicine Technology	18	18	16	15	16	16	15	14	14	15
Operations Management	8	6	3	15	7	14	16	13	19	18
Optical Engineering	-	-	-	-	-	-	-	-	1	1
Population Health Management	-	-	-	-	-	-	-	-	-	5
Radiologic Science	47	51	50	53	51	50	48	55	45	56
Renewable Energy Engineering	-	-	6	9	29	35	60	35	29	29
Renewable Energy Systems	-	-	1	-	-	-	-	-	-	-
Respiratory Care	5	8	6	7	10	21	21	21	27	22
Software Engineering Tech	44	36	27	27	31	29	41	31	35	47
System Engr & Technical Mgmt	-	-	-	-	-	-	-	-	-	3
Technology and Management	-	-	-	-	-	-	1	1	11	8
Ultrasound/Diag Med Sono Opt	1	-	-	-	-	-	-	-	-	-
Ultrasound/Vascular Option	1	-	-	-	-	-	-	-	-	-
Vascular Technology	30	30	26	23	23	25	21	28	19	24
Total	492	434	490	497	534	565	612	632	599	689

Masters

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Civil Engineering	-	-	-	-	-	-	-	-	2	6
Manufacturing Engineering Tech	3	4	7	2	6	8	12	4	8	9
Renewable Energy Engineering	-	-	-	-	-	-	-	1	11	9
Total	3	4	7	2	6	8	12	5	21	24

Grand Total

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Grand Total	593	521	574	594	610	635	699	721	694	774

Attachment 3_Grad_Data_First_Destination_3_Year_History_by_Major

Oregon Tech Graduate Outcome Data

a=2013/2014/2015 combined	% Employed		% Continuing Ed		% Looking for Work		% Not Looking		Success Rate		Median Salary	
b=2014/2015/2016 combined	a	b	a	b	a	b	a	b	a	b	a	b
% among those reporting outcomes	83.3	87.6	6.1	6.7	9.4	4.9	1.2	0.8	90.6	95.1	\$ 54,000	\$ 56,000
Biology-Health Sciences	36	38	60	62	4	0	0	0	96	100	\$ 20,750	\$ 33,000
Civil Engineering	83	92	11	8	6	0	0	0	94	100	\$ 50,000	\$ 51,540
Communication Studies	60	67	13	11	27	22	0	0	73	78	\$ 27,000	\$ 28,500
Computer Engineering Technology	89	93	0	0	0	0	11	7	100	100	\$ 63,000	\$ 64,000
Dental Hygiene	86	96	4	1	9	2	1	1	91	98	\$ 53,000	\$ 57,500
Diagnostic Medical Sonography	97	98	3	2	0	0	0	0	100	100	\$ 60,000	\$ 60,868
Echocardiography	95	93	0	3	5	3	0	0	95	97	\$ 60,500	\$ 64,000
Electrical Engineering	87	83	0	10	13	7	0	0	87	93	\$ 60,000	\$ 60,000
Electronics Engineering Technology	73	82	7	5	20	14	0	0	80	86	\$ 54,250	\$ 66,750
Embedded Systems Engineering Tech	80	83	0	17	20	0	0	0	80	100	\$ 58,250	\$ 60,000
EMT/Paramedic	100	100	0	0	0	0	0	0	100	100	\$ 48,000	\$ 52,000
Environmental Sciences	67	76	11	18	22	6	0	0	78	94	\$ 39,800	\$ 40,000
Geomatics: GIS	100	100	0	0	0	0	0	0	100	100	\$ 42,000	\$ 42,000
Geomatics: Surveying	69	64	0	9	31	27	0	0	69	77	\$ 40,500	\$ 43,000
Health Care Management	75	80	25	20	0	0	0	0	100	100	\$ 52,000	na
Health Informatics	75	79	10	11	15	11	0	0	85	89	\$ 53,000	\$ 52,000
Information Technology	84	88	0	2	16	10	0	0	84	90	\$ 55,000	\$ 55,000
Management: Accounting	78	83	6	6	17	11	0	0	83	89	\$ 32,000	\$ 32,250
Management: SmBus/Entrepreneurs	77	87	15	13	8	0	0	0	92	100	\$ 33,000	\$ 40,900
Management: Marketing	82	93	0	0	18	7	0	0	82	93	\$ 39,250	\$ 48,500
Manufacturing Engineering Technolo	77	85	5	4	13	11	0	0	87	89	\$ 62,500	\$ 60,000
Mathematics, Applied	60	71	20	29	0	0	20	0	100	100	na	na
Mechanical Engineering	71	82	12	9	10	5	7	4	90	95	\$ 60,000	\$ 60,000
Mechanical Engineering Technology	86	100	7	0	7	0	0	0	93	100	\$ 60,000	\$ 62,500
Medical Laboratory Science	100	100	0	0	0	0	0	0	100	100	\$ 53,750	\$ 55,000
Nuclear Medicine Technology	87	86	0	3	13	11	0	0	87	89	\$ 57,000	\$ 57,846
Nursing												
Operations Management	83	83	11	14	6	3	0	0	94	97	\$ 63,000	\$ 63,000
Polysomnographic Technology	83	100	0	0	17	0	0	0	83	100	\$ 50,000	\$ 40,500
Population Health Management	na	75	na	25	na	0	na	0	na	100	na	\$ 42,000
Psychology, Applied	54	66	24	26	15	5	6	3	85	95	\$ 30,000	\$ 30,000
Radiologic Science	92	97	1	0	6	3	1	1	94	97	\$ 47,000	\$ 50,000
Renewable Energy Engineering	76	83	6	8	18	9	0	0	82	91	\$ 57,000	\$ 56,500
Respiratory Care	97	98	0	0	3	2	0	0	97	98	\$ 56,000	\$ 56,000
Software Engineering Technology	93	91	0	0	3	7	3	3	97	93	\$ 62,250	\$ 66,750
Technology and Management	100	88	0	0	0	12	0	0	100	88	na	na
Vascular Technology	92	91	0	0	8	9	0	0	92	91	\$ 64,602	\$ 62,000

Additional Notes:

Numbers may not add to 100 due to rounding

na=not reported, or not available due to small sample size

METHODOLOGY

Sample Frame 2016: 781 degrees awarded per FAST

Survey Response Rate: 49% Total Knowledge Rate 2016: 75%

Sources: Data collected from a variety of sources. Below, for 2016, in chronological order:

Grad Fair paper survey

Faculty senior exit survey

Career Services survey

Career Services followup with non-respondents

Faculty information from their contact with students

LinkedIn Profiles

Salaries of \$2,500 and below and \$250,000 and above were deleted.

Students with dual majors are included under each major

Known Outcomes 2016: 587

Known Outcomes 2013/2014/2015 combined N=1008

Known Outcomes 2014/2015/2016 combined N=1244

Student Learning Outcome #1. The student will demonstrate the ability to communicate effectively in oral, written and visual forms.

Direct Assessments 1, 2 and 3

Faculty assessed 27 students direct assignments in Echo 420A, Echo 420B and Echo 421 in the 2016-2017 Academic year. The rubric is designed for the student learning outcome for oral communication was given to the students and used to grade the assignment. The faculty rated the proficiency of students using the rubric in the table below.

Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Content	Grading Rubric	1-4 scale per rubric proficiency criteria	80% with 3.0 or higher	81%
Organization	Grading Rubric	1-4 scale per rubric proficiency criteria	80% with 3.0 or higher	93%
Style	Grading Rubric	1-4 scale per rubric proficiency criteria	80% with 3.0 or higher	81%
Delivery	Grading Rubric	1-4 scale per rubric proficiency criteria	80% with 3.0 or higher	81%
Visuals	Grading Rubric	1-4 scale per rubric proficiency criteria	80% with 3.0 or higher	100%

Table 1: Oral Communication 2016-2017 27 students Echo 420A, Echo420B, Echo 421

Direct Assessments 1, 2 and 3 Written

Faculty assessed 27 students direct assignments in Echo 420A, Echo 420B and Echo 421 in the 2016-2017 Academic year. The rubric is designed for the student learning outcome for written communication was given to the students and used to grade the assignment. The faculty rated the proficiency of students using the rubric in the table below.

Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Purpose and Ideas	Grading Rubric	1-4 scale per rubric proficiency criteria	80% with 3.0 or higher	93%

Organization	Grading Rubric	1-4 scale per rubric proficiency criteria	80% with 3.0 or higher	93%
Support	Grading Rubric	1-4 scale per rubric proficiency criteria	80% with 3.0 or higher	81%
Style	Grading Rubric	1-4 scale per rubric proficiency criteria	80% with 3.0 or higher	81%
Conventions	Grading Rubric	1-4 scale per rubric proficiency criteria	80% with 3.0 or higher	93%
Documentation	Grading Rubric	-4 scale per rubric proficiency criteria	80% with 3.0 or higher	93%

Table 1: Written Communication 2016-2017 27 students Echo 420A, Echo420B, Echo 421

Student Learning Outcome#5 The student will demonstrate knowledge and understanding of human gross anatomy, sectional, anatomy and normal and abnormal cardiovascular anatomy.

The Oregon Tech faculty assessed 31 students on direct assignments in Echo 325 and Echo 365 in the 2016-2017 academic school year. The three grading rubrics are listed below in tables 3a, and 3b.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Patent Ductus Arteriosus	Rubric	1-4	80% 3 or 4	83%
Atrial Septal Defect	Rubric	1-4	80% 3 or 4	92%
Ventricular Septal Defect	Rubric	1-4	80% 3 or 4	92%
Valvular Stenosis	Rubric	1-4	80% 3 or 4	83%
Transposition of the Great Vessels	Rubric	1-4	80% 3 or 4	83%
Tetraology of Fallot	Rubric	1-4	80% 3 or 4	83%

Table 3a Echo 325 Direct Assignment Measurement SLO#5 2016-2017

Strengths: Students were able to demonstrate knowledge of abnormal cardiac embryology and pathology in the pediatric echocardiography course.

Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Essential View 1 Aorta	Rubric	1-4	80% 3 or 4	100%
Essential View 2 Iliacs	Rubric	1-4	80% 3 or 4	84%
Essential View 3 Celiac	Rubric	1-4	80% 3 or 4	89%
Essential View 4 SMA	Rubric	1-4	80% 3 or 4	89%
Essential View 5 IMA	Rubric	1-4	80% 3 or 4	
Essential View 6 Renal Arteries	Rubric	1-4	80% 3 or 4	84%
Essential View	Rubric	1-4	80% 3 or 4	84%

7 Kidneys				
Essential View 8 Renal Arteries Flank	Rubric	1-4	80% 3 or 4	84%
Essential View 9 Renal Arteries Prone	Rubric	1-4	80% 3 or 4	84%
Essential View 10 Kidneys	Rubric	1-4	80% 3 or 4	89%
Essential View 11 Liver	Rubric	1-4	80% 3 or 4	89%
Essential View 12 Spleen	Rubric	1-4	80% 3 or 4	89%
Essential View 13 Hepatic	Rubric	1-4	80% 3 or 4	89%

Table 3b Echo 365 Direct Assignment Measurement SLO#5 2016-2017

Strengths: Students were able to show scanning competencies in each area of the abdominal vascular anatomy by the end of the course in the final project.

#	Question	Highly prepared	Prepared	Unprepared	Highly unprepared	Total				
7	1. The student will demonstrate the ability to communicate effectively in oral, written and visual forms.	62.50%	5	37.50%	3	0.00%	0	0.00%	0	8
8	2. The student will demonstrate the ability to work effectively in teams.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8
9	3. The student will demonstrate an ability to provide basic patient care and comfort.	87.50%	7	12.50%	1	0.00%	0	0.00%	0	8
10	4. The student will employ professional judgment and discretion.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8
11	5. The student will demonstrate knowledge and understanding of human gross anatomy, sectional anatomy, and normal and abnormal cardiovascular anatomy.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8
12	6. The student will demonstrate knowledge and understanding of cardiovascular physiology, pathology, and pathophysiology.	87.50%	7	12.50%	1	0.00%	0	0.00%	0	8
13	7. The student will demonstrate knowledge and understanding of cardiovascular physical principles and instrumentation.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8
14	8. The student will demonstrate knowledge and understanding of clinical echocardiography diagnostic procedures and testing.	100.00%	8	0.00%	0	0.00%	0	0.00%	0	8
15	9. The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8
16	10. The student will be able to perform scholarly research and to contribute	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8

that knowledge to the field of echocardiography.									
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Student Learning Outcome #8: The student will demonstrate knowledge and understanding of clinical echocardiographic diagnostic procedures and testing.

The assignment used to grade the students on this learning outcome are case studies that they prepare in their externship courses in 2016-2017 academic year on 21 students. The grading rubric used is in the below table.

Two Direct Assessments SLO#8

Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Demonstrates Understandings of Cardiac Scanning Protocols	Rubric	1-4	80% at 3 or 4	90%
Demonstrates accurate understand of cardiac interpretation	Rubric	1-4	80% at 3 or 4	81%
Demonstrates understanding of historical background and relevancy of the case.	Rubric	1-4	80% at 3 or 4	90%
Demonstrates and ability to discuss the case and all its aspects.	Rubric	1-4	80% at 3 or 4	86%
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	86%
Written components contain all parts of scientific writing	Rubric	1-4	80% at 3 or 4	86%

Summary Table 4, Two Direct Measures SLO#8 Echo 420A, Echo 420B 2016-2017

Strengths: Over 80% of the students were able to demonstrate knowledge and understanding of clinical diagnostic testing and procedures in echocardiography. They were able to demonstrate this knowledge through well designed and researched real cardiac case studies. This is not to surprising as the students are already working and employed in the field before starting the degree completion program.

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

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, Echo 420B and Echo 421 in the 2016-2017 Academic Year on 27 total students. The grading rubric was scored in the table below.

Summary Three Direct Measurements SLO #10

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	81%
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	81%
Apply the scholarly information	Grading rubric	1-4 scale	80%, at 3 or 4	91%
Ability to interpret scholarly data	Grading rubric	1-4 scale	80%, at 3 or 4	91%
Ability to present/summary the scholarly information	Grading rubric	1-4 scale	80%, at 3 or 4	81%

Table 2: Three direct assignment assessments SLO#10 2016-2017 Academic Year.

Students performed at or above in all categories of scholarly research. As a result of this data, the Oregon Tech Faculty decided the students were proficient in scholarly research.

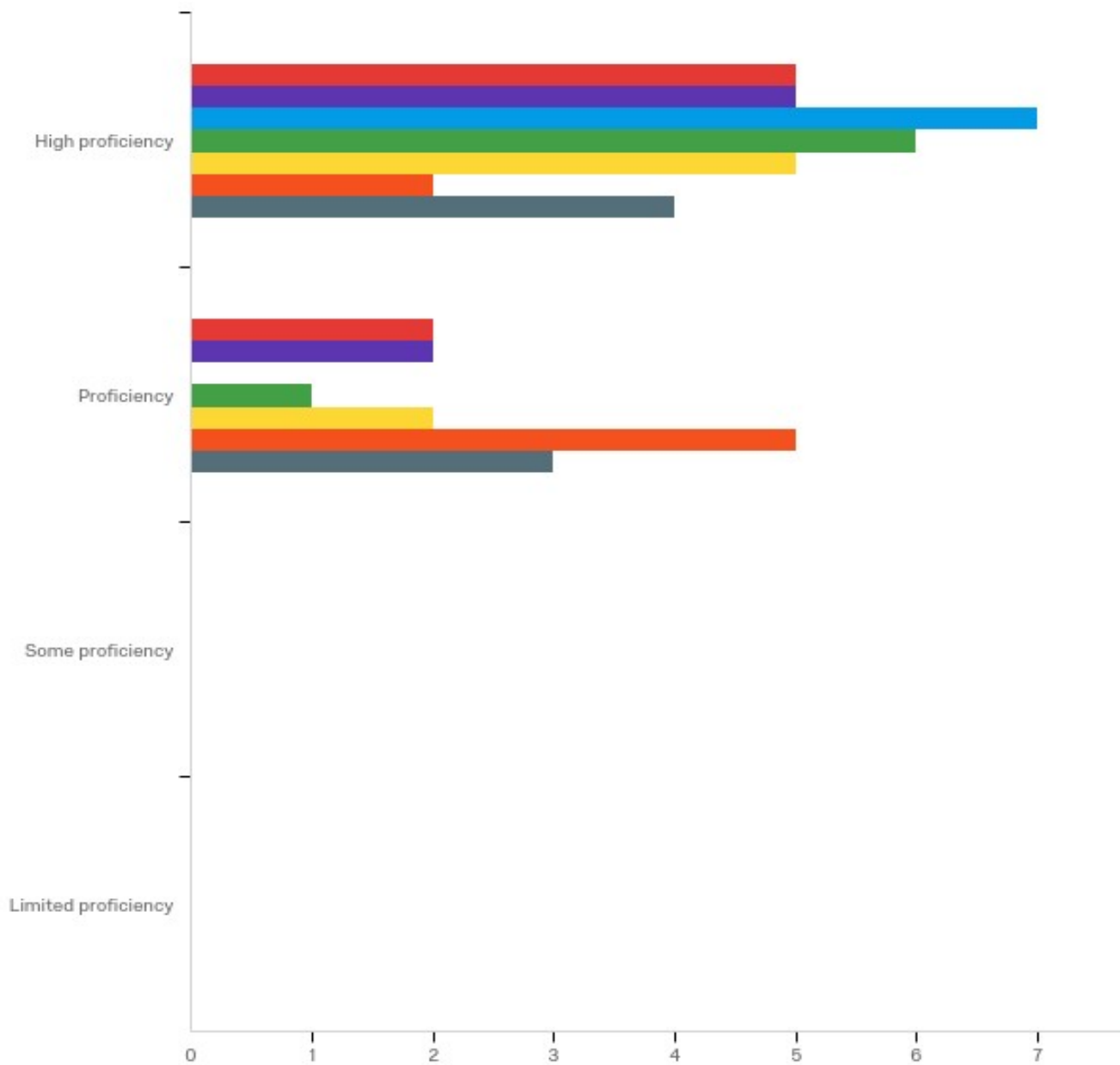
Default Report

2016-17 Student Exit Survey - Echocardiography B.S. Degree Completion

November 2nd 2017, 2:35 pm PDT

Q3 - Oregon Tech Essential Student Learning Outcomes

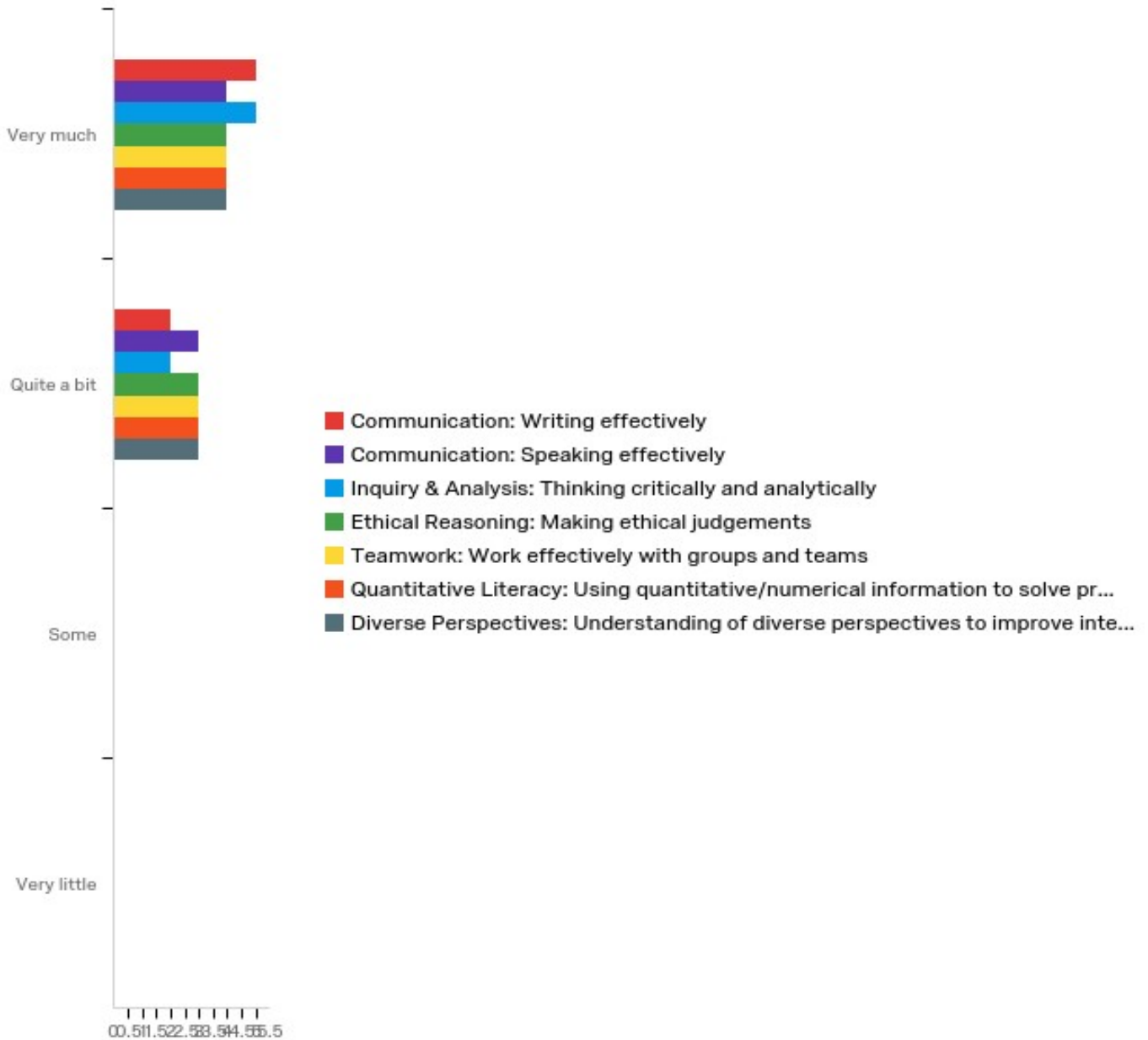
Please rate your proficiency in the following areas:



#	Question	High proficiency		Proficiency		Some proficiency		Limited proficiency	
1	Communication: Writing effectively	14.71%	5	13.33%	2	0.00%	0	0.00%	0
2	Communication: Speaking effectively	14.71%	5	13.33%	2	0.00%	0	0.00%	0
3	Inquiry & Analysis: Thinking critically and analytically	20.59%	7	0.00%	0	0.00%	0	0.00%	0
4	Ethical Reasoning: Making ethical judgements	17.65%	6	6.67%	1	0.00%	0	0.00%	0
5	Teamwork: Work effectively with groups and teams	14.71%	5	13.33%	2	0.00%	0	0.00%	0
6	Quantitative Literacy: Using quantitative/numerical information to solve problems, evaluate claims, and support decisions	5.88%	2	33.33%	5	0.00%	0	0.00%	0
7	Diverse Perspectives: Understanding of diverse perspectives to improve interactions with others	11.76%	4	20.00%	3	0.00%	0	0.00%	0
	Total	Total	34	Total	15	Total	0	Total	0

Q4 - Oregon Tech Essential Student Learning Outcomes

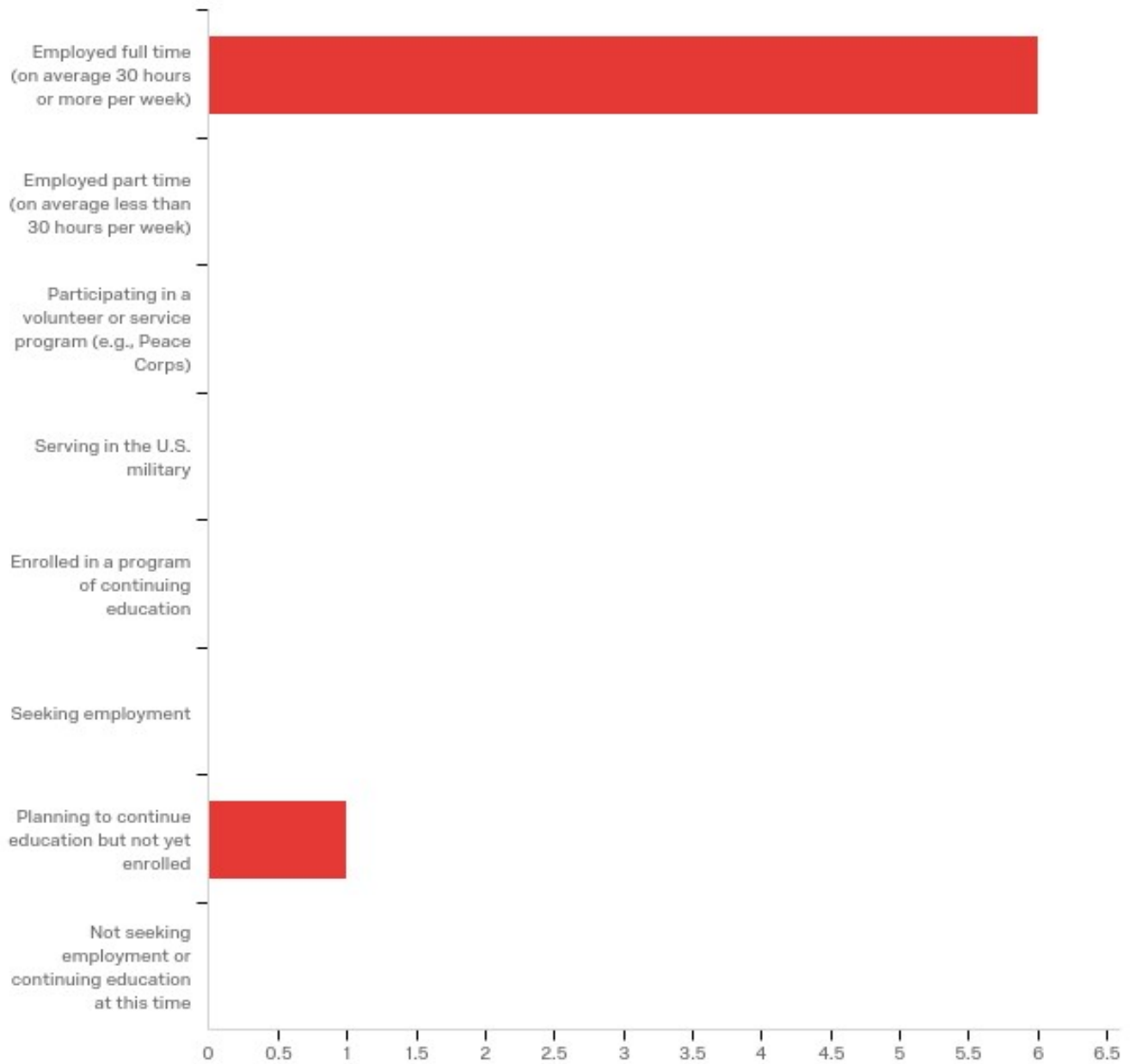
How much has your experience at Oregon Tech contributed to your knowledge, skills, and personal development in these areas?



#	Question	Very much	Quite a bit	Some	Very little	Total
1	Communication: Writing effectively	71.43%	28.57%	0.00%	0.00%	7
2	Communication: Speaking effectively	57.14%	42.86%	0.00%	0.00%	7

3	Inquiry & Analysis: Thinking critically and analytically	71.43%	5	28.57%	2	0.00%	0	0.00%	0	7
4	Ethical Reasoning: Making ethical judgements	57.14%	4	42.86%	3	0.00%	0	0.00%	0	7
5	Teamwork: Work effectively with groups and teams	57.14%	4	42.86%	3	0.00%	0	0.00%	0	7
6	Quantitative Literacy: Using quantitative/numerical information to solve problems, evaluate claims, and support decisions	57.14%	4	42.86%	3	0.00%	0	0.00%	0	7
7	Diverse Perspectives: Understanding of diverse perspectives to improve interactions with others	57.14%	4	42.86%	3	0.00%	0	0.00%	0	7

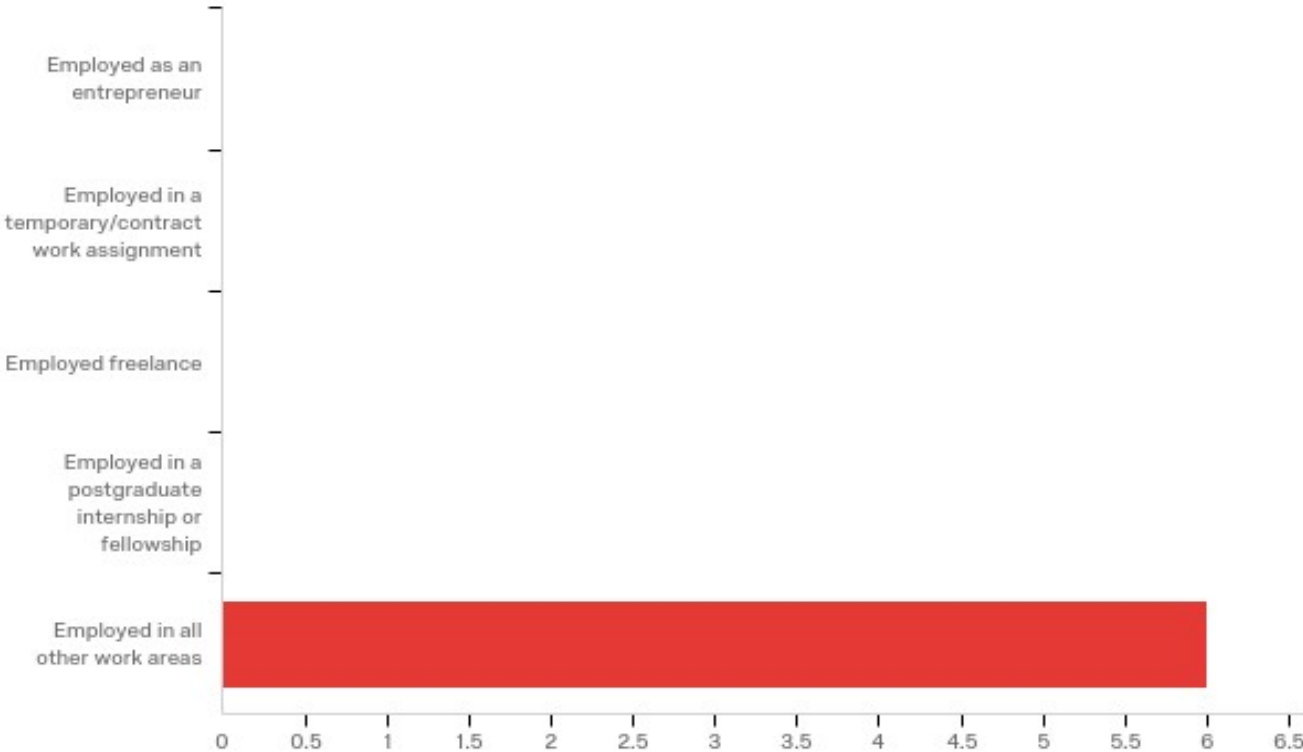
Q5 - Which of the following BEST describes your PRIMARY status after graduation?



#	Answer	%	Count
1	Employed full time (on average 30 hours or more per week)	85.71%	6
2	Employed part time (on average less than 30 hours per week)	0.00%	0
3	Participating in a volunteer or service program (e.g., Peace Corps)	0.00%	0
4	Serving in the U.S. military	0.00%	0
5	Enrolled in a program of continuing education	0.00%	0
6	Seeking employment	0.00%	0

7	Planning to continue education but not yet enrolled	14.29%	1
8	Not seeking employment or continuing education at this time	0.00%	0
	Total	100%	7

Q6 - Please select the category which BEST describes your employment after graduation:

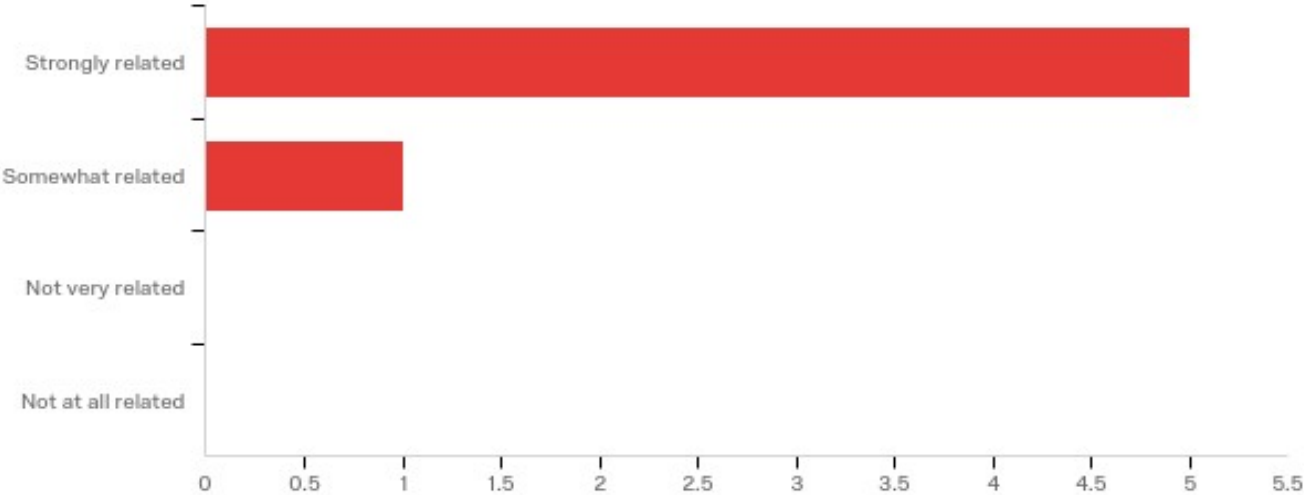


#	Answer	%	Count
1	Employed as an entrepreneur	0.00%	0
2	Employed in a temporary/contract work assignment	0.00%	0
3	Employed freelance	0.00%	0
4	Employed in a postgraduate internship or fellowship	0.00%	0
5	Employed in all other work areas	100.00%	6
	Total	100%	6

Q7 - Please provide the following information regarding your employment after graduation:

Employing Organization:	City:	State:	Country:	Job Title:	Annual base salary amount in U.S. dollars:	Guaranteed first-year bonus amount in U.S. dollars:
Northeast Georgia Medical Center	Braselton	Georiga	Hall	CVT Technologist		
Cleveland Clinic Children's	Cleveland	Ohio	Cuyahoga	Supervisor of the Non-Invasive Lab in Pediatric Cardiology	90,000	0
University Hospital: University of New Mexico	Albuquerque	New Mexico	USA	Sonographer	91,250.00	0.00
Centra	Lynchburg	VA	USA	Echo Educator	73000.00	0.00
Nationwide Children's Hospital	Columbus	OH	USA	Pediatric cardiac sonographer	32.0	0

Q8 - How closely related is your position to your Oregon Tech degree?



#	Answer	%	Count
1	Strongly related	83.33%	5
2	Somewhat related	16.67%	1
3	Not very related	0.00%	0
4	Not at all related	0.00%	0
	Total	100%	6

Q9 - Please select the category which BEST describes your employment after graduation:



#	Answer	%	Count
1	Employed as an entrepreneur	0.00%	0
2	Employed in a temporary/contract work assignment	0.00%	0
3	Employed freelance	0.00%	0
4	Employed in a postgraduate internship or fellowship	0.00%	0
5	Employed in all other work areas	0.00%	0
	Total	100%	0

Q10 - Please provide the following information regarding your employment after graduation:

Employing Organization:

Q11 - How closely related is your position to your Oregon Tech degree?



#	Answer	%	Count
1	Strongly related	0.00%	0
2	Somewhat related	0.00%	0
3	Not very related	0.00%	0
4	Not at all related	0.00%	0
	Total	100%	0

Q12 - Please provide the following information about your volunteer or service assignment:

Organization:

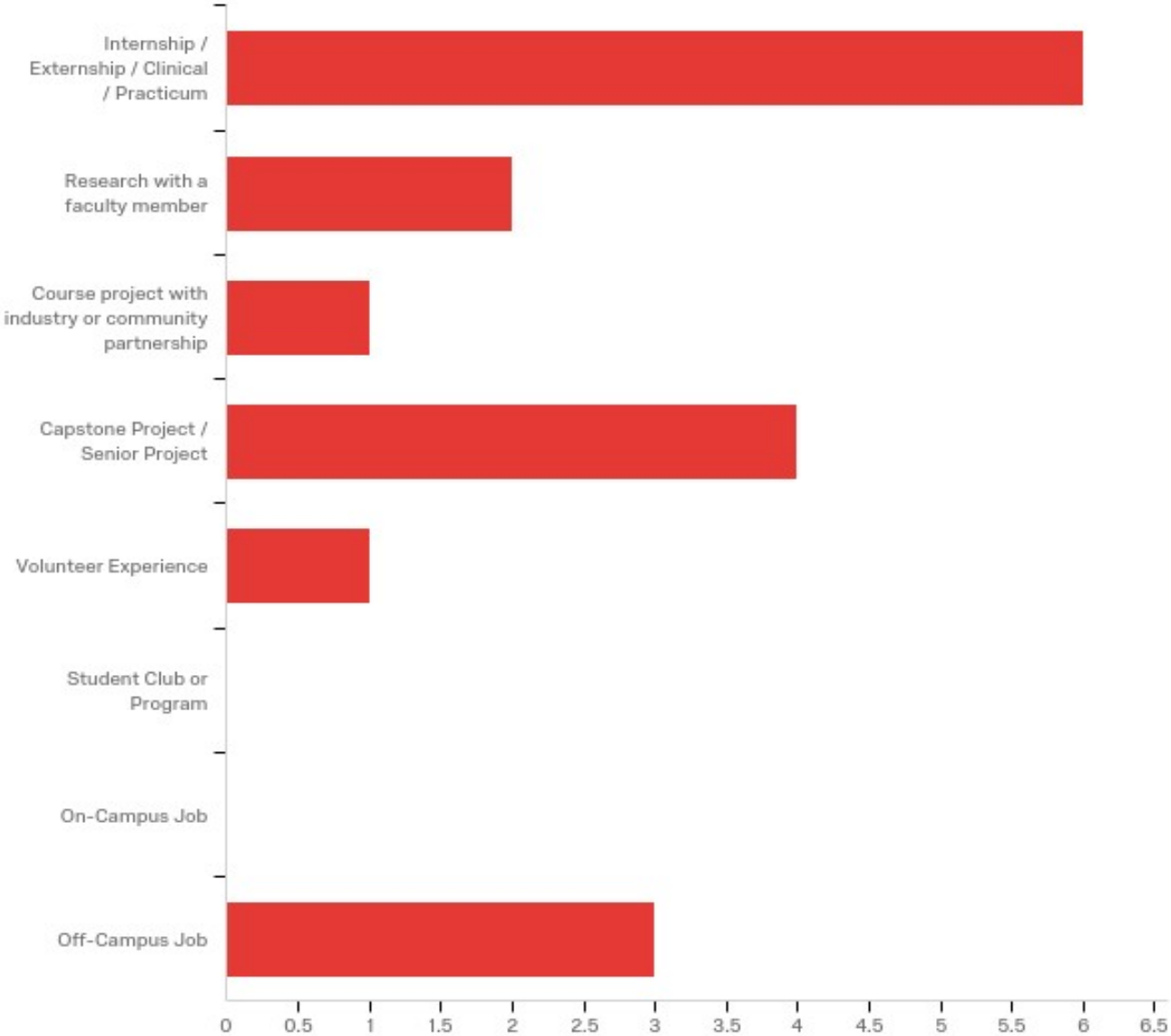
Q13 - Please provide the following information about your military assignment:

Service Branch:

Q14 - Please provide the following information regarding your continuing education following graduation:

Name of Institution:

Q15 - Oregon Tech recognizes that learning occurs in a variety of venues and experiences. Please check all of the following learning experiences you participated in while enrolled as a student at Oregon Tech.



#	Answer	%	Count
1	Internship / Externship / Clinical / Practicum	35.29%	6
13	Research with a faculty member	11.76%	2
12	Course project with industry or community partnership	5.88%	1
10	Capstone Project / Senior Project	23.53%	4
8	Volunteer Experience	5.88%	1

4	Student Club or Program	0.00%	0
5	On-Campus Job	0.00%	0
6	Off-Campus Job	17.65%	3
	Total	100%	17

Q16 - Please tell us more about your Internship / Externship / Clinical / Practicum.

Name of company or organization:	Brief description of internship	What term was the internship?	Duration in weeks	Average hours per week
University Hospital	Pediatric cardiac imaging			
St Josph Ann Arbor hospital/ St Mary Mercy hospital	open heart surgery/ hearth cath/ pacemaker insertion		two weeks	watch 8 hours
Centra	Observed various imaging modalities	Winter 2015		4

Q17 - Please tell us more about your research with a faculty member.

Name of faculty member:	Brief description of experience:	What term(s) did you participate:	Duration in weeks:	Average hours per week:
Dr. Kenneth Zahka	Valsartan for Attenuating Disease Evolution In Early Sarcomeric HCM (VANISH)- Multicenter Research Project	Ongoing since May 2015 (Last year of trial)	156 weeks total	Average 1 hour a week
Children's Hospital Heart Center	MRI cardiac imaging			

Q18 - Please tell us more about your course project with industry or community partnership.

Name of company or organization:

Q19 - Please tell us more about your capstone project or senior project:

Name of company or organization:	Brief description of experience:	What term(s) did you participate:	Duration in weeks:	Average hours per week:
University of New Mexico	Assessing different medical imaging modalities			

Q20 - Please tell us more about your volunteer experience:

Name of company or organization:	Brief description of experience:	What term(s) did you participate:	Duration in weeks:	Average hours per week:
Simon Fund	Simon's Fund: Preventing Sudden Cardiac Arrest in Children (Volunteer Screening for SCD)	August 2015	1 day	6 hours

Q21 - Please select all of the student clubs and/or programs you participated in while at Oregon Tech:

- ALPS - Philosophy / Poetry Club
- Amateur Radio Club
- ASCE (Civil Engineers)
- ASME - Mechanical Engineers
- AUVSL - Astronauts
- Astronomy Club
- Unmanned Vehicle
- Baja SAE
- Systems and BarCamp
- Christian Fellowship
- Beautification Club
- Circle K Club
- Disc Golf Club
- DMS Club
- Engineer Echo Club
- Phi Eta Sigma
- Borders (FWS) (Engineering Honor)
- Formula SAE
- Gaming Community
- Harvard Club
- Honor Organization
- IEEE Electrical and of Oregon Tech
- Electronics International Club
- Lambda Pi Eta
- Mathematics Club
- Mars Reach
- Martial Arts
- Newman Club
- Nuclear Medicine
- Performing Musicians
- Phi Beta Kappa Band
- Business Club
- Psy Child Psychology
- Psychology Club
- Radiologic Science
- Energy Engineers
- Robotics Club
- SAD Power Club
- SADHA - Student Activities
- Social Activities
- Social Dancing Club
- Students in
- SWE Society of Women Communication
- Trading Card Game
- Student Government
- Vascular Club
- Campus Activities
- Diversity Center
- International
- Student Services
- New Student
- Orientation (NSO)
- Outdoor Program
- Residence Hall
- Broadcasting (C) Association (RHA)
- Program (SVP)
- Thy Women's Resource Center (WRC)

#	Answer	%	Count
1	ALPS - Philosophy / Poetry Club	0.00%	0
2	Amateur Radio Club	0.00%	0
3	ASCE (Civil Engineers)	0.00%	0
4	ASME - Mechanical Engineers	0.00%	0
5	Astronomy Club	0.00%	0

6	AUVSI - Assoc for Unmanned Vehicle Systems Int'l	0.00%	0
7	Baja SAE	0.00%	0
8	Barbell Club	0.00%	0
9	Campus Beautification Club	0.00%	0
10	Christian Fellowship Club	0.00%	0
11	Circle K Club	0.00%	0
12	Disc Golf Club	0.00%	0
13	DMS Club	0.00%	0
14	Echo Club	0.00%	0
15	Engineers without Borders (EWB)	0.00%	0
16	Epsilon Eta Sigma (Engineering Honor Society)	0.00%	0
17	Formula SAE	0.00%	0
18	Gaming Community	0.00%	0
19	Geomatics Club	0.00%	0
20	Hawaii Club: Alanui o Pueo	0.00%	0
21	Health Science Club	0.00%	0
22	Honor Organization of Oregon Tech (HOOT)	0.00%	0
23	IEEE Electrical and Electronics Engineers	0.00%	0
24	International Club	0.00%	0
25	Lambda Pi Eta	0.00%	0
26	Mathematics Club	0.00%	0
27	Mars Reach	0.00%	0
28	Martial Arts	0.00%	0
29	Newman Club	0.00%	0
30	Nuclear Medicine	0.00%	0
31	Nursing Students without Borders	0.00%	0
32	Performing Musicians - Pep Band	0.00%	0
33	Phi Beta Lambda - Business Club	0.00%	0
34	Phi Delta Theta	0.00%	0
35	Psy Chi (Psychology Honor Society)	0.00%	0
36	Psychology Club	0.00%	0
37	Radiologic Science	0.00%	0

38	REE - Renewable Energy Engineers	0.00%	0
39	Respiratory Club	0.00%	0
40	Robotics Club	0.00%	0
41	Rowing Club	0.00%	0
42	SADHA at CCC - Chemeketa	0.00%	0
43	SADHA Dental Hygiene	0.00%	0
44	Social Activities Club	0.00%	0
45	Social Dancing Club	0.00%	0
46	Students for the Child	0.00%	0
47	Students in Communication	0.00%	0
48	SWE Society of Women Engineers	0.00%	0
49	Tennis Club	0.00%	0
50	Trading Card Game Club	0.00%	0
51	Vascular Club	0.00%	0
52	Student Government (ASOIT)	0.00%	0
53	Campus Activities (CAB)	0.00%	0
54	Diversity Center (DC)	0.00%	0
55	International Student Services (ISS)	0.00%	0
56	KTEC-FM Radio Station	0.00%	0
57	New Student Orientation (NSO)	0.00%	0
58	Outdoor Program (OP)	0.00%	0
59	Oregon Tech Broadcasting (OTB)	0.00%	0
60	Residence Hall Association (RHA)	0.00%	0
61	Student Veterans Program (SVP)	0.00%	0
62	The Edge Newspaper	0.00%	0
63	Women's Resource Center (WRC)	0.00%	0
	Total	100%	0

Data source misconfigured for this visualization

Q22 - Please tell us more about your on-campus job:

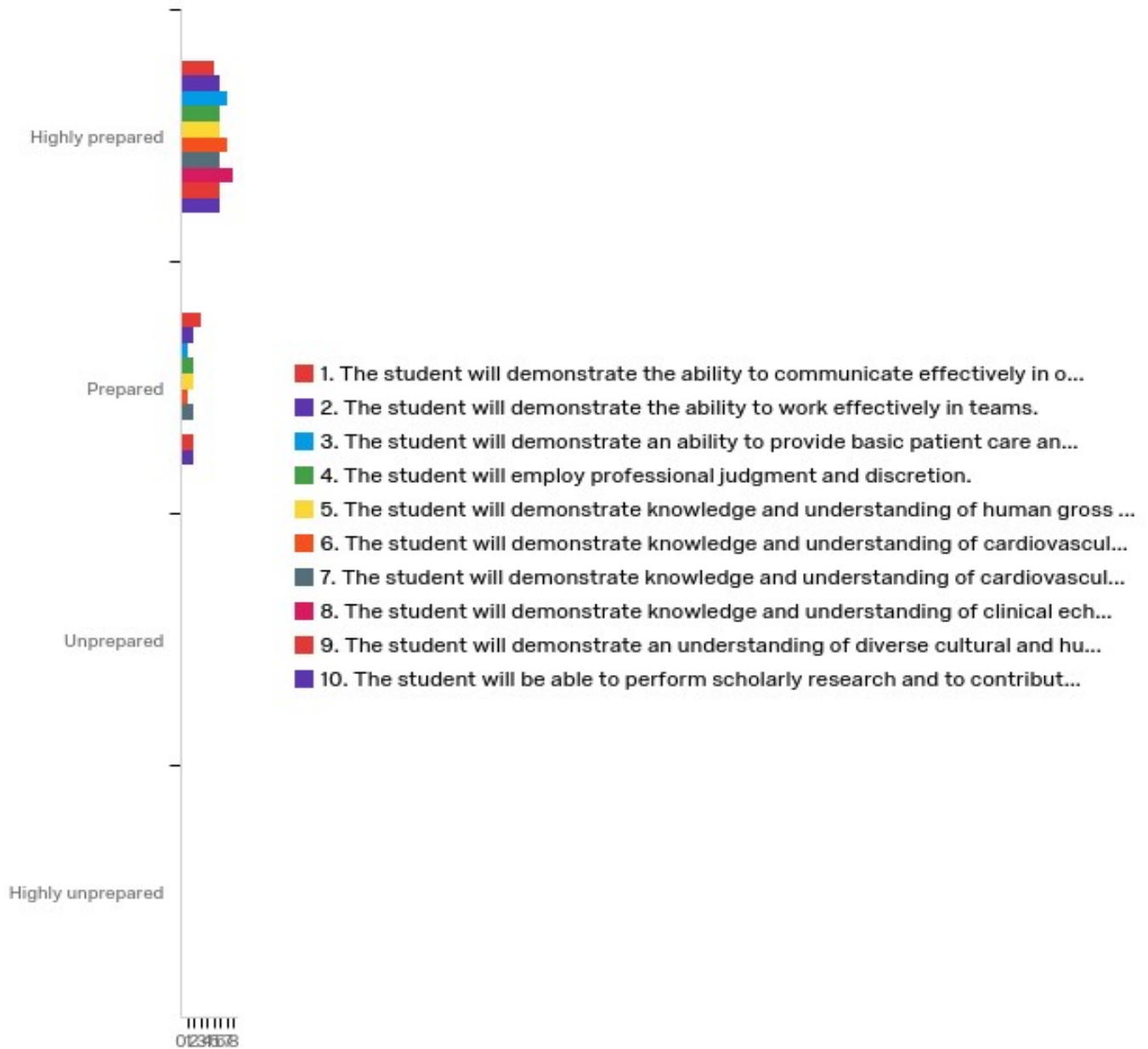
Name of department:

Q23 - Please tell us more about your off-campus job:

Name of company or organization:	Brief description of experience:	What term(s) did you participate:	Duration in weeks:	Average hours per week:
Worked full time as Non invasive coordinator of echo lab				40+

Q24 - Program Student Learning Outcomes - Echocardiography B.S. Degree Completion

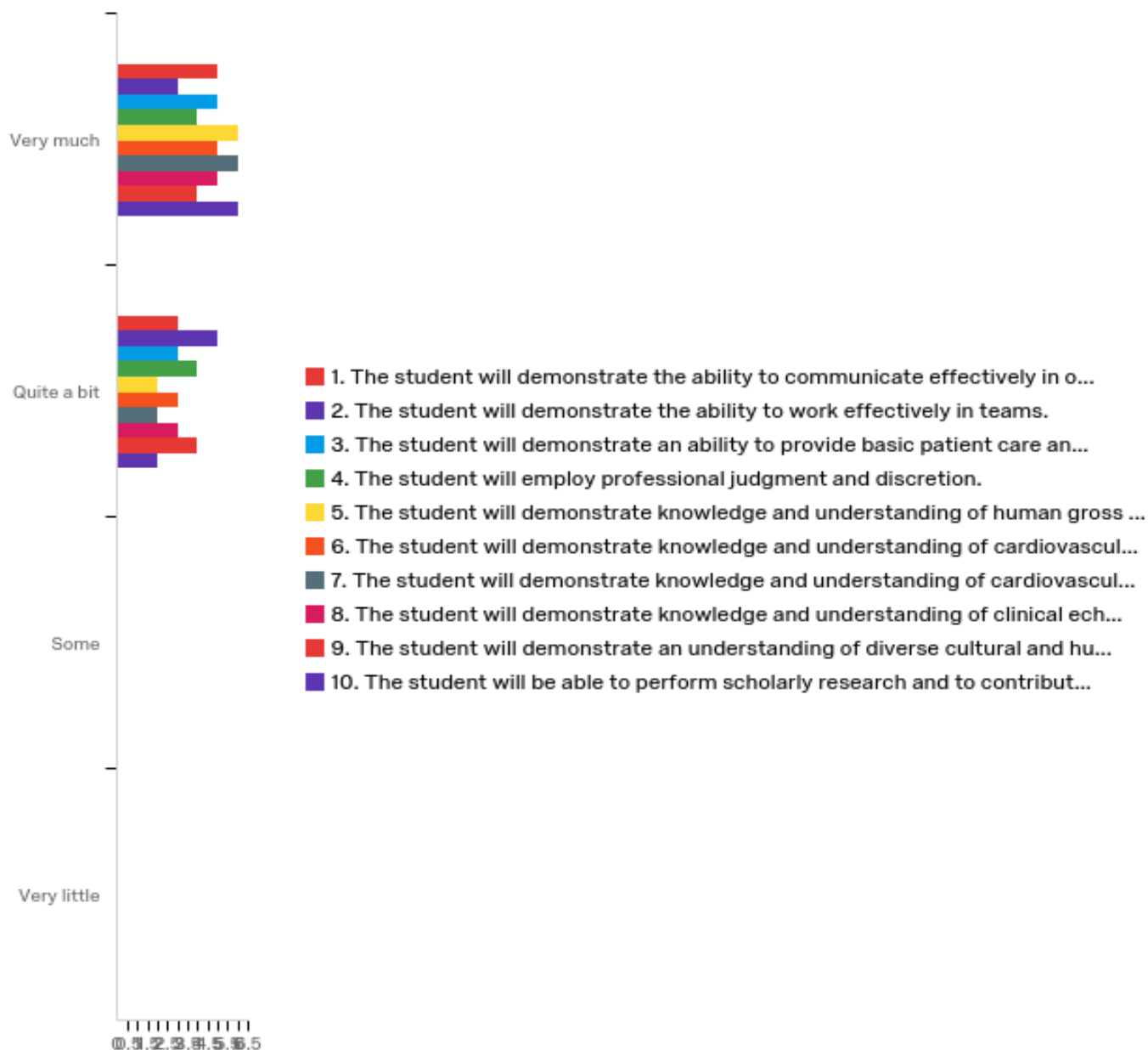
Please rate your proficiency in the following areas:



#	Question	Highly prepared	Prepared	Unprepared	Highly unprepared	Total
7	1. The student will demonstrate the ability to communicate effectively in oral, written and visual forms.	62.50%	37.50%	0.00%	0.00%	8
8	2. The student will demonstrate the ability to	75.00%	25.00%	0.00%	0.00%	8

	work effectively in teams.									
9	3. The student will demonstrate an ability to provide basic patient care and comfort.	87.50%	7	12.50%	1	0.00%	0	0.00%	0	8
10	4. The student will employ professional judgment and discretion.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8
11	5. The student will demonstrate knowledge and understanding of human gross anatomy, sectional anatomy, and normal and abnormal cardiovascular anatomy.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8
12	6. The student will demonstrate knowledge and understanding of cardiovascular physiology, pathology, and pathophysiology.	87.50%	7	12.50%	1	0.00%	0	0.00%	0	8
13	7. The student will demonstrate knowledge and understanding of cardiovascular physical principles and instrumentation.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8
14	8. The student will demonstrate knowledge and understanding of clinical echocardiography diagnostic procedures and testing.	100.00%	8	0.00%	0	0.00%	0	0.00%	0	8
15	9. The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8
16	10. The student will be able to perform scholarly research and to contribute that knowledge to the field of echocardiography.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8

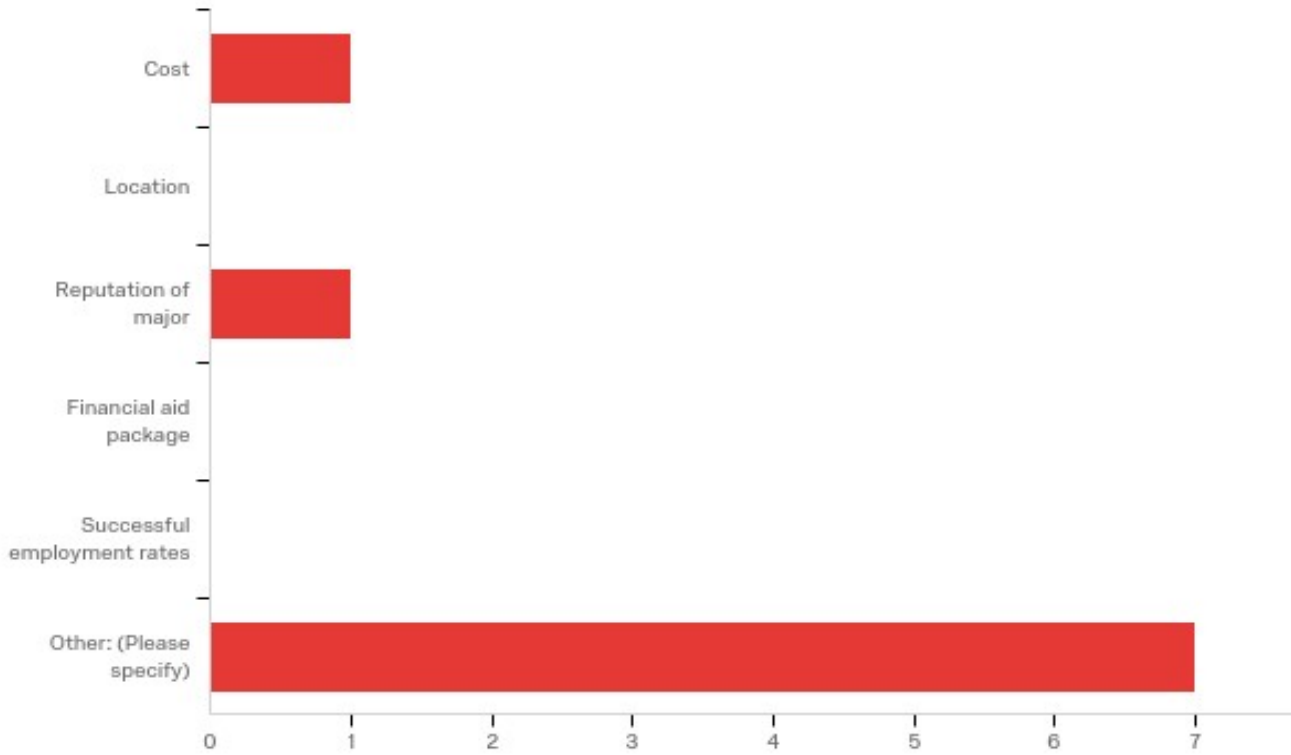
Q25 - Program Student Learning Outcomes - Echocardiography B.S. Degree Completion
How much has your experience at Oregon Tech contributed to your knowledge, skills, and personal development in these areas?



#	Question	Very much	Quite a bit	Some	Very little	Total
7	1. The student will demonstrate the ability to communicate effectively in oral, written and visual forms.	62.50% 5	37.50% 3	0.00% 0	0.00% 0	8
8	2. The student will demonstrate the ability to work effectively in teams.	37.50% 3	62.50% 5	0.00% 0	0.00% 0	8
9	3. The student will demonstrate an ability to provide basic patient care and an understanding of the role of the echocardiographer.	62.50% 5	37.50% 3	0.00% 0	0.00% 0	8

	to provide basic patient care and comfort.									
10	4. The student will employ professional judgment and discretion.	50.00%	4	50.00%	4	0.00%	0	0.00%	0	8
11	5. The student will demonstrate knowledge and understanding of human gross anatomy, sectional anatomy, and normal and abnormal cardiovascular anatomy.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8
12	6. The student will demonstrate knowledge and understanding of cardiovascular physiology, pathology, and pathophysiology.	62.50%	5	37.50%	3	0.00%	0	0.00%	0	8
13	7. The student will demonstrate knowledge and understanding of cardiovascular physical principles and instrumentation.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8
14	8. The student will demonstrate knowledge and understanding of clinical echocardiography diagnostic procedures and testing.	62.50%	5	37.50%	3	0.00%	0	0.00%	0	8
15	9. The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society.	50.00%	4	50.00%	4	0.00%	0	0.00%	0	8
16	10. The student will be able to perform scholarly research and to contribute that knowledge to the field of echocardiography.	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8

Q26 - What attracted to you to Oregon Tech? (Please check all that apply)



#	Answer	%	Count
1	Cost	11.11%	1
2	Location	0.00%	0
3	Reputation of major	11.11%	1
4	Financial aid package	0.00%	0
5	Successful employment rates	0.00%	0
6	Other: (Please specify)	77.78%	7
	Total	100%	9

Other: (Please specify)

Other: (Please specify) - Text
Online Capability
Ability to take one class at a time and remain in school while working full time, giving birth and caring for a newborn, and raising a family. This structure gives women (especially mothers) the opporunity to finish school to enhance their career and make a decent salary.

specialized program not offered at other colleges

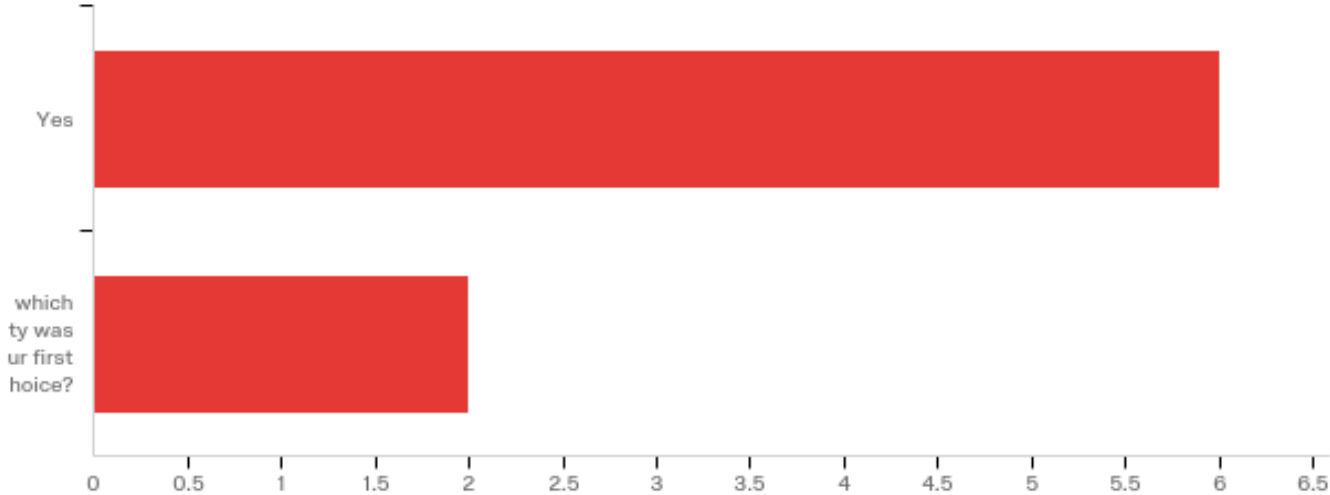
The school literature I received in the mail and online courses without quitting work.

Online classes, credit for my arams credentials, and credits for my previous degree.

Personal gain and encouraged by employer

Degree

Q27 - Was Oregon Tech your first choice?



#	Answer	%	Count
1	Yes	75.00%	6
2	No If not, which university was your first choice?	25.00%	2
	Total	100%	8

No

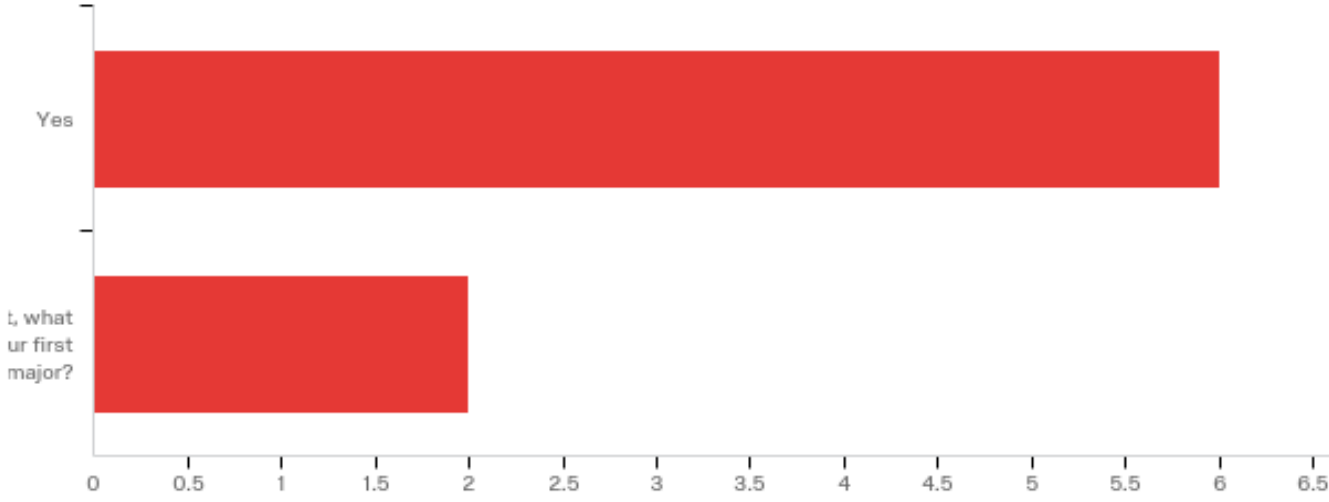
If not, which university was your first choice?

No

If not, which university was your first choice? - Text

Sam Houston University.

Q28 - Was Echocardiography Degree Completion your first choice of major?



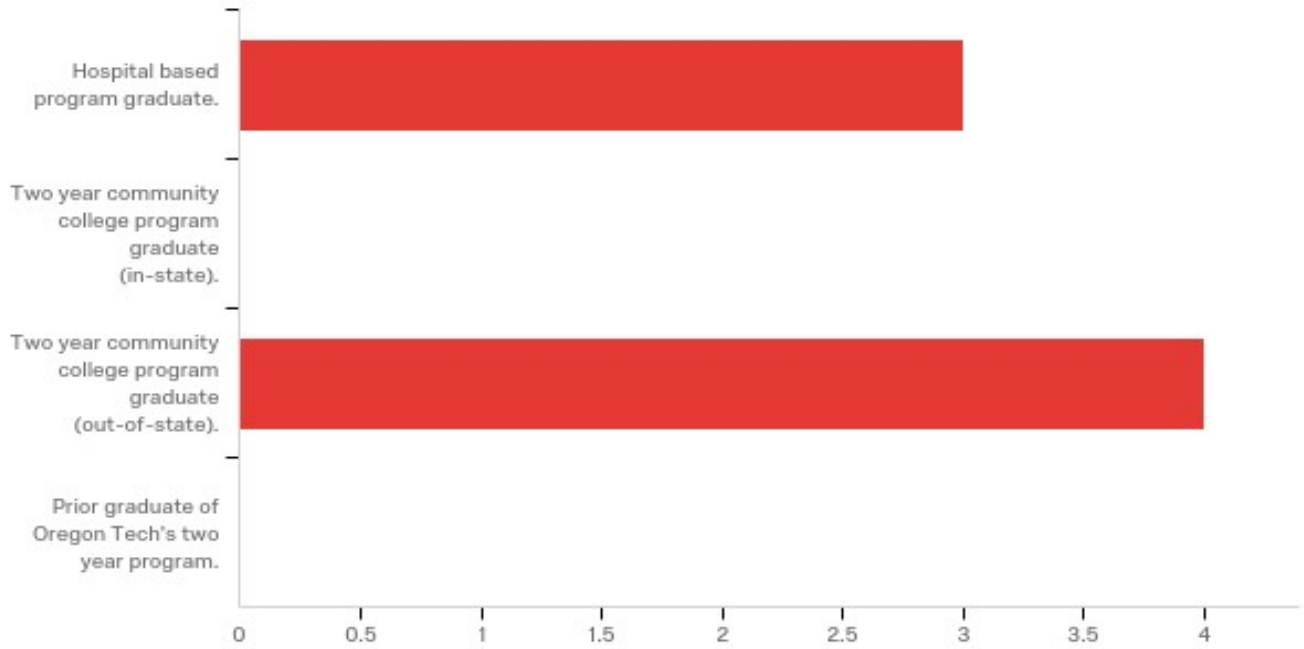
#	Answer	%	Count
1	Yes	75.00%	6
2	No If not, what was your first choice of major?	25.00%	2
	Total	100%	8

No

If not, what was your first choice of major?

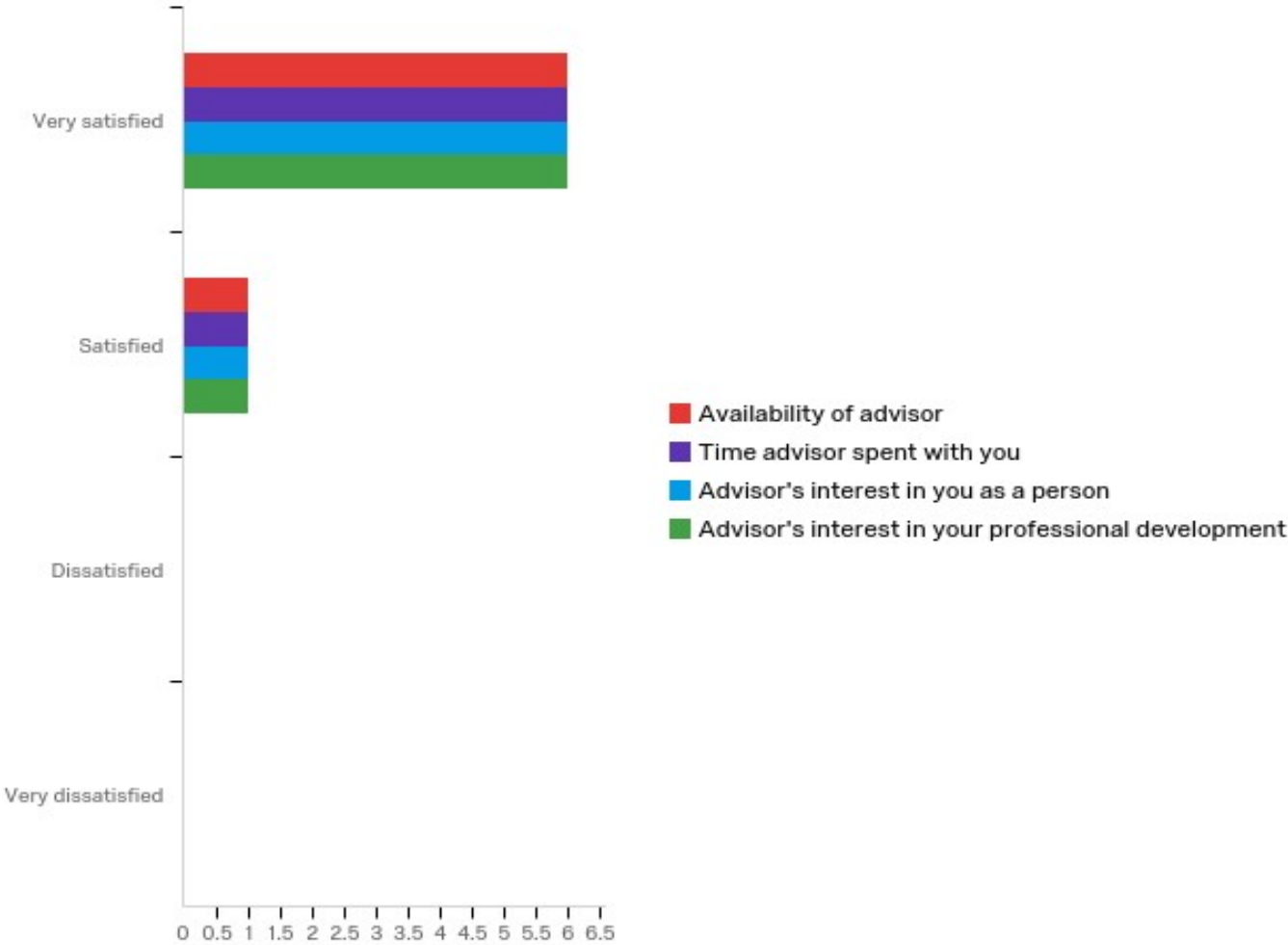
No
If not, what was your first choice of major? - Text
Biology.

Q29 - I entered the program as a:



#	Answer	%	Count
1	Hospital based program graduate.	42.86%	3
2	Two year community college program graduate (in-state).	0.00%	0
3	Two year community college program graduate (out-of-state).	57.14%	4
4	Prior graduate of Oregon Tech's two year program.	0.00%	0
	Total	100%	7

Q30 - Please indicate your level of satisfaction with advising in the Echocardiography Degree Completion program.



#	Question	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied	Total
1	Availability of advisor	85.71% 6	14.29% 1	0.00% 0	0.00% 0	7
2	Time advisor spent with you	85.71% 6	14.29% 1	0.00% 0	0.00% 0	7
3	Advisor's interest in you as a person	85.71% 6	14.29% 1	0.00% 0	0.00% 0	7
4	Advisor's interest in your professional development	85.71% 6	14.29% 1	0.00% 0	0.00% 0	7

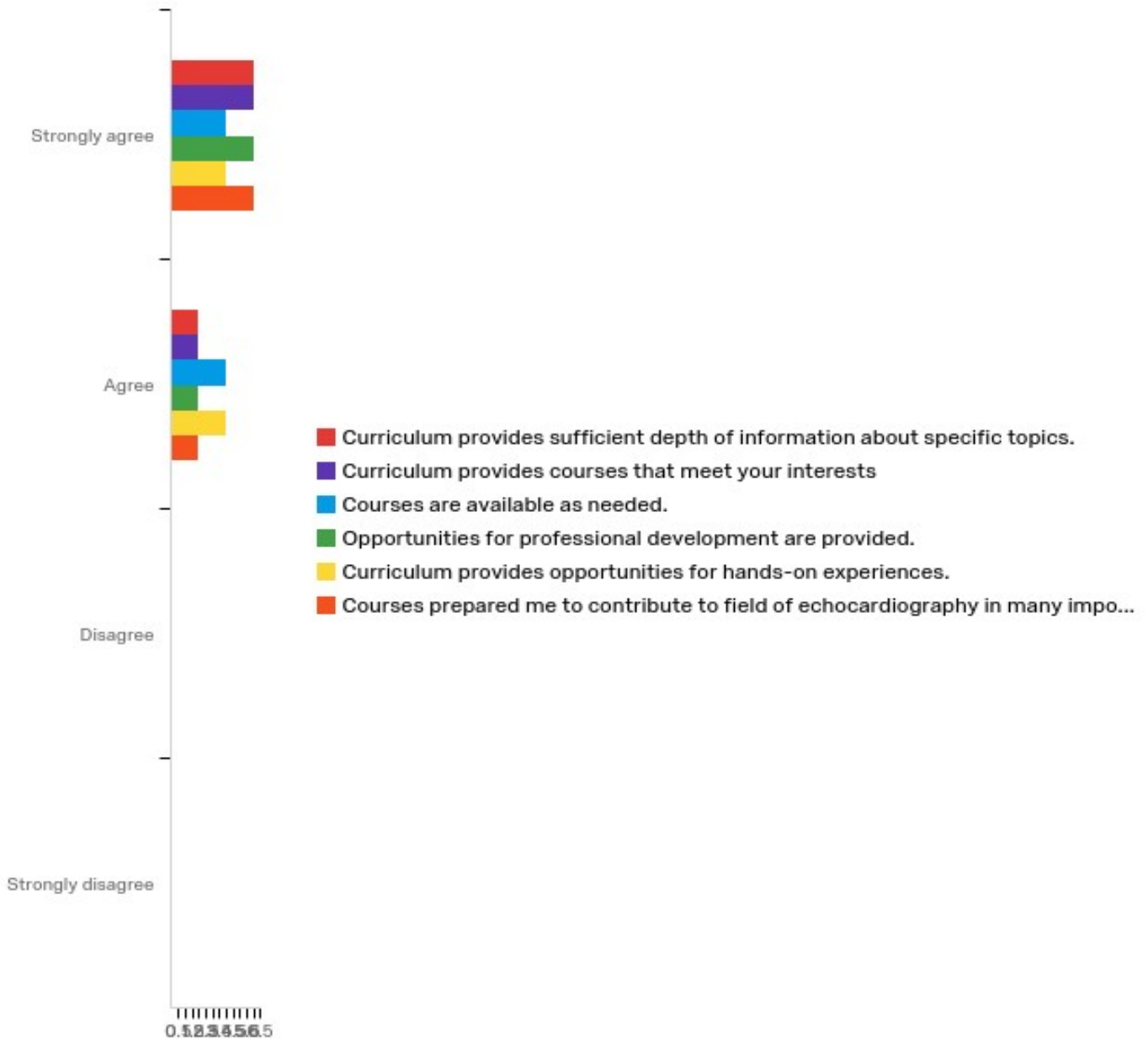
Q31 - Do you have any comments about Echocardiography Degree Completion advising?

Do you have any comments about Echocardiography Degree Completion advising?

The advisors do have the interest of the students to complete the Echocardiography Degree program.

Pediatric echocardiography is offered only once a year. If possible, should be offered minimum 2 times a year.

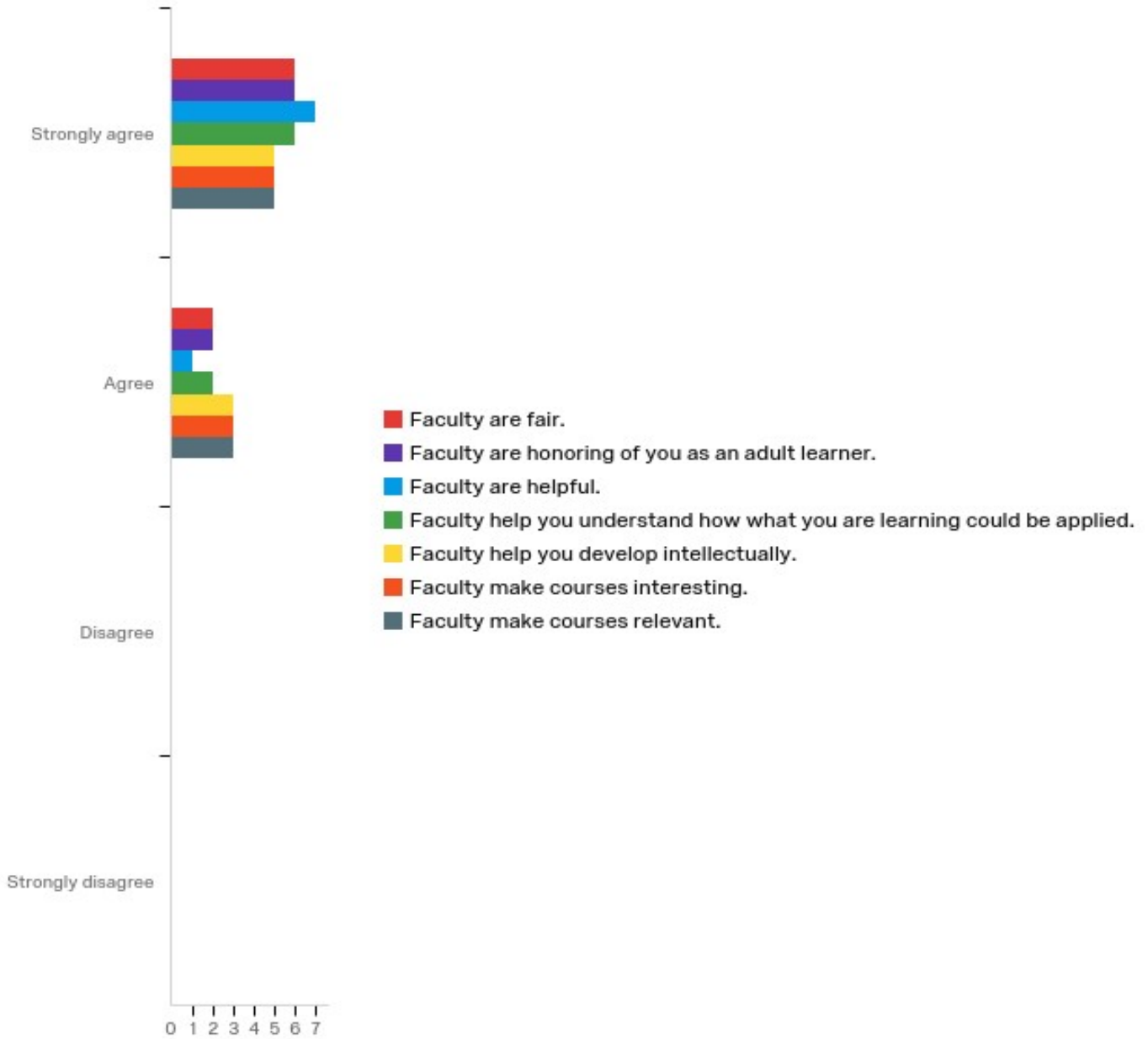
Q32 - Please provide feedback about the Echocardiography Degree Completion program by indicating how much you agree with each one of the following statements.



#	Question	Strongly agree	Agree	Disagree	Strongly disagree	Total
1	Curriculum provides sufficient depth of information about specific topics.	75.00% 6	25.00% 2	0.00% 0	0.00% 0	8
2	Curriculum provides courses that meet your interests	75.00% 6	25.00% 2	0.00% 0	0.00% 0	8
3	Courses are available as needed.	50.00% 4	50.00% 4	0.00% 0	0.00% 0	8
4	Opportunities for professional development are provided.	75.00% 6	25.00% 2	0.00% 0	0.00% 0	8

5	Curriculum provides opportunities for hands-on experiences.	50.00%	4	50.00%	4	0.00%	0	0.00%	0	8
6	Courses prepared me to contribute to field of echocardiography in many important ways	75.00%	6	25.00%	2	0.00%	0	0.00%	0	8

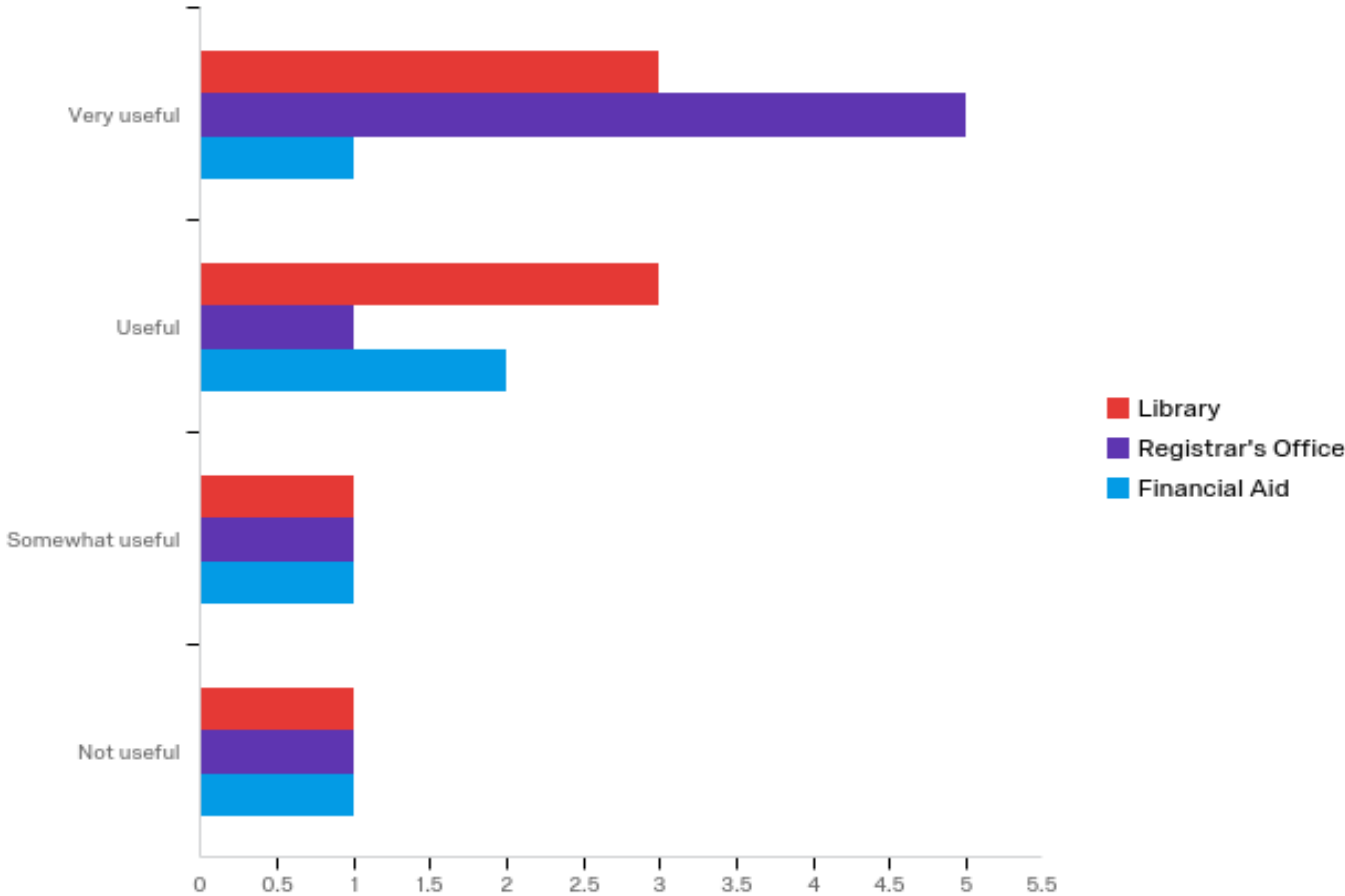
Q33 - Please provide feedback on the Echocardiography Degree Completion faculty.



#	Question	Strongly agree	Agree	Disagree	Strongly disagree	Total
1	Faculty are fair.	75.00% 6	25.00% 2	0.00% 0	0.00% 0	8
2	Faculty are honoring of you as an adult learner.	75.00% 6	25.00% 2	0.00% 0	0.00% 0	8
3	Faculty are helpful.	87.50% 7	12.50% 1	0.00% 0	0.00% 0	8
4	Faculty help you understand how what you are learning could be applied.	75.00% 6	25.00% 2	0.00% 0	0.00% 0	8
5	Faculty help you develop	62.50% 5	37.50% 3	0.00% 0	0.00% 0	8

	intellectually.									
6	Faculty make courses interesting.	62.50%	5	37.50%	3	0.00%	0	0.00%	0	8
7	Faculty make courses relevant.	62.50%	5	37.50%	3	0.00%	0	0.00%	0	8

Q34 - Please provide feedback about how useful the following Oregon Tech services have been to you.



#	Question	Very useful		Useful		Somewhat useful		Not useful		Total
1	Library	37.50%	3	37.50%	3	12.50%	1	12.50%	1	8
2	Registrar's Office	62.50%	5	12.50%	1	12.50%	1	12.50%	1	8
3	Financial Aid	20.00%	1	40.00%	2	20.00%	1	20.00%	1	5

Q36 - Do you feel you are now a life long learner since you completed your degree?

Do you feel you are now a life long learner since you completed your degree?

yes

Yes

Yes I feel like a life long learner. This is a big accomplishment for me to complete by degree.

Yes

yes

YES

Q37 - 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, it was quite difficult to make the decision at the age of 30 to go back to school. I felt I should have worked on this when I was younger, and before I had kids. I am so proud of my accomplishment and I feel good about my hard work.

Yes. The varied courses showed to me that I can learn and master many different fields of learning.

Yes my confidence have really grown. Some people receive you differently with having a degree.

Official bachelor degree in echocardiography will give me confidence working in the filed.

no

YES

Q38 - 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?

I hope so

Yes. I am now more focused on the process and doing all the work without shortcuts.

Yes I can always contribute to the advancing of the Echo field , we have students doing their clinical at our hospital . Some of the information I receive I can pass it on to our student.

I can contribute to the field of echocardiography by teaching others to perform quality exams.

maybe

YES

Q39 - Has your degree given you greater opportunity in your career? If yes, please explain.

Has your degree given you greater opportunity in your career? If yes, please explain.

I was able to apply for the Supervisor position because I was going to school and was going to graduate within 2 years after being hired into the position.

Yes. Without this degree I could not move up to a supervisory position at my hospital.

No Not yet. But I believe the Master Program will give me more opportunity in my career

Yes, now I am eligible to apply for masters degree.

yes, promoted to echo educator and was encouraged for me to get the BS completed.

YES

Q40 - 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).

I particularly loved the case studies. It was amazing to really focus on history, symptoms, and outcome.

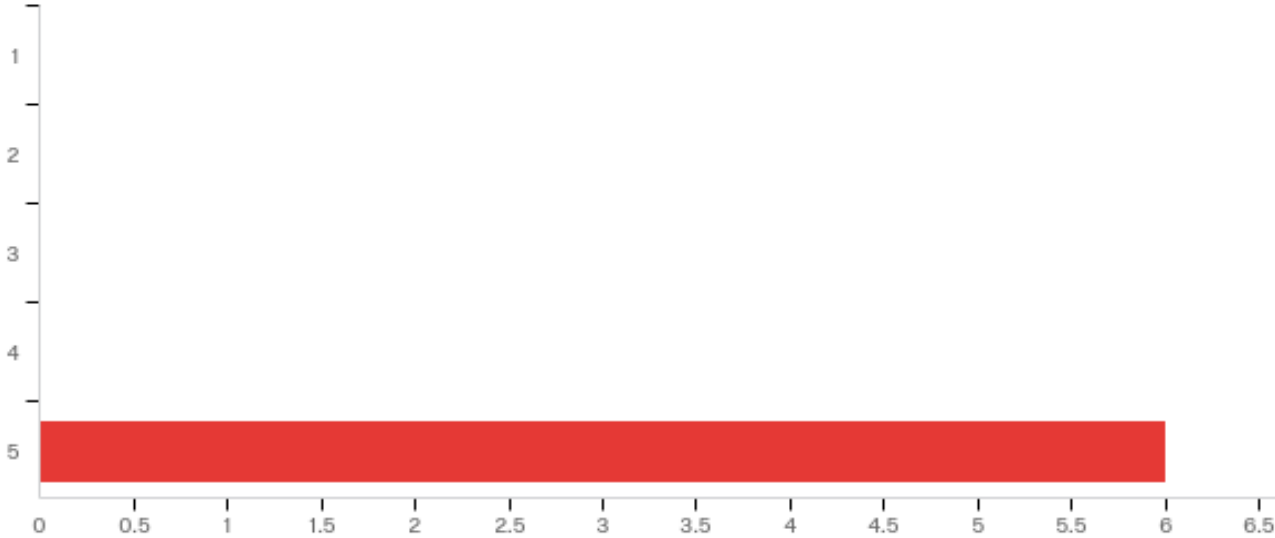
1. Learning I can put in the time to get good grades and really learn the subjects.
2. Being able to have this great job that lets me use my training to help my patients.
3. The varied classes...in a hospital based program you learn your job...but here I had to do all different types of learning.

Dr I , accepting you in the program and helping you get set up to take the classes on line. She is an excellent communicator with her students. 2. Brandy Brown excellent student support services coordinator help guide and encourage students to complete the program , excellent communicator with students. 3. The student blackboard is a very helpful tool to do assignments and turn in assignments as well

Learning APA style writing, my research paper, cath lab and pediatric echocardiography observation.

Working at my own pase

Q41 - What is your overall rating of the education you received at Oregon Tech?



#	Answer	%	Count
1	1	0.00%	0
2	2	0.00%	0
3	3	0.00%	0
4	4	0.00%	0
5	5	100.00%	6
	Total	100%	6

Q42 - Do you have any other comments about your time at Oregon Tech?

Do you have any other comments about your time at Oregon Tech?

I appreciate all the support and guidance from my advisors.

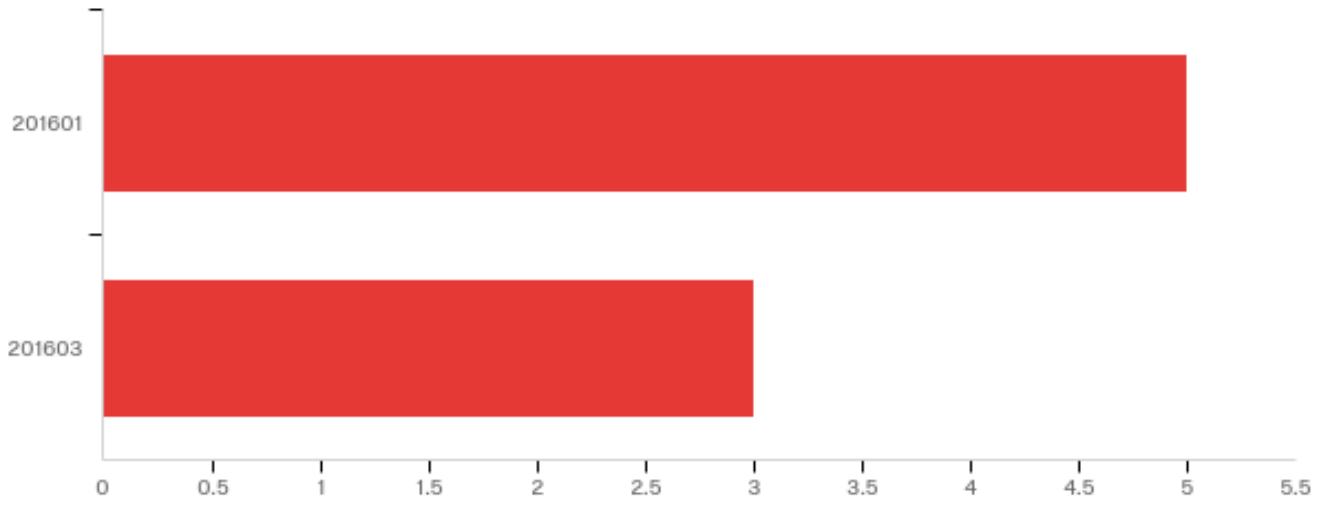
I had a long journey to complete by degree. But it help me to be a consistent and a determinate person. I would and have recommend this program to other people. If I can do it , so can they. During this journey, I have gotten a divorced after 34 years. I lost my oldest brother , son in law and grand baby , father in law . and a home I had for 31 years. But I gain a beautiful new home that I was able to purchased on my own. New grand children lots of them total 12 now. Its been a blessing . Thank you Oregon Institute of Technology you were my second family.

This is the only program in the country that offers online echocardiography bachelors degree. I appreciate all the faculty (Janette Isaacson) for her hard work in developing the curriculum. Because of her hard work and dedication students like me have an opportunity to advance their education.

Q43 - The Echocardiography Degree Completion program would like to stay in touch with you. Please provide us with contact information for you after leaving Oregon Tech.

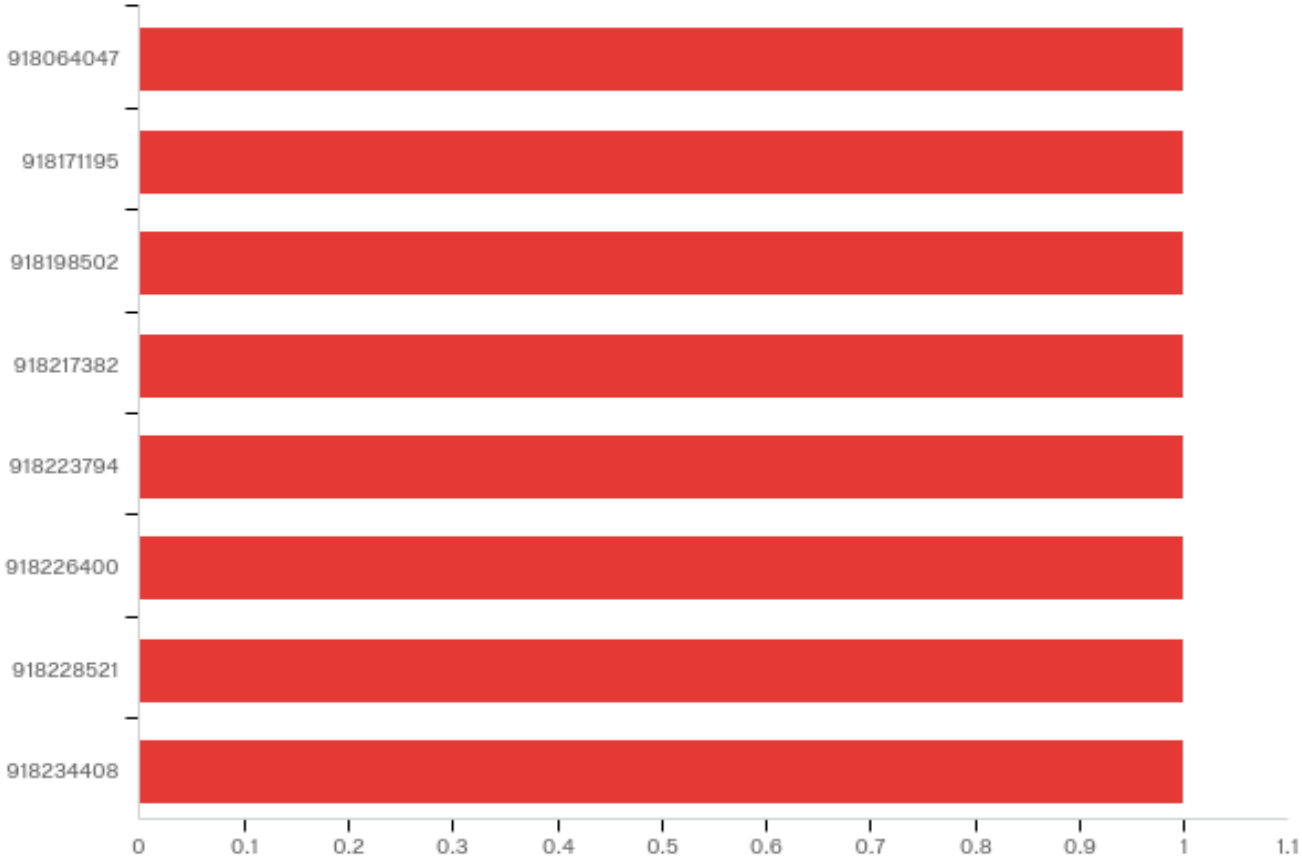
Street Address:	City:	State:	Zip:	Telephone:	E-mail Address:
2205 Education Way	Oakwood	Georgia	30542		
978 Buttonwood Lane	Brunswick	Ohio	44212	440-212-3585	
7000 Shoshone Rd NE	Albuquerque	NM	87110		gmccullough@salud.unm.edu
31473 Brown St	Garden City	Michigan	48135	313 475 2096	deb_upshaw@yahoo.com
15 N. Parkgate Circle	Spring	Texas	77381		rm1reddy@yahoo.com
9516 Red Hose Rd.	Gladys	VA	24554		heartscanner63@gmail.com
256 Beechwood Drive	Tiffin	OH	44883	4196183288	kacy.sisco@gmail.com

Term



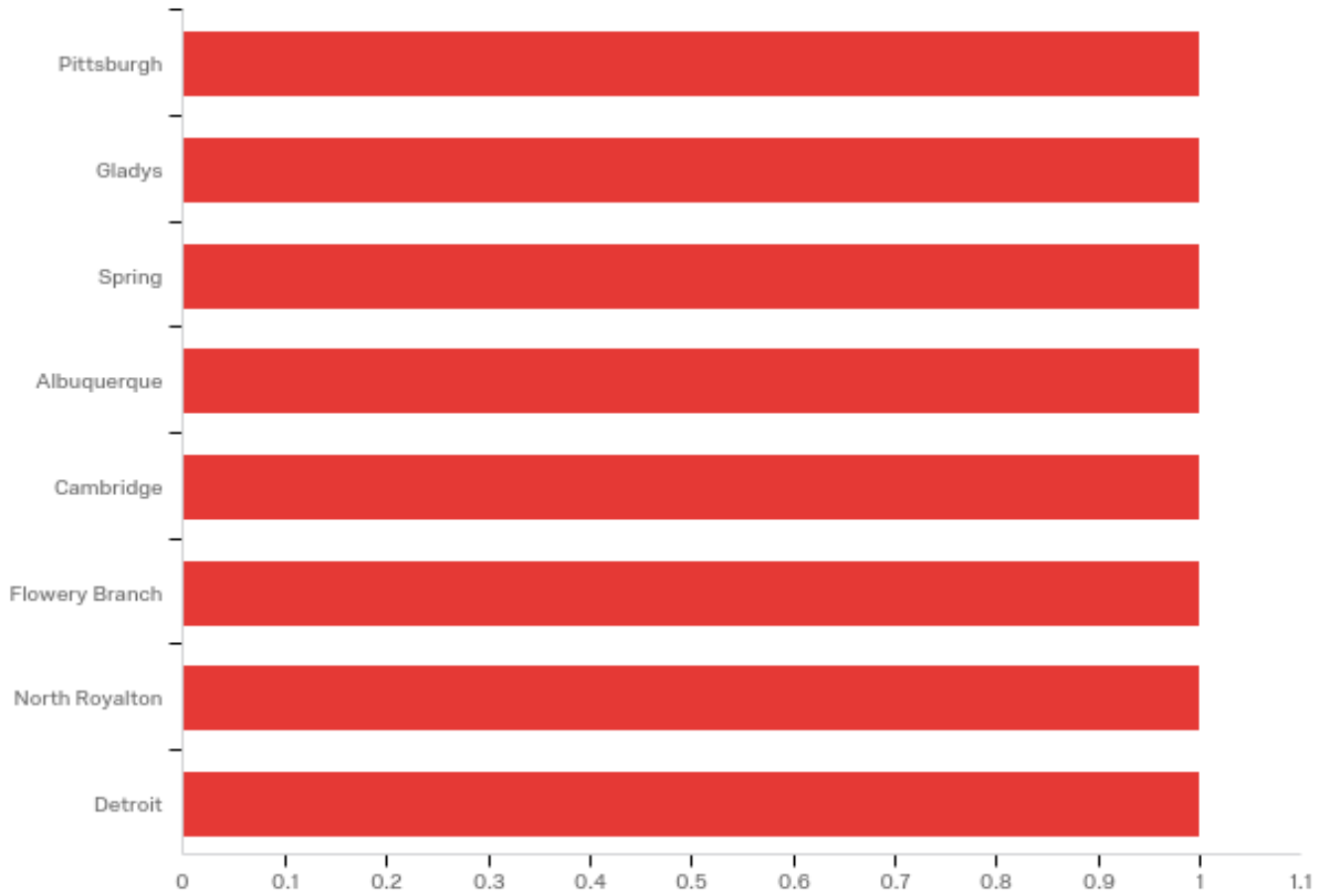
Answer	%	Count
201601	62.50%	5
201603	37.50%	3
Total	100%	8

Student ID



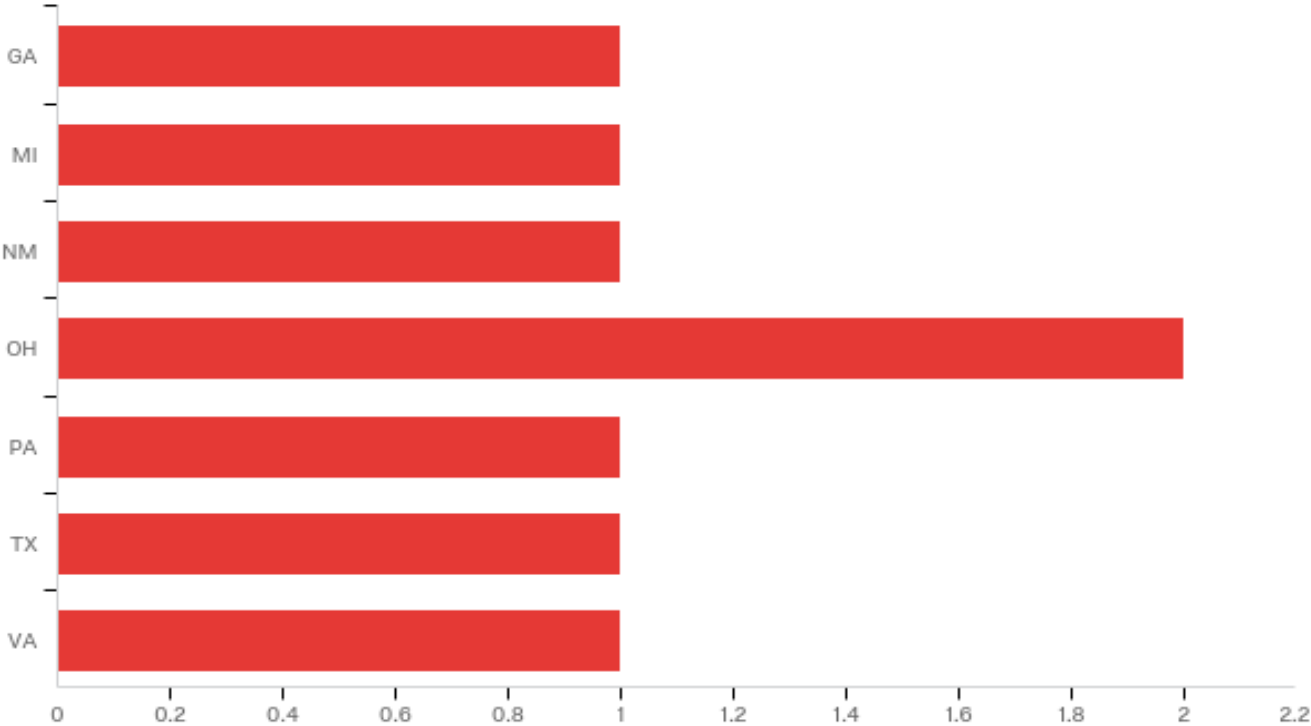
Answer	%	Count
918064047	12.50%	1
918171195	12.50%	1
918198502	12.50%	1
918217382	12.50%	1
918223794	12.50%	1
918226400	12.50%	1
918228521	12.50%	1
918234408	12.50%	1
Total	100%	8

City (GO)



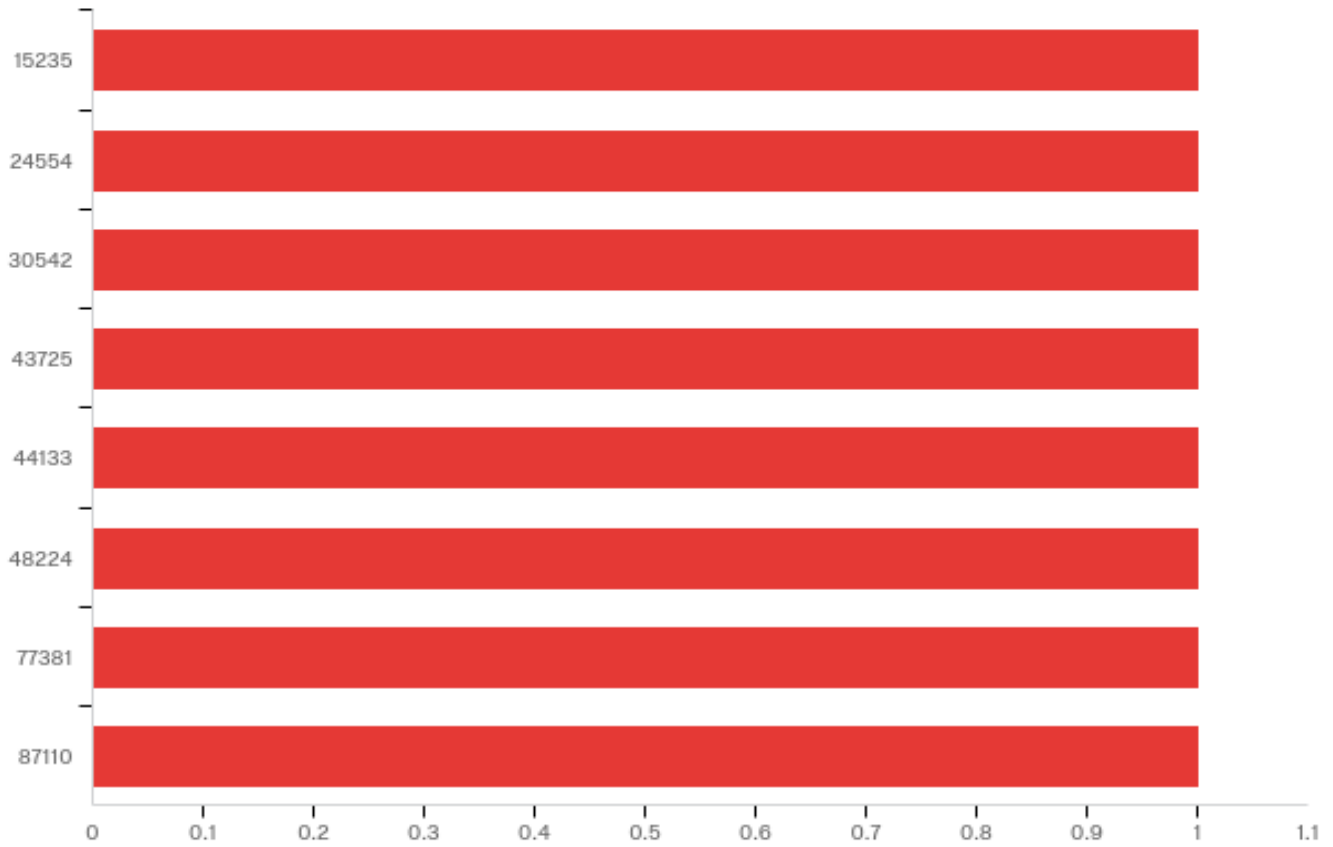
Answer	%	Count
Pittsburgh	12.50%	1
Gladys	12.50%	1
Spring	12.50%	1
Albuquerque	12.50%	1
Cambridge	12.50%	1
Flowery Branch	12.50%	1
North Royalton	12.50%	1
Detroit	12.50%	1
Total	100%	8

State (GO)



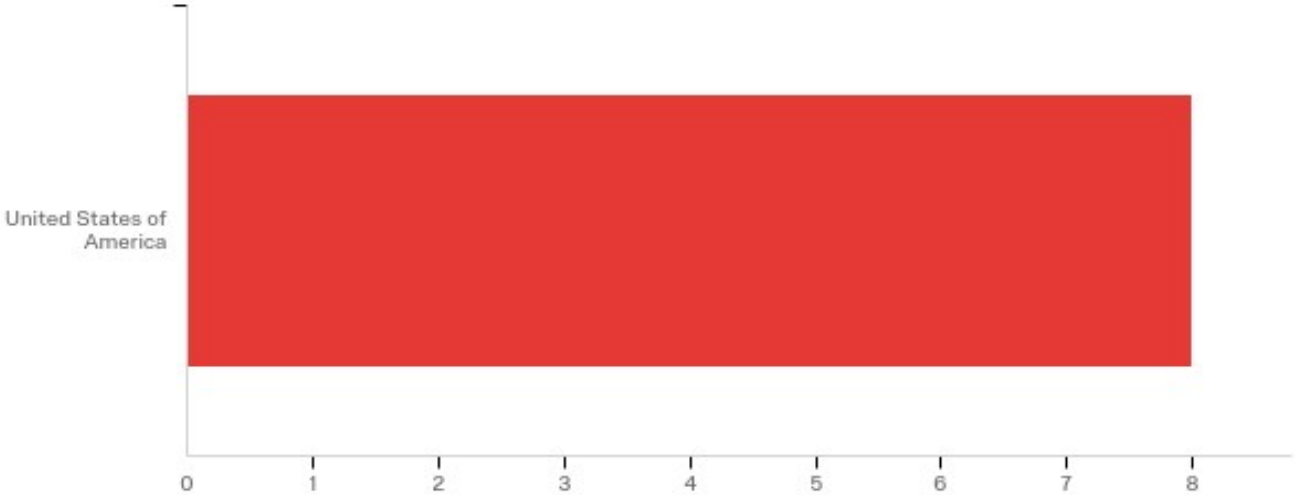
Answer	%	Count
GA	12.50%	1
MI	12.50%	1
NM	12.50%	1
OH	25.00%	2
PA	12.50%	1
TX	12.50%	1
VA	12.50%	1
Total	100%	8

Zip (GO)



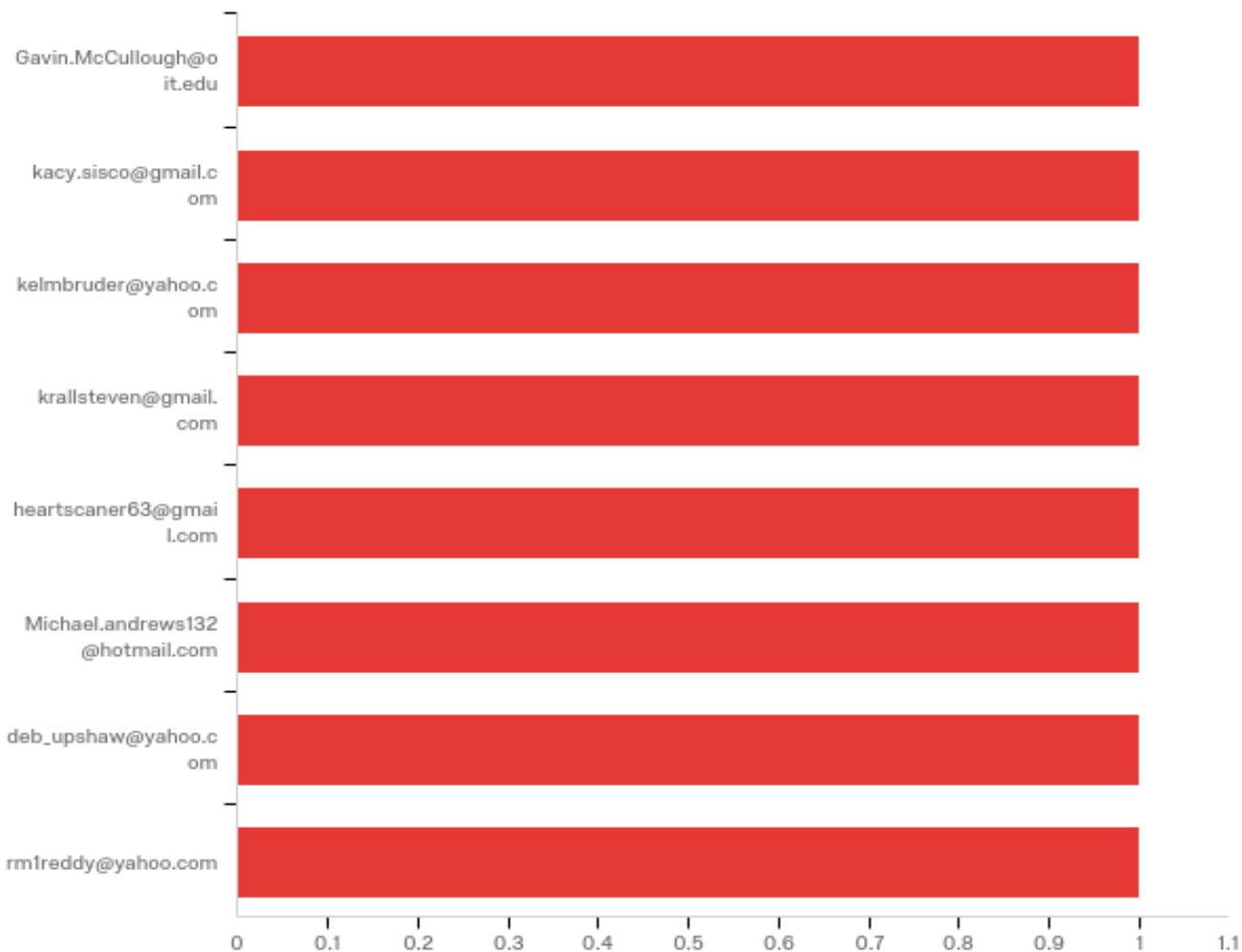
Answer	%	Count
15235	12.50%	1
24554	12.50%	1
30542	12.50%	1
43725	12.50%	1
44133	12.50%	1
48224	12.50%	1
77381	12.50%	1
87110	12.50%	1
Total	100%	8

Nation Desc (GO)



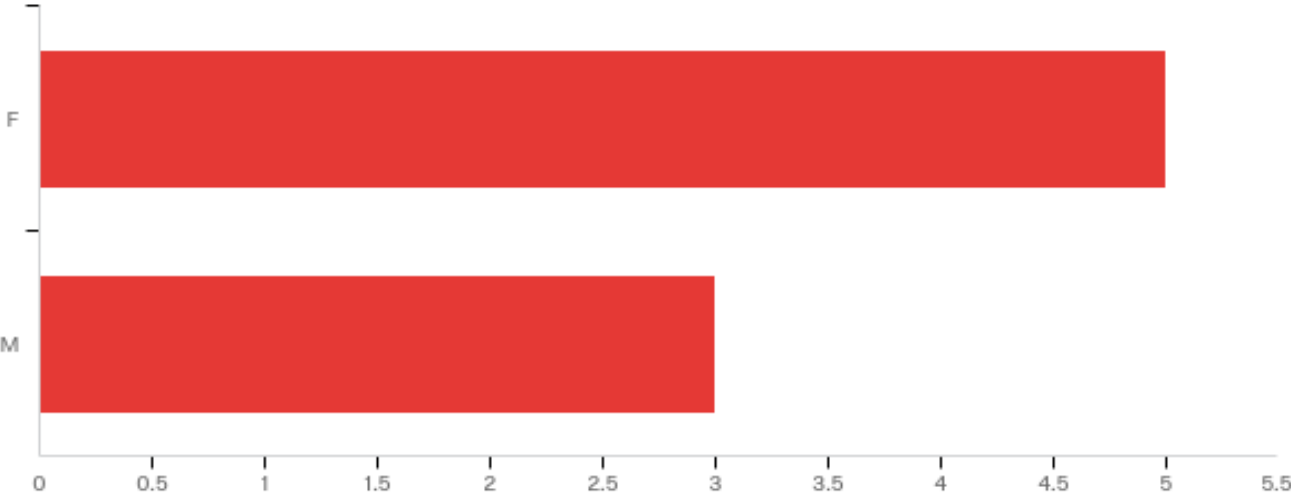
Answer	%	Count
United States of America	100.00%	8
Total	100%	8

Secondary Email



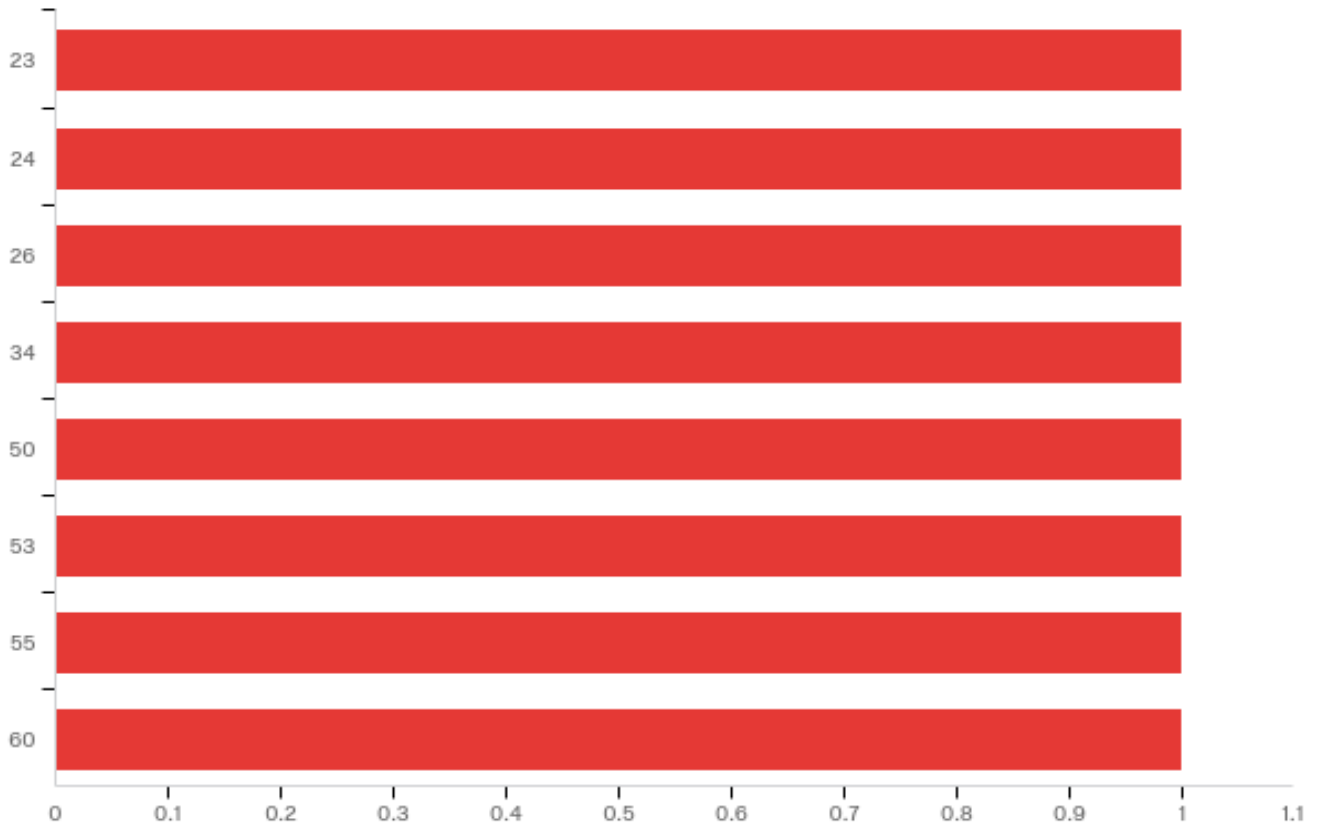
Answer	%	Count
Gavin.McCullough@oit.edu	12.50%	1
kacy.sisco@gmail.com	12.50%	1
kelmbruder@yahoo.com	12.50%	1
krallsteven@gmail.com	12.50%	1
heartscanner63@gmail.com	12.50%	1
Michael.andrews132@hotmail.com	12.50%	1
deb_upshaw@yahoo.com	12.50%	1
rm1reddy@yahoo.com	12.50%	1
Total	100%	8

Gender



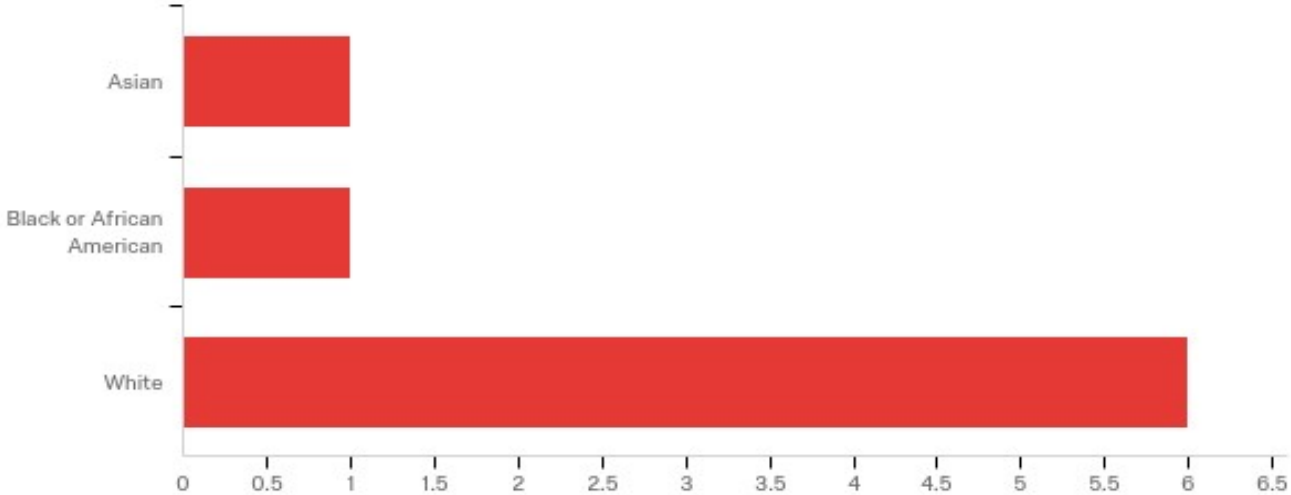
Answer	%	Count
F	62.50%	5
M	37.50%	3
Total	100%	8

Age



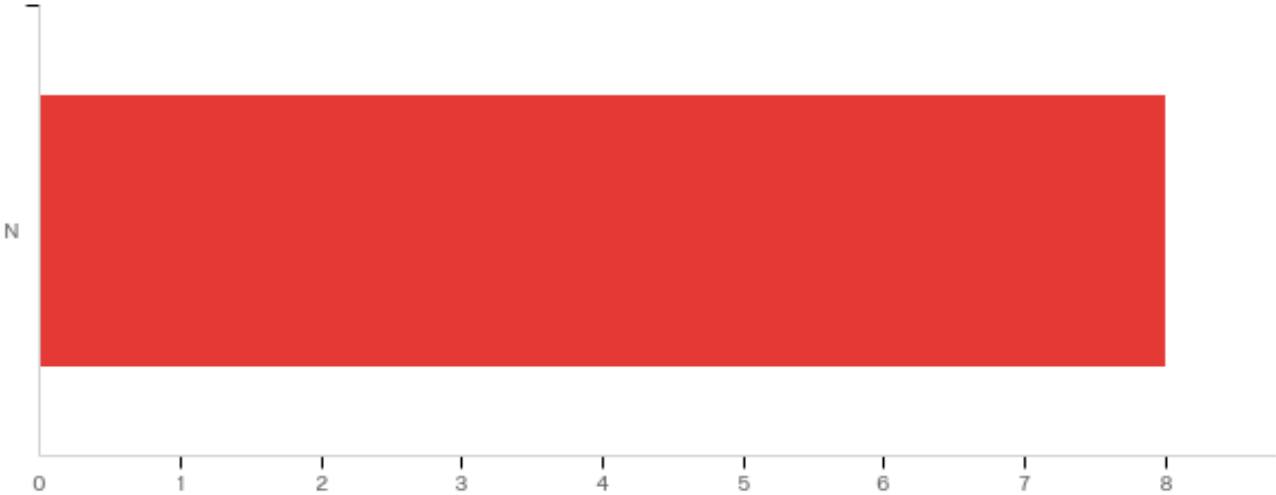
Answer	%	Count
23	12.50%	1
24	12.50%	1
26	12.50%	1
34	12.50%	1
50	12.50%	1
53	12.50%	1
55	12.50%	1
60	12.50%	1
Total	100%	8

Ethnicity



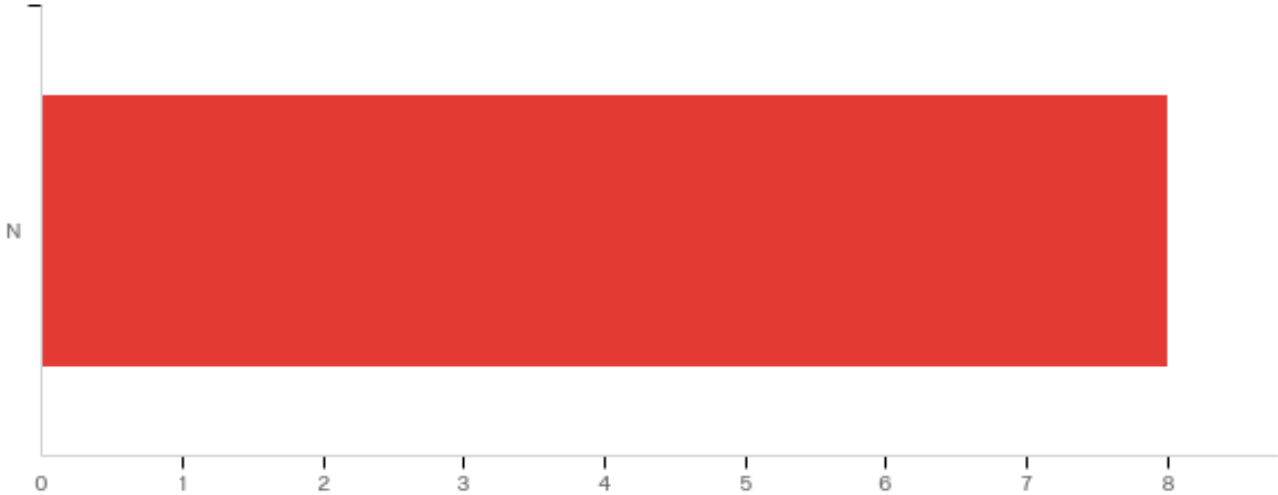
Answer	%	Count
Asian	12.50%	1
Black or African American	12.50%	1
White	75.00%	6
Total	100%	8

Athlete



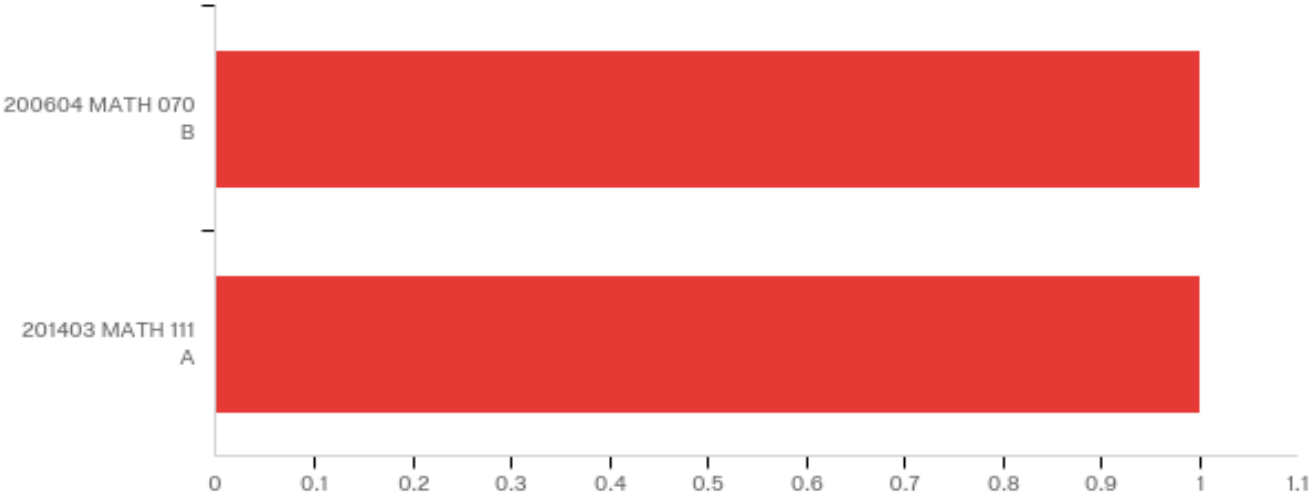
Answer	%	Count
N	100.00%	8
Total	100%	8

Veteran Self Report



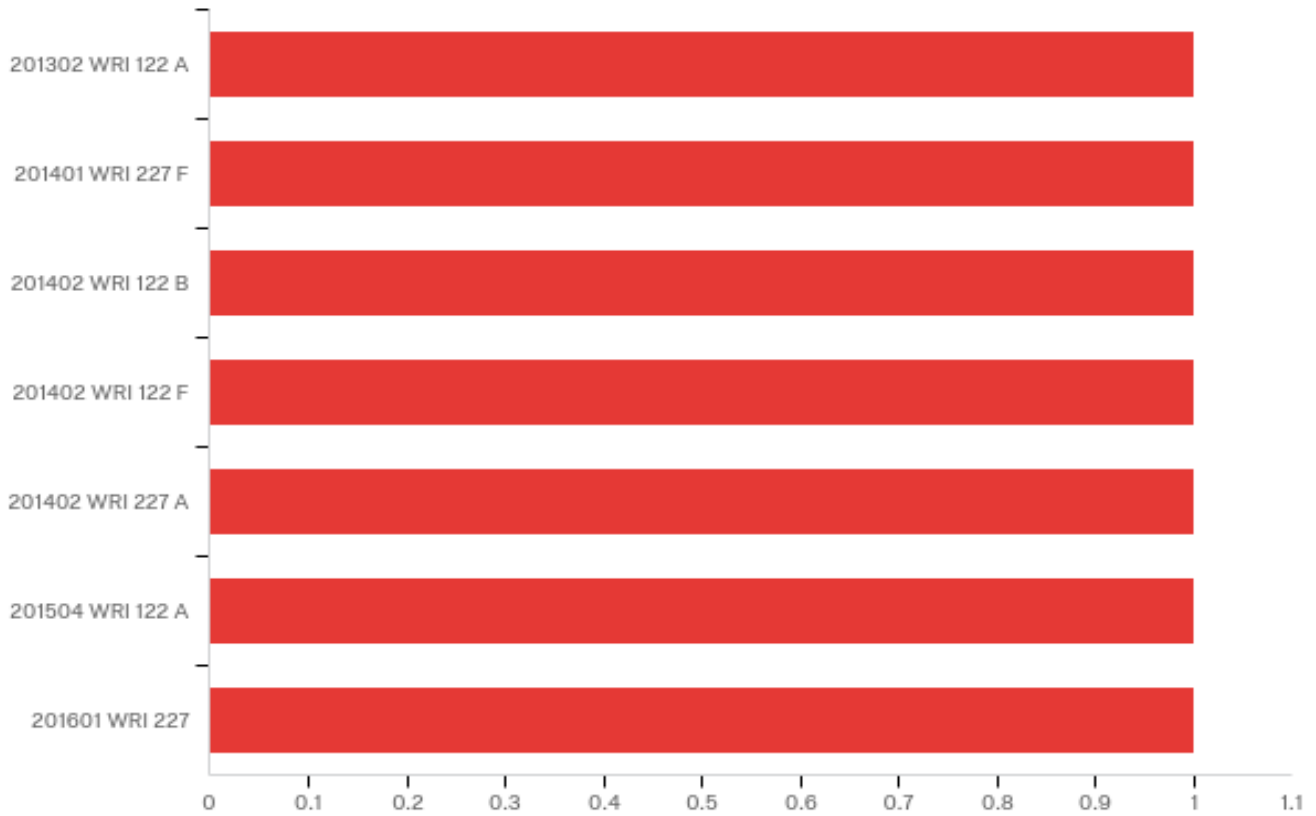
Answer	%	Count
N	100.00%	8
Total	100%	8

1st OIT Math Course



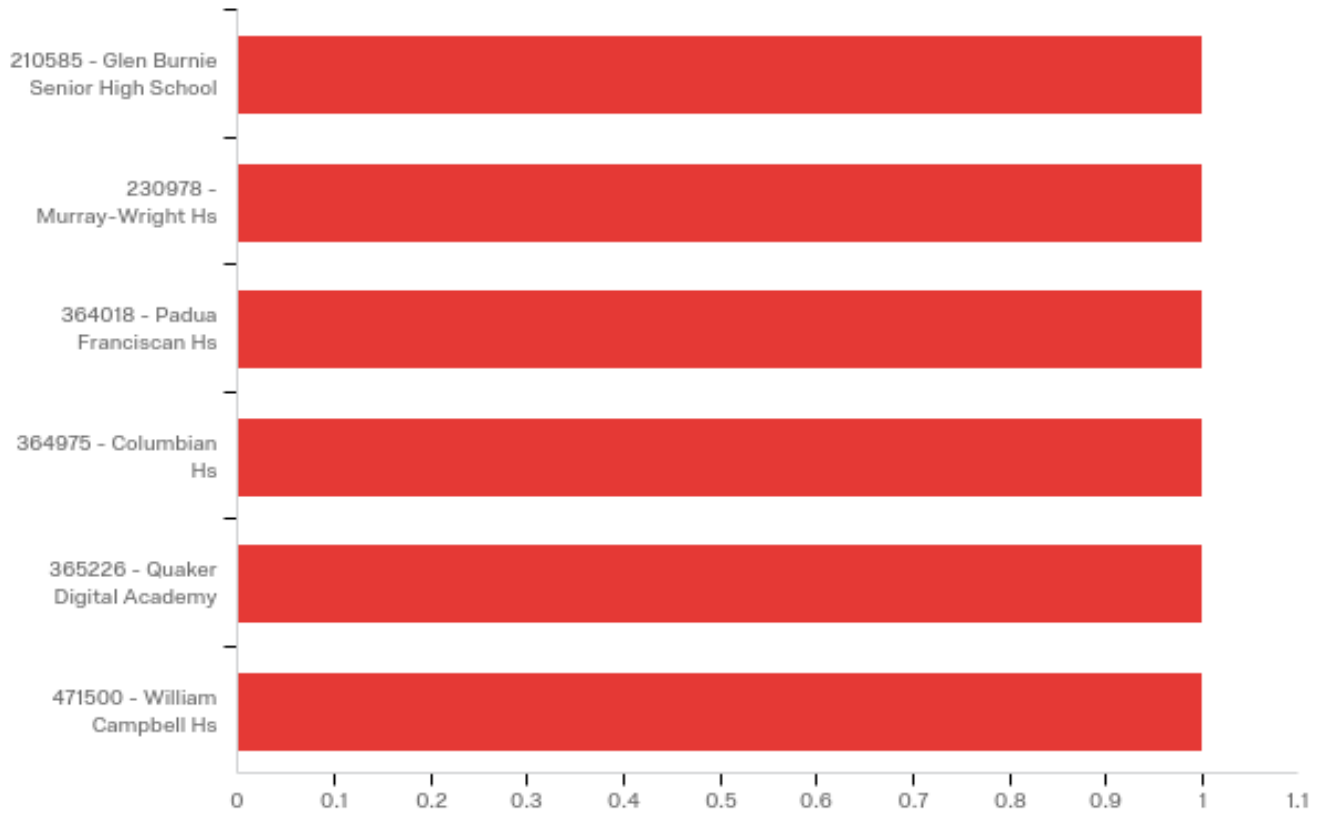
Answer	%	Count
200604 MATH 070 B	50.00%	1
201403 MATH 111 A	50.00%	1
Total	100%	2

1st OIT WRI Course



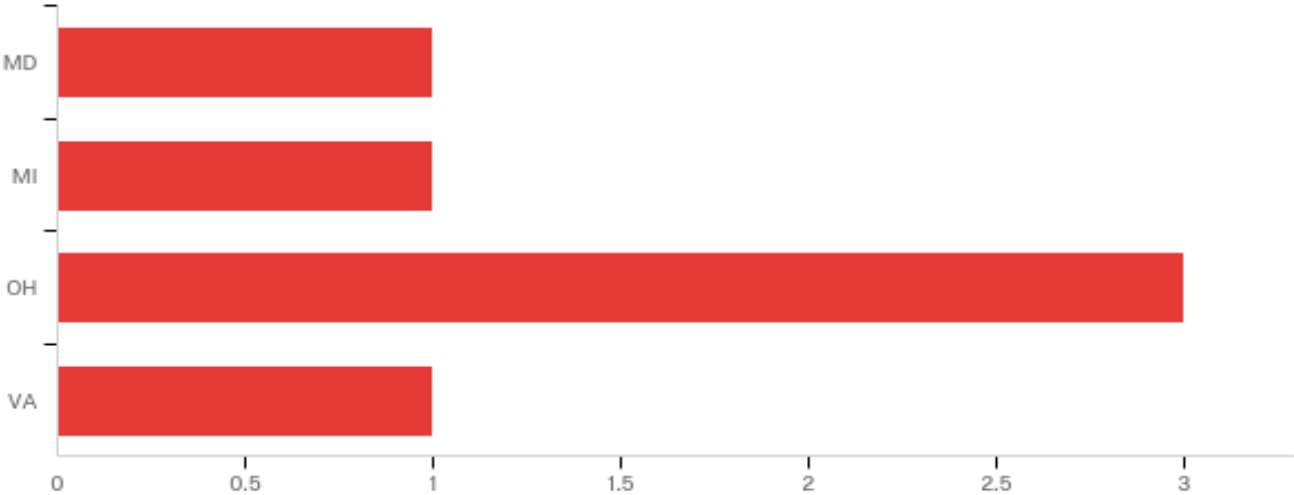
Answer	%	Count
201302 WRI 122 A	14.29%	1
201401 WRI 227 F	14.29%	1
201402 WRI 122 B	14.29%	1
201402 WRI 122 F	14.29%	1
201402 WRI 227 A	14.29%	1
201504 WRI 122 A	14.29%	1
201601 WRI 227	14.29%	1
Total	100%	7

HS



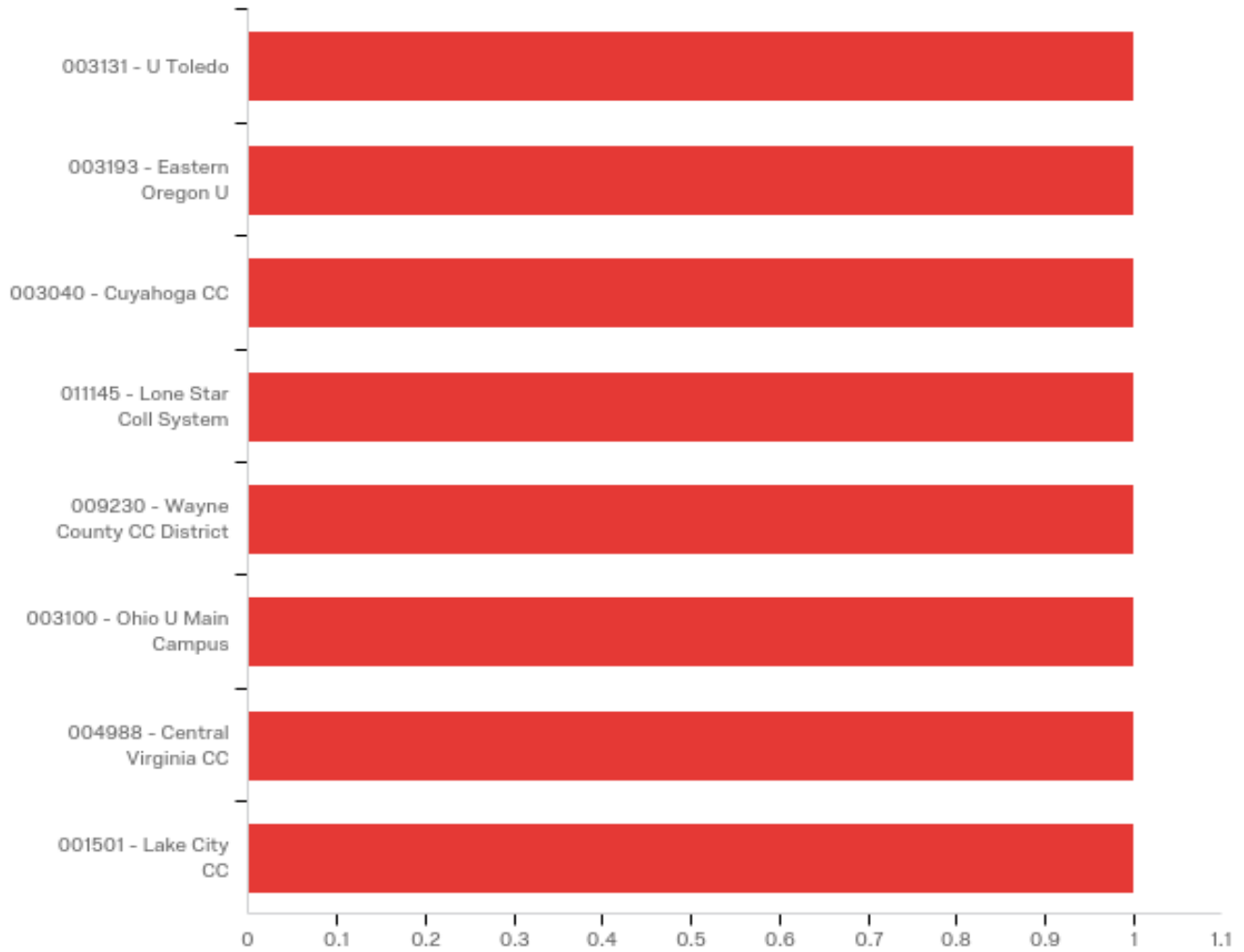
Answer	%	Count
210585 - Glen Burnie Senior High School	16.67%	1
230978 - Murray-Wright Hs	16.67%	1
364018 - Padua Franciscan Hs	16.67%	1
364975 - Columbian Hs	16.67%	1
365226 - Quaker Digital Academy	16.67%	1
471500 - William Campbell Hs	16.67%	1
Total	100%	6

HS State



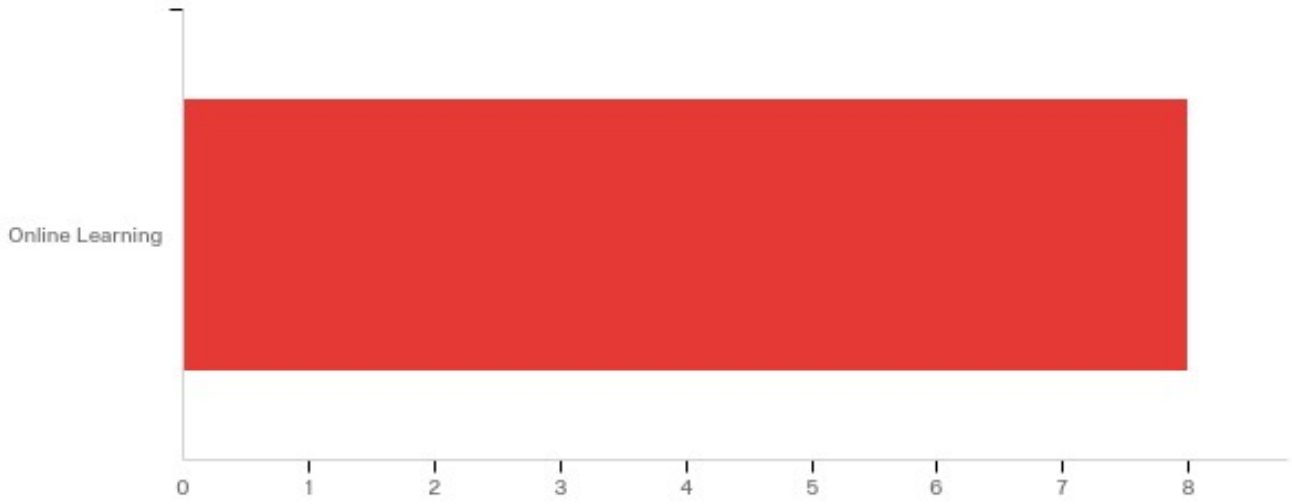
Answer	%	Count
MD	16.67%	1
MI	16.67%	1
OH	50.00%	3
VA	16.67%	1
Total	100%	6

Prior College



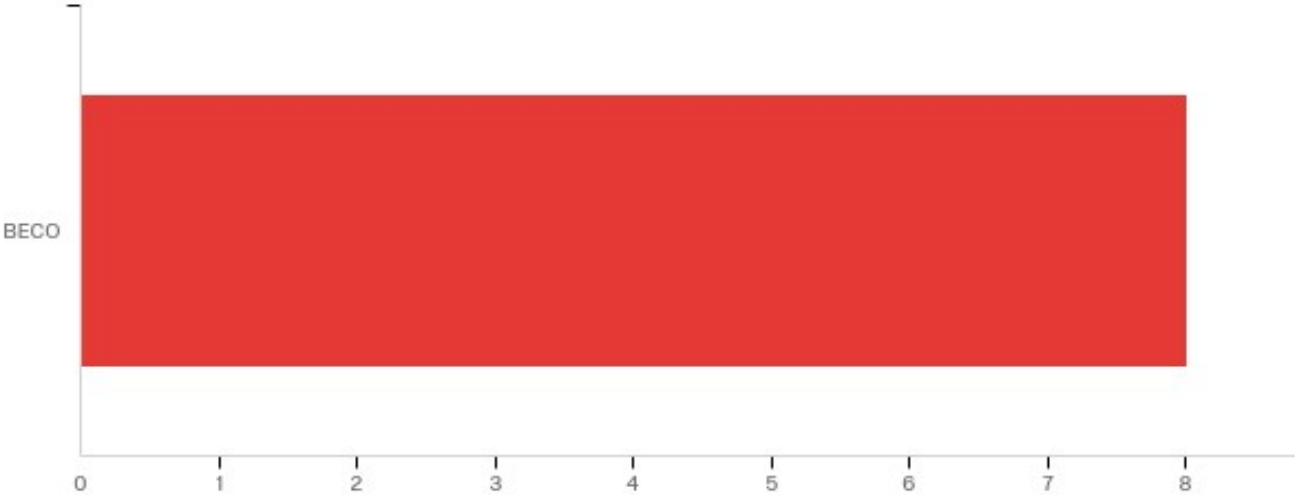
Answer	%	Count
003131 - U Toledo	12.50%	1
003193 - Eastern Oregon U	12.50%	1
003040 - Cuyahoga CC	12.50%	1
011145 - Lone Star Coll System	12.50%	1
009230 - Wayne County CC District	12.50%	1
003100 - Ohio U Main Campus	12.50%	1
004988 - Central Virginia CC	12.50%	1
001501 - Lake City CC	12.50%	1
Total	100%	8

Stu Campus Desc



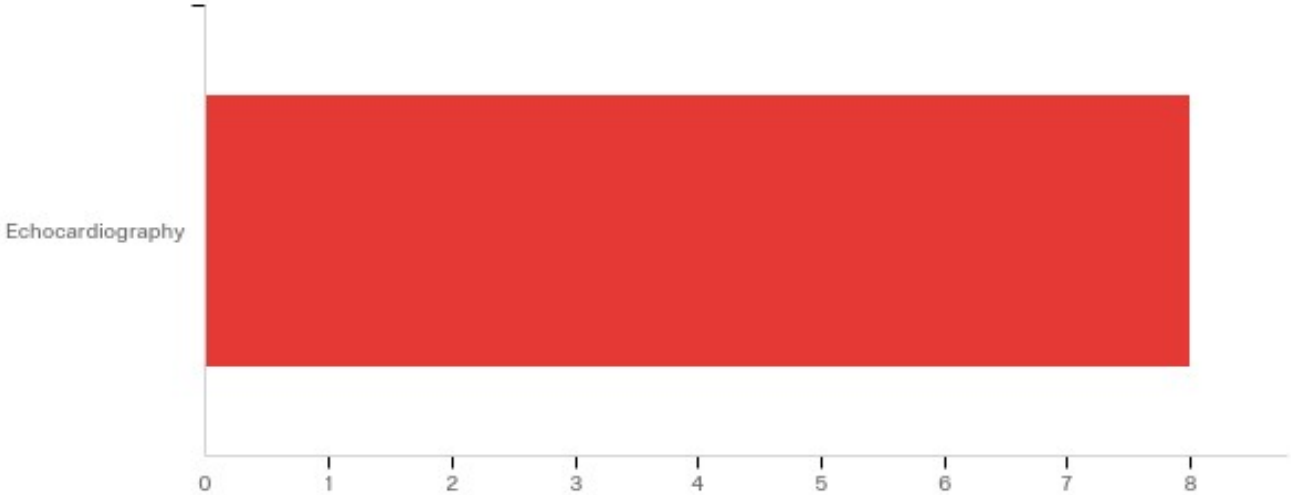
Answer	%	Count
Online Learning	100.00%	8
Total	100%	8

Major 1



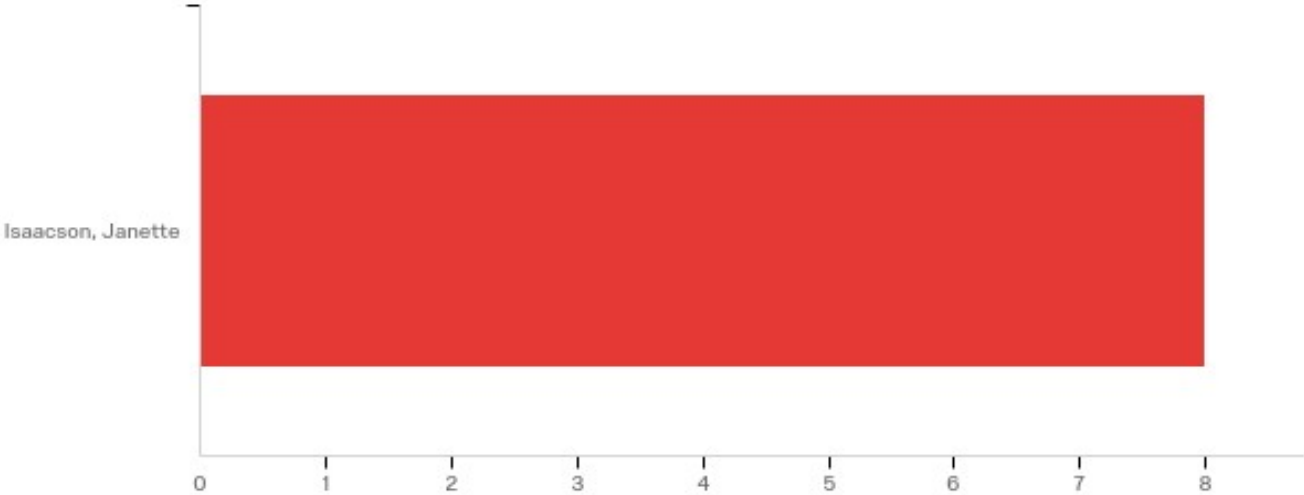
Answer	%	Count
BECO	100.00%	8
Total	100%	8

Major 1 Desc



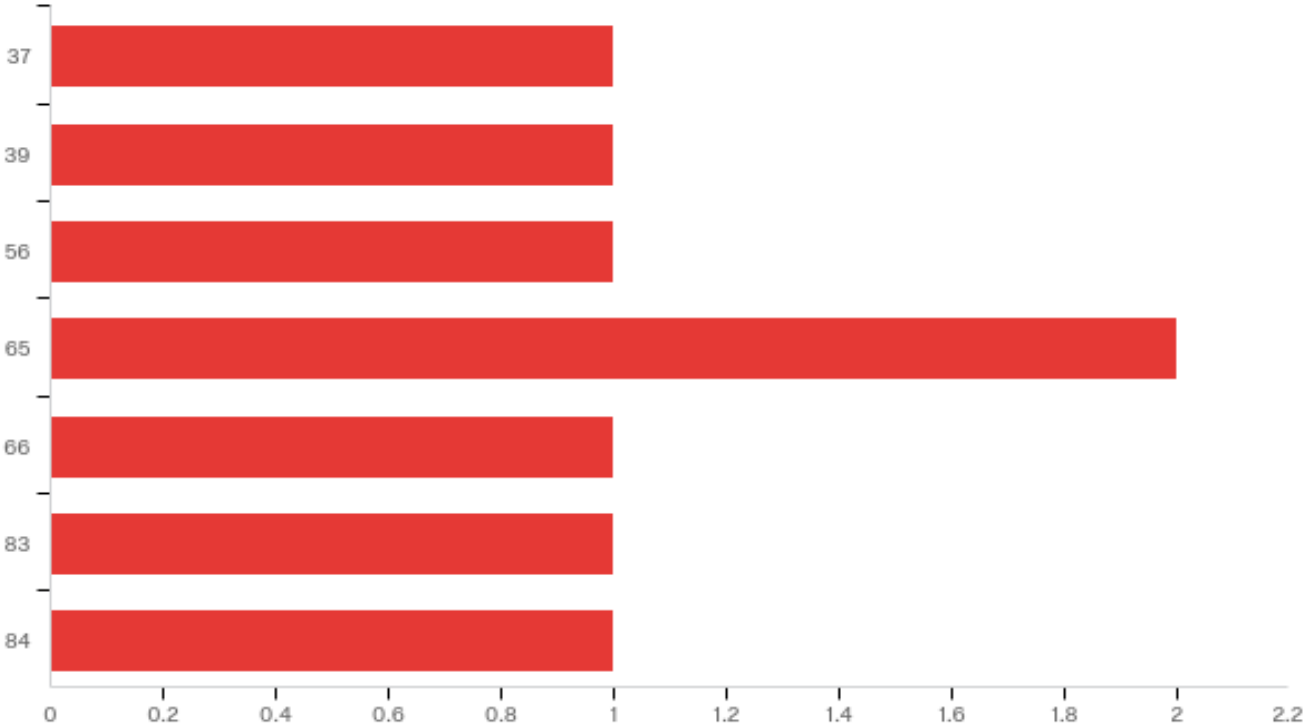
Answer	%	Count
Echocardiography	100.00%	8
Total	100%	8

Advisor Name



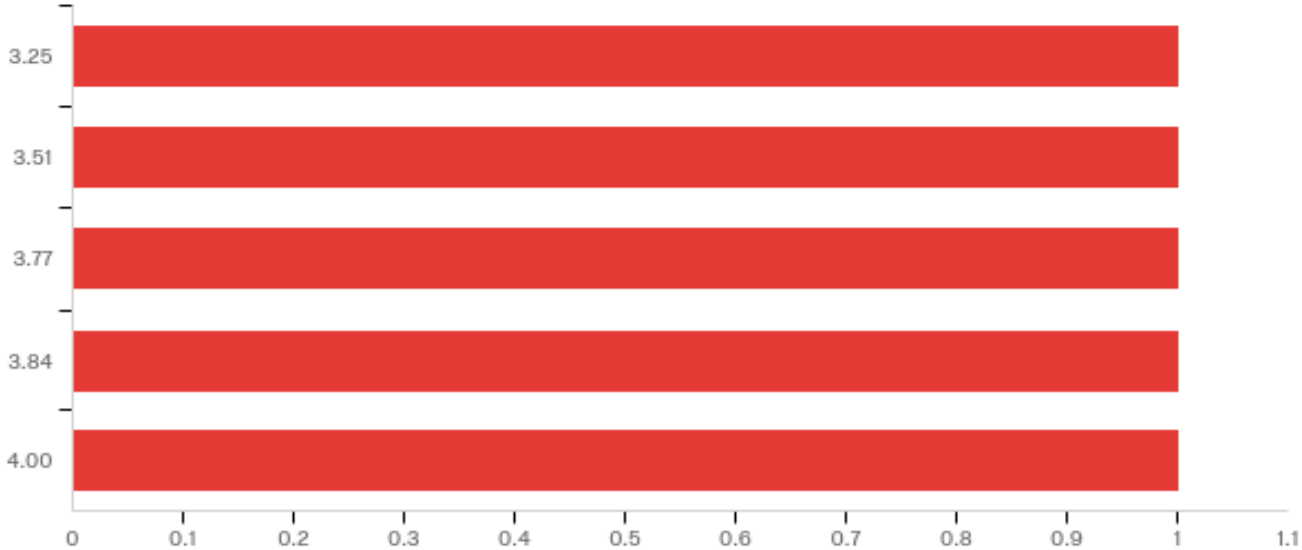
Answer	%	Count
Isaacson, Janette	100.00%	8
Total	100%	8

Inst Ernd Credit Hrs (NF)



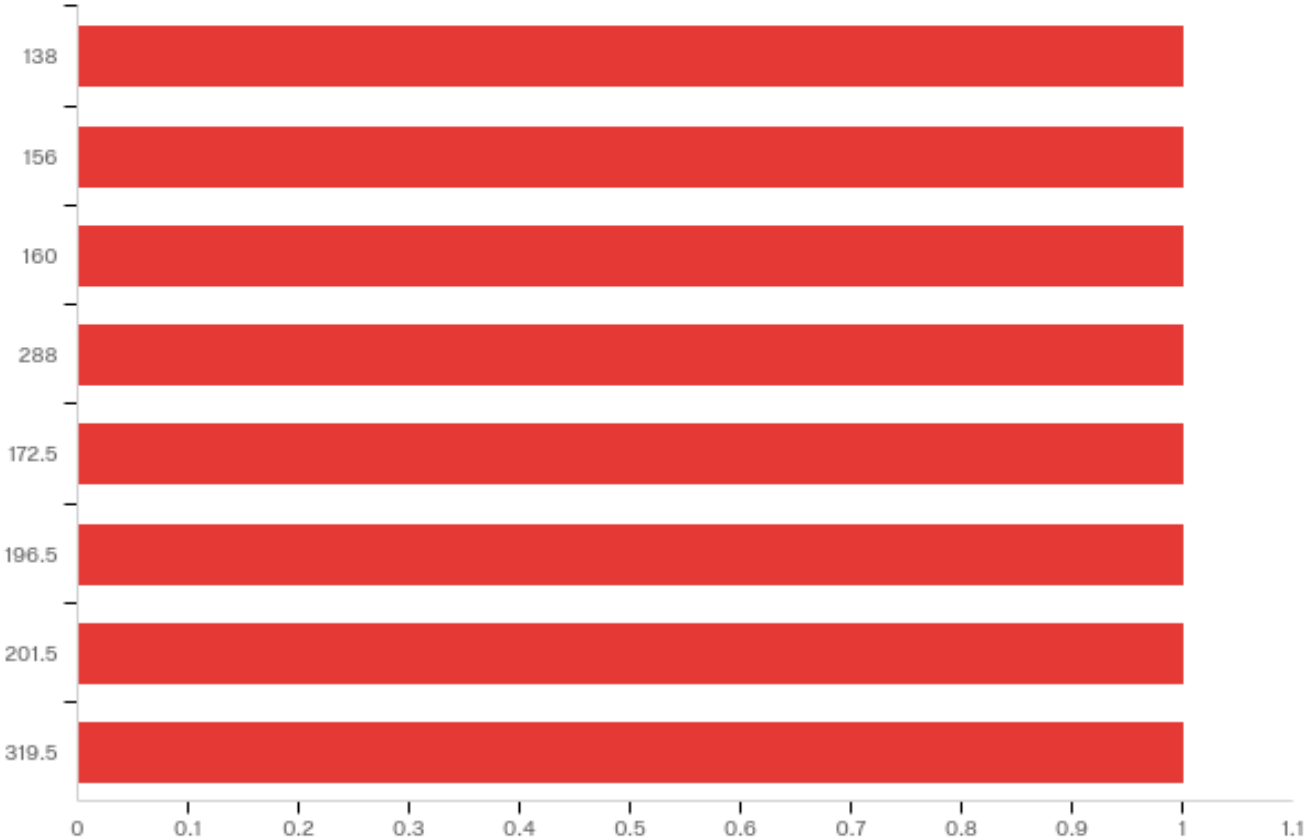
Answer	%	Count
37	12.50%	1
39	12.50%	1
56	12.50%	1
65	25.00%	2
66	12.50%	1
83	12.50%	1
84	12.50%	1
Total	100%	8

Inst GPA (NF)



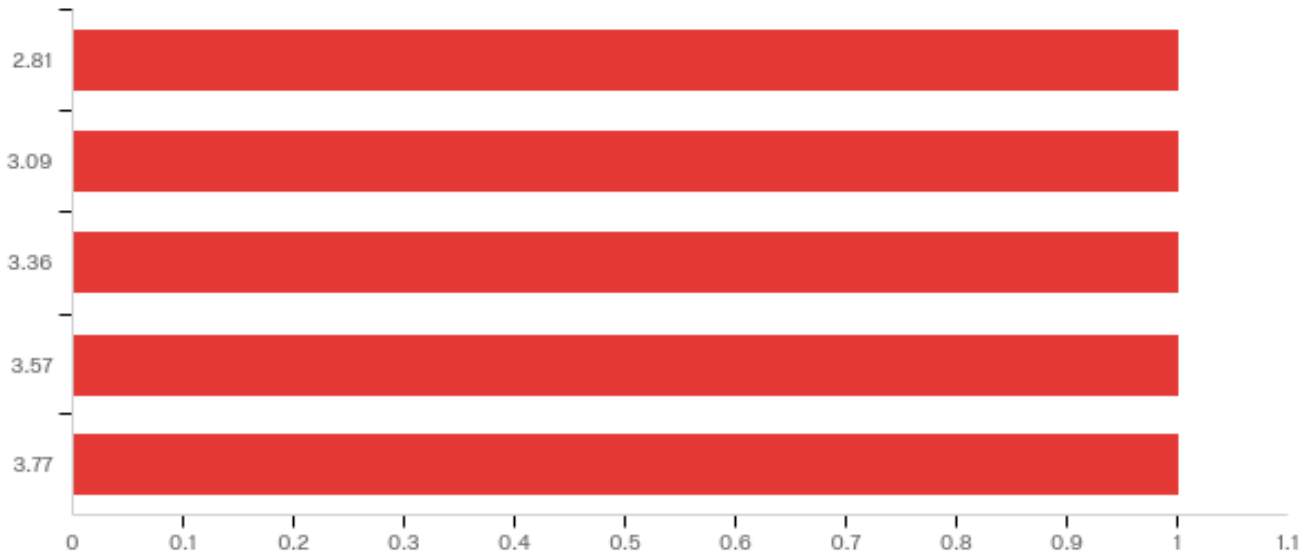
Answer	%	Count
3.25	20.00%	1
3.51	20.00%	1
3.77	20.00%	1
3.84	20.00%	1
4.00	20.00%	1
Total	100%	5

Trans Earnd Credit Hrs (NF)



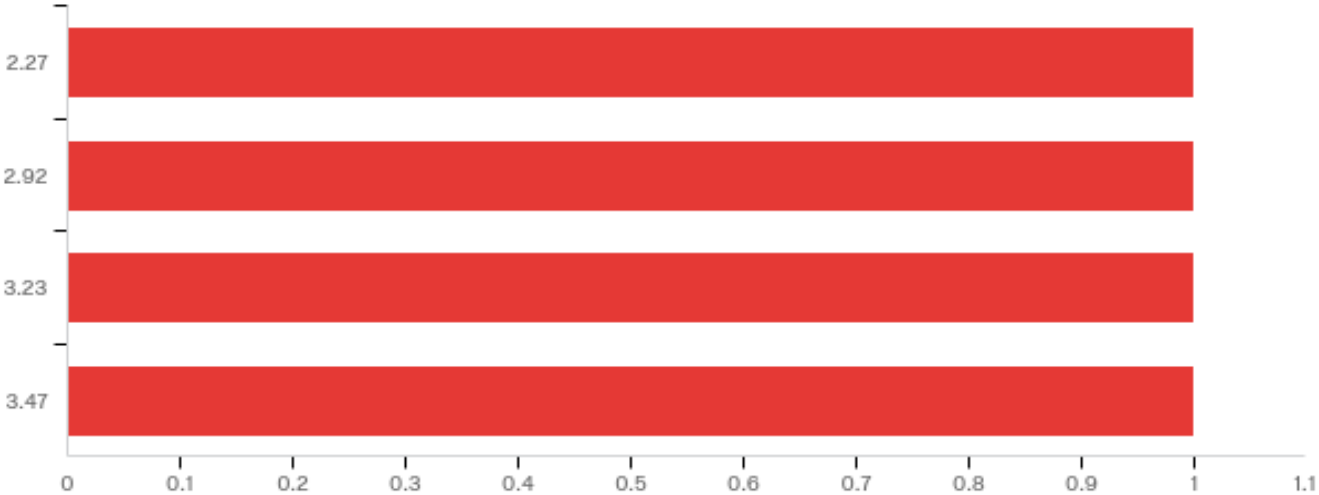
Answer	%	Count
138	12.50%	1
156	12.50%	1
160	12.50%	1
288	12.50%	1
172.5	12.50%	1
196.5	12.50%	1
201.5	12.50%	1
319.5	12.50%	1
Total	100%	8

Trans GPA (NF)



Answer	%	Count
2.81	20.00%	1
3.09	20.00%	1
3.36	20.00%	1
3.57	20.00%	1
3.77	20.00%	1
Total	100%	5

High School GPA



Answer	%	Count
2.27	25.00%	1
2.92	25.00%	1
3.23	25.00%	1
3.47	25.00%	1
Total	100%	4

Q23_2 - Topics



Answer	%	Count
Total	100%	0