Default Report

Wysk | STAM Survey

September 23rd 2019, 1:46 pm MDT

A2 - Name of Institution

Name of Institution
universith of pittsburgh
Florida State University
University of North Carolina at Charlotte
University of Southern California
University of Arizona
Georgia Institute of Technology
FAMU-FSU College of Engineering
UPRM
Virginia Tech
Texas A&M University
NC State University

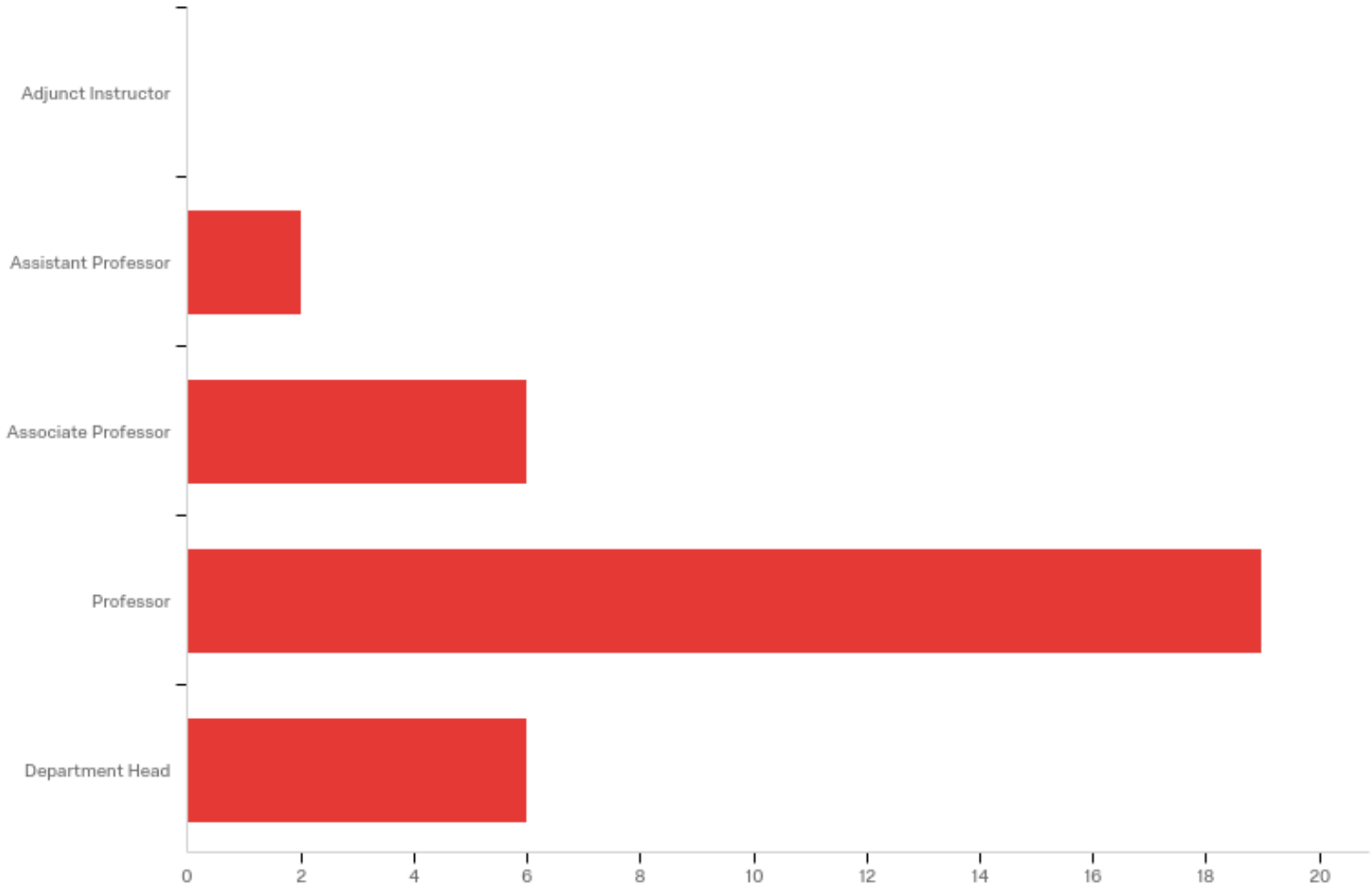
A2 - Name of Institution

Name of Institution
Ohio University
Purdue University
Wayne State University
Iowa State Univeristy
Oregon State University
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
University of Florida
Pennsylvania State University
Ulsan National Institute of Science anc Technology
North Carolina State University
Penn State

A2 - Name of Institution

Name of Institution
The University of Texas RGV
University at Buffalo
Georgia Tech
Mississippi State
North Carolina State University
NC State University
North Carolina State University

A3 - Rank


Adjunct Instructor
Assistant Professor
Associate Professor
Professor
Department Head
0
2
4
6
8
10
12
14
16
18
20

A3 - Rank

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Rank	2.00	5.00	3.88	0.77	0.59	33

A3 - Rank

#	Answer	%	Count
1	Adjunct Instructor	0.00%	0
2	Assistant Professor	6.06%	2
3	Associate Professor	18.18%	6
4	Professor	57.58%	19
5	Department Head	18.18%	6
	Total	100%	33

A4 - Full Name (optional)

Full Name (optional)
bopaya bidanda
Richard Liang
Chris Evans
Yong Chen
Chuck Zhang
Okenwa Okoli
Lourdes A. Medina
Christopher Williams
Darrell Wallace
Satish Bukkapatnam
Ola Harrysson

A4 - Full Name (optional)

Full Name (optional)
Dusan Sormaz
Gary Cheng
Kyoung-yun Kim
DANIEL WALDORF
Katie Basinger
Jerald Brevick
Guha Manogharan
Namhun Kim
Yuan-Shin Lee
Robert C Voigt
Linkan Bian

A4 - Full Name (optional)

Full Name (optional)
Rohan Shirwaiker
Paul Cohen
Binil Starly

A5 - Name of Department

Name of Department
industrial engineering
Industrial and Manufacturing Engineering
Mechanical Engineering and Engineering Sciences
Industrial and Systems Engineering
Systems and Industrial Engineering
Industrial & Systems Engineering
Industrial & Manufacturing Engineering
Department of Industrial Engineering
Mechanical Engineering
Mechanical, Industrial, and Manufacturing Engineering (MIME)
Satish Bukkapatnam

A5 - Name of Department

Name of Department
Industrial and Systems Enghineering
Department of Industrial and Systems Engineering
Industrial Engineering
Industrial and Systems Engineering
School of Mechanical, Industrial, and Manufacturing Engineering
Industrial and Manufacturing Engineering
ISE
Industrial and Systems Engineering
Engineering
Mechanical Engineering
Mechanical, Aerospace, and Nuclear Engineering

A5 - Name of Department

Name of Department
Industrial and Systems Engineering
Industrial and Manufacturing Engineering
Manufacturing and Industrial Engineering
Mechanical and Aerospace Engineering
ISyE, MSE
Industrial and Systems Engineering
Industrial & Systems Engineering
Fitts Dept. of Industrial and Systems Engineering
Binil Starly

A6 - Name of manufacturing course(s) taught

Name of manufacturing course(s) taught
ie 1052 - core undergrad course on processes and material selection ie 2006 - core masters course focusing on processes and systems in addition, we offer a variety of courses in nano materials, nano manufacturing, bio manufacturing, logistics, etc.
Engineering Materials and Manufacturing Processes II
1. Manufacturing Systems (sophomore, core). 2. Metrology and Precision Engineering (Junior/Senior Tech elective) 3. Introduction to Optical Manufacturing and Testing (grad) 4. Advanced Surface Metrology (grad) 5. Data Analysis and Uncertainty (grad). Note: Other faculty teach manufacturing related courses.
Manufacturing processes; Computer-aided Manufacturing Additive Manufacturing
Integrated Manufacturing Systems Computer Integrated Manufacturing Systems Lean Operations and Manufacturing Systems
ISEN 324: Computer Aided Design and Manufacturing
Advanced Manufacturing
Integrated Production Systems and Facility Layout

A6 - Name of manufacturing course(s) taught

Name of manufacturing course(s) taught
- Process Automation (using PLC) - Looking to develop a course on Vision systems in Automated processes
Additive Manufacturing
MFG 3723. Manufacturing Processes. MFG 3723L - Manufacturing Processes Laboratory ISEN 3710. Engineering Statistics. MFG 3771 Additive and Digital Manufacturing MFG 4861 -Design for Manufacturability MECH 5836. Fluid Power and Control. MFG 4823 - Advanced Manufacturing process Analysis MFG 4823/L - Advanced Manufacturing Process Analysis Laboratory
Manufacturing processes Elements of smart manufacturing RF/RFID sensing for manufacturing Sensor-based modeling of manufacturing systems High volume manufacturing Total quality engineering
Introduction to product development and prototyping (ISE 216) Fundamentals of Additive Manufacturing (ISE 589)

A6 - Name of manufacturing course(s) taught

Name of manufacturing course(s) taught
Manufacturing analytics, knowledge-based design, PLM and Sustainable Design, CAD/CAM, Integrated Product Development
Production Engineering (MFGE 336), Computer Aided Design and Manufacturing (ME 413), Industrial Sustainability Analysis (MFGE 535)
Fundamentals of Manufacturing Engineering, Tool and Process Engineering, Computer-Aided Manufacturing, Engineering Metrology
manufacturing proesses, manufacturing automation
None- however my PhD was focused in manufacturing and at UF we are considering adding manufacturing to our curriculum.
ENGR 3100 Production Processes ENGR 3400 Production Systems I ENGR 4000 Production Systems II ENGR 3500 Statistics and Quality Control
AM processes, metal AM lab, DfX
Manufacturing System Modeling and Simulation 3D Printing
Manufacturing Processes Engineering, Automated Systems Engineering, Smart and Digital Manufacturing, Computation Geometry for Design and Manufacturing

A6 - Name of manufacturing course(s) taught

Name of manufacturing course(s) taught
-manufacturing process -welding -casting -manufacturing with materials
Manufacturing Processes Tool Design Engineering Mechanics
Sustainable Manufacturing
additive manufacturing as a system
Manufacturing Processes Data Analytics in Advanced Manufacturing
ISE 316: Manufacturing Engineering I - Processes ISE 589: Intro to Biomedical Design & Manufacturing ISE 714: Product Manufacturing Engineering for Medical Device Industry
1. Product Development and Rapid Prototyping (UG) 2. Manufacturing Processes (UG) 3. Advanced Machining (GR)
Product Development & Rapid Prototyping Digital Manufacturing

A7 - Text used in the course(s)

Text used in the course(s)
usually, none
S. Kalpakjian and S. R. Schmid, Manufacturing Processes for Engineering Materials, 5th ed., Pearson Education, Inc., 2007.
1. Kalpakjian & Schmid, Manufacturing Processes for Engineering Materials. (2-5) none requird
Manufacturing Engineering and Technology, 7th Edition, Serope Kalpakjian and Steven R. Schmid.
Nanua Singh, Systems Approach to Computer-Integrated Design and Manufacturing, John Wiley & Sons, Inc., 1996. Goldratt, The Goal, North River Press, 2004 Third Edition
Computer-Aided Manufacturing (3rd Edition) 3rd Edition by Tien-Chien Chang (Author), Richard A. Wysk (Author), Hsu-Pin Wang (Author)
N/A
1. Automation, Production Systems, and Computer Integrated Manufacturing by Mikell P. Groover. 2. Fundamentals of Modern Manufacturing by Mikell P. Groover. 3. Manufacturing Planning and Control Systems by Vollmann, Berry, Whybark 4. Manufacturing Facilities Design & Material Handling by F.E. Meyers, P. Stephens. 5. Designing & Managing the Supply Chain: Concepts;. Strategies and Case Studies, by D. Simich-Levi.

A7 - Text used in the course(s)

Text used in the course(s)
Manual developed by other professor Reference: Bartelt, T., 2011, Industrial Automated Systems Instrumentation and Motion Control, Delmar, Cengate Learning.
Additive Manufacturing Technologies: 3D Printing, Rapid Prototyping, and Direct Digital Manufacturing
Manufacturing Processes and Lab - we fluctuate between Groover, Kalpakjian, and DeGarmo depending on text version and instructor. Engineering Statistics - Montgomery, Runger, and Hubele Fluid Power with Applications, 7th Ed. - Esposito (plus supplemental notes) For MFG 3771 and MFG 4861 we primarily use aggregated notes and no textbook.
Books by Drs. Kalpakjian, DeGarmo & Black, Groover, Tlusty, Hastie, Jeff Wu, Montgomery, George Box, and personal collection.
Product Design and Development, Steven Eppinger, Karl Ulrich
Manufacturing Analytics (no textbook and used class handouts), Knowledge-based Design (no textbook and used class handouts), PLM and Sustainable Design (no textbook and used class handouts), CAD/CAM (Chang, Wysk, and Wang), Integrated Product Development (Ulrich and Eppinger and class handouts)
Fundamentals of Modern Manufacturing: Materials, Processes, and Systems (M.P. Groover);

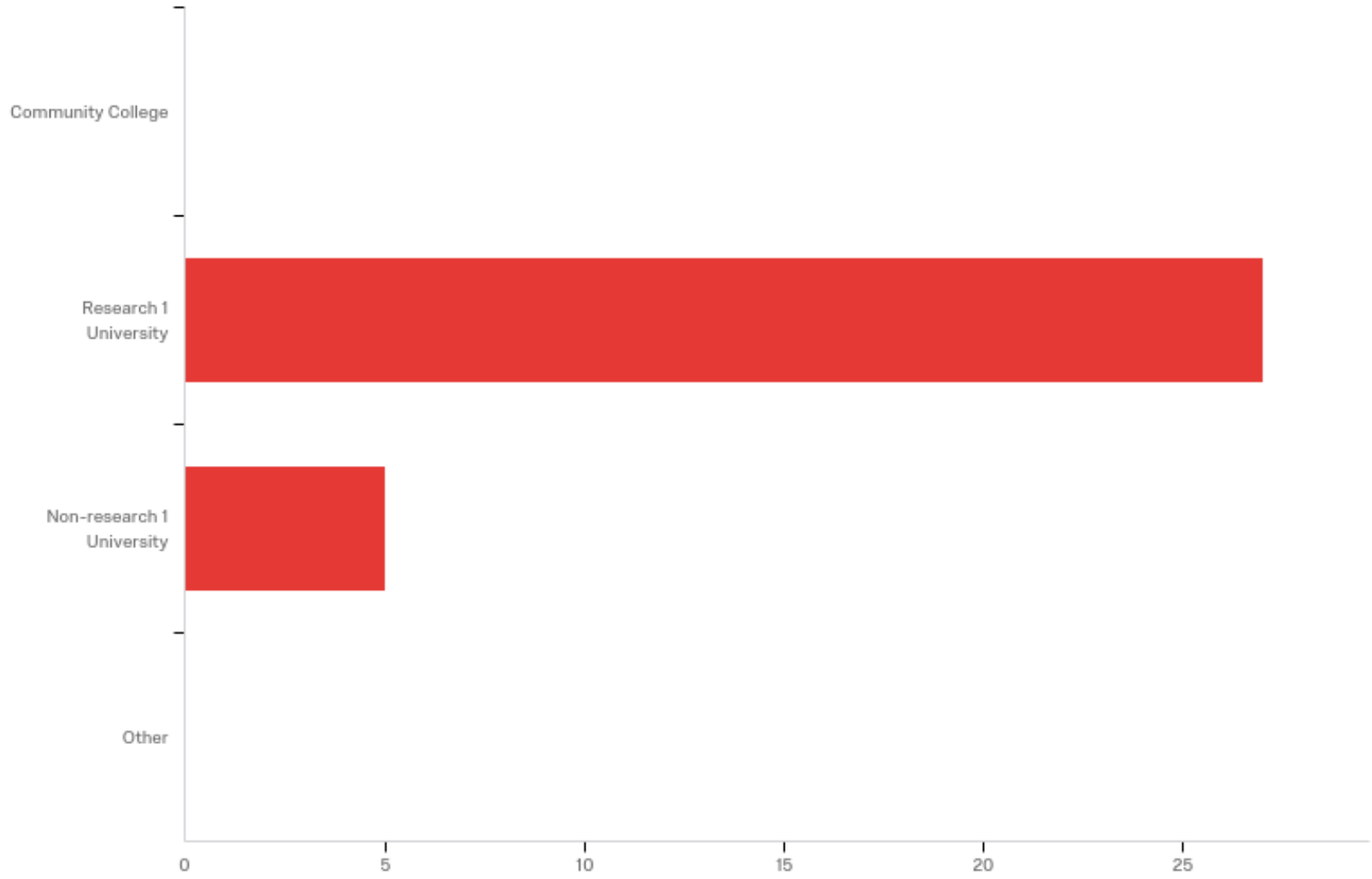
A7 - Text used in the course(s)

Text used in the course(s)
Fundamentals of Modern Manufacturing (Groover) mostly
Groover
ENGR 3100 Groover ENGR 3400 Tompkins and White ENGR 4000 none required, use small segments of various texts ENGR 3500 Navidi
AM courses - NA DfX - Product Design for Manufacture and Assembly (Boothroyd Dewhurst)
Computer-Aided Manufacturing (Chang/Wysk/Wang) Simulation Modeling and Analysis (Averill M. Law) Additive Manufacturing Technologies (Gibson/Rosen/Stucker)
Fundamentals of Modern Manufacturing-Materials, Processes and Systems (Mikell Groover); Automation, Production Systems and Computer-Integrated Manufacturing (Mikell Groover); Computational Geometry - Algorithms and Applications (Mark de Berg).
Kalpakjian & Schmit, Manufacturing Engineering and Technology DiGarmo	Materials and Processes in Manufacturing

A7 - Text used in the course(s)

Text used in the course(s)
Green Manufacturing: Fundamentals and Applications (Green Energy and Technology) 2012th Edition by David A. Dornfeld (Editor)
This course is intended to fill a major void in additive manufacturing education. All additive manufacturing courses so far are offered to address materials and process level issues. While materials and processes are important and will be discussed in this course, system-level challenges are important yet seldom addressed. This course will provide a forum for the students and the instructor (and guest lecturers) to discuss critical topics such as qualifications & certifications, regulations,...
Standard textbooks and notes
Fundamentals of Modern Manufacturing (Groover) Design of Biomedical Devices and Systems (King and Fries) Product Design for Manufacture and Assembly (Boothroyd, Dewhurst and Knight)
1. Ulrich & Eppinger 2. Groover 3. Trent
Product Development by Ulrich and Eppinger

B2 - Which best describes your college or university?



B2 - Which best describes your college or university?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Which best describes your college or university? - Selected Choice	2.00	3.00	2.16	0.36	0.13	32

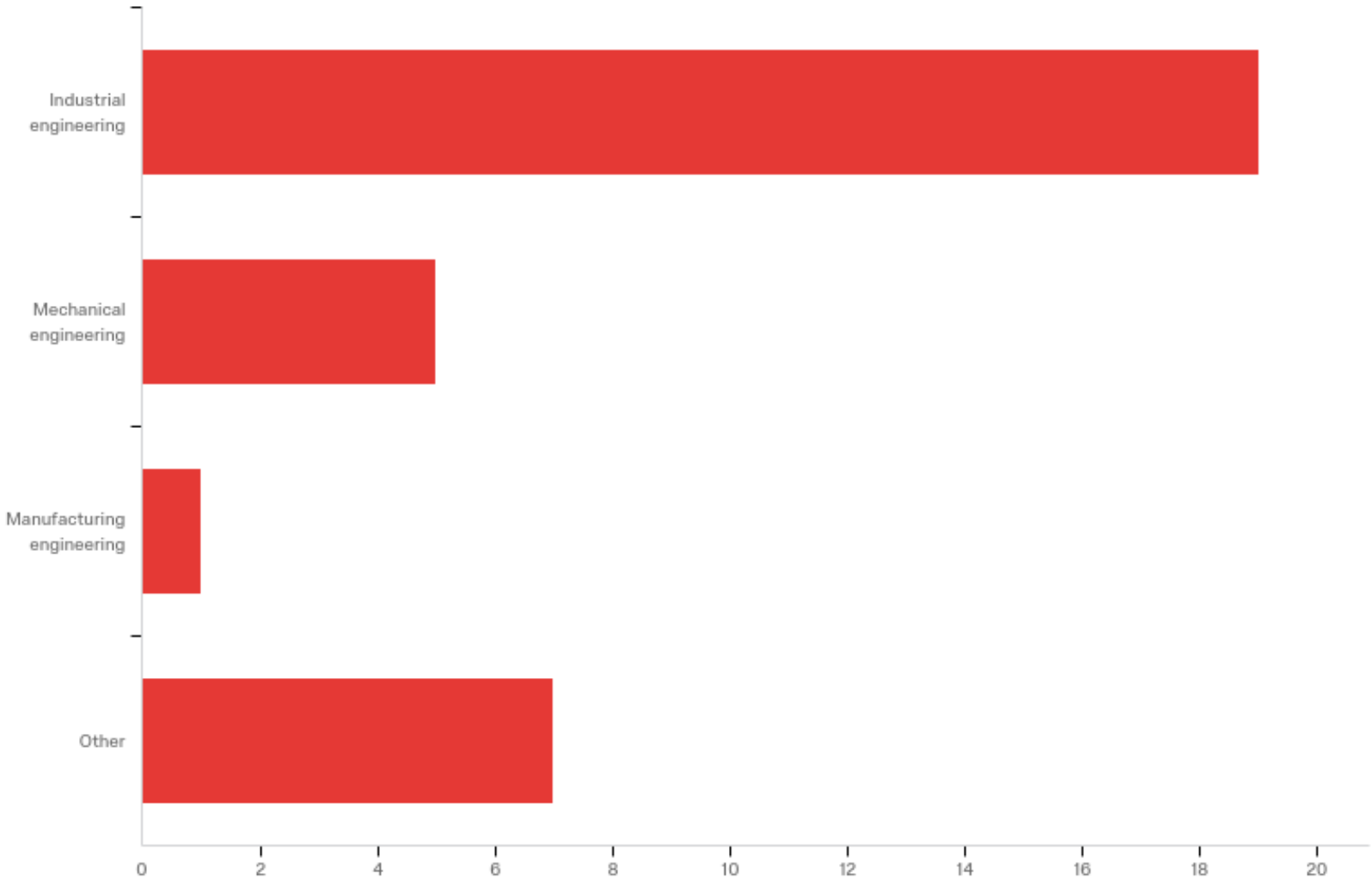
B2 - Which best describes your college or university?

#	Answer	%	Count
1	Community College	0.00%	0
2	Research 1 University	84.38%	27
3	Non-research 1 University	15.63%	5
4	Other	0.00%	0
	Total	100%	32

B2 - Which best describes your college or university?

Other - Text

B3 - Which best describes your department?



B3 - Which best describes your department?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Which best describes your departme nt? - Selected Choice	1.00	4.00	1.88	1.22	1.48	32

B3 - Which best describes your department?

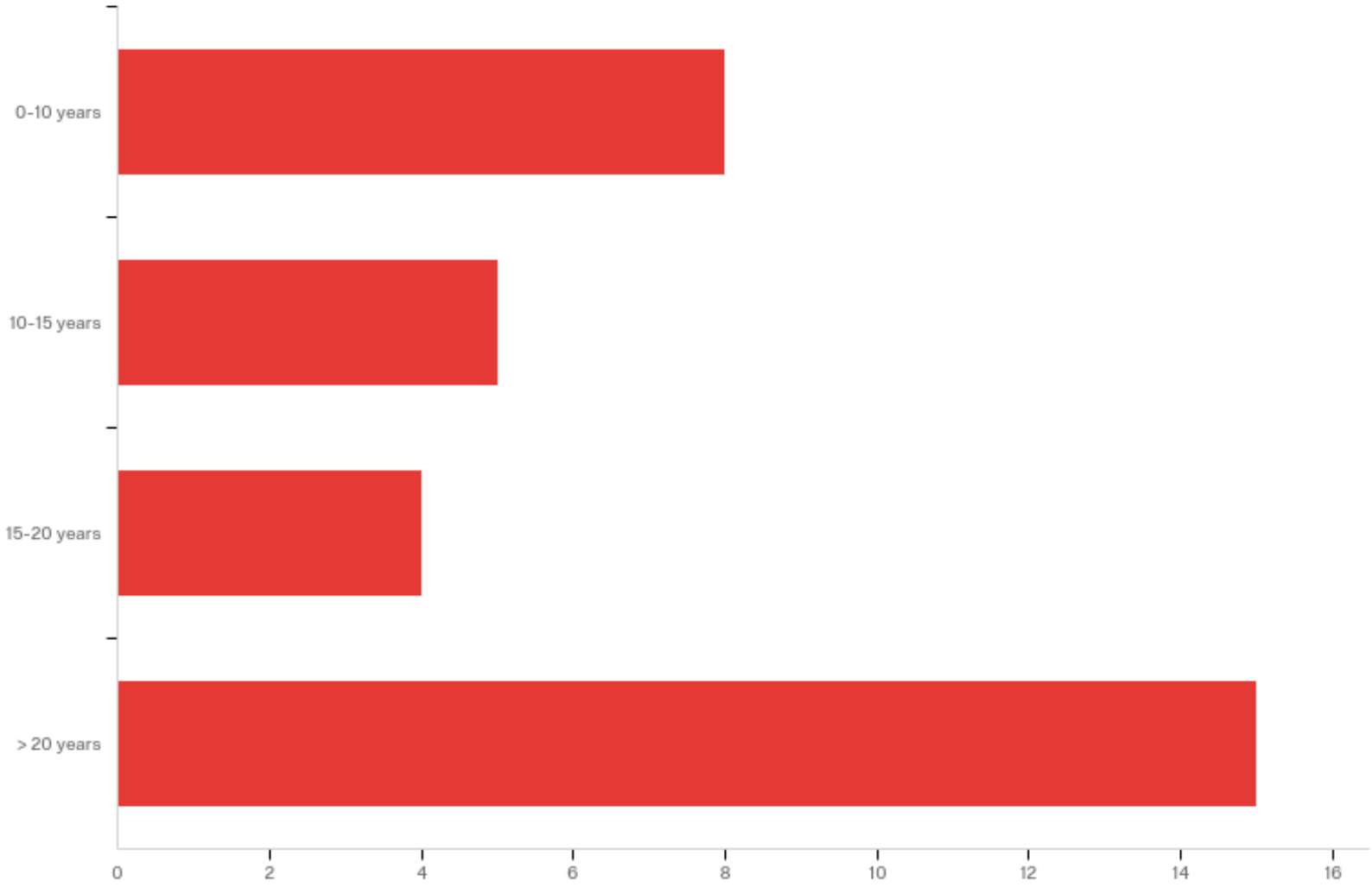
#	Answer	%	Count
1	Industrial engineering	59.38%	19
2	Mechanical engineering	15.63%	5
3	Manufacturing engineering	3.13%	1
4	Other	21.88%	7
	Total	100%	32

B3 - Which best describes your department?

B3_4_TEXT - Other

Other - Text
combination of Industrial and Manufacturing Engineering
Industrial Engineering; Systems Engineering
Manufacturing Engineering program in a Mech / Indust. / Mfg dept.
Mechanical, Industrial, and Manufacturing Engineering are co-housed
Industrial and Manufacturing Engineering
Production systems engineering
industrial and manufacturing engineering

B4 - Which best describes your teaching experience?



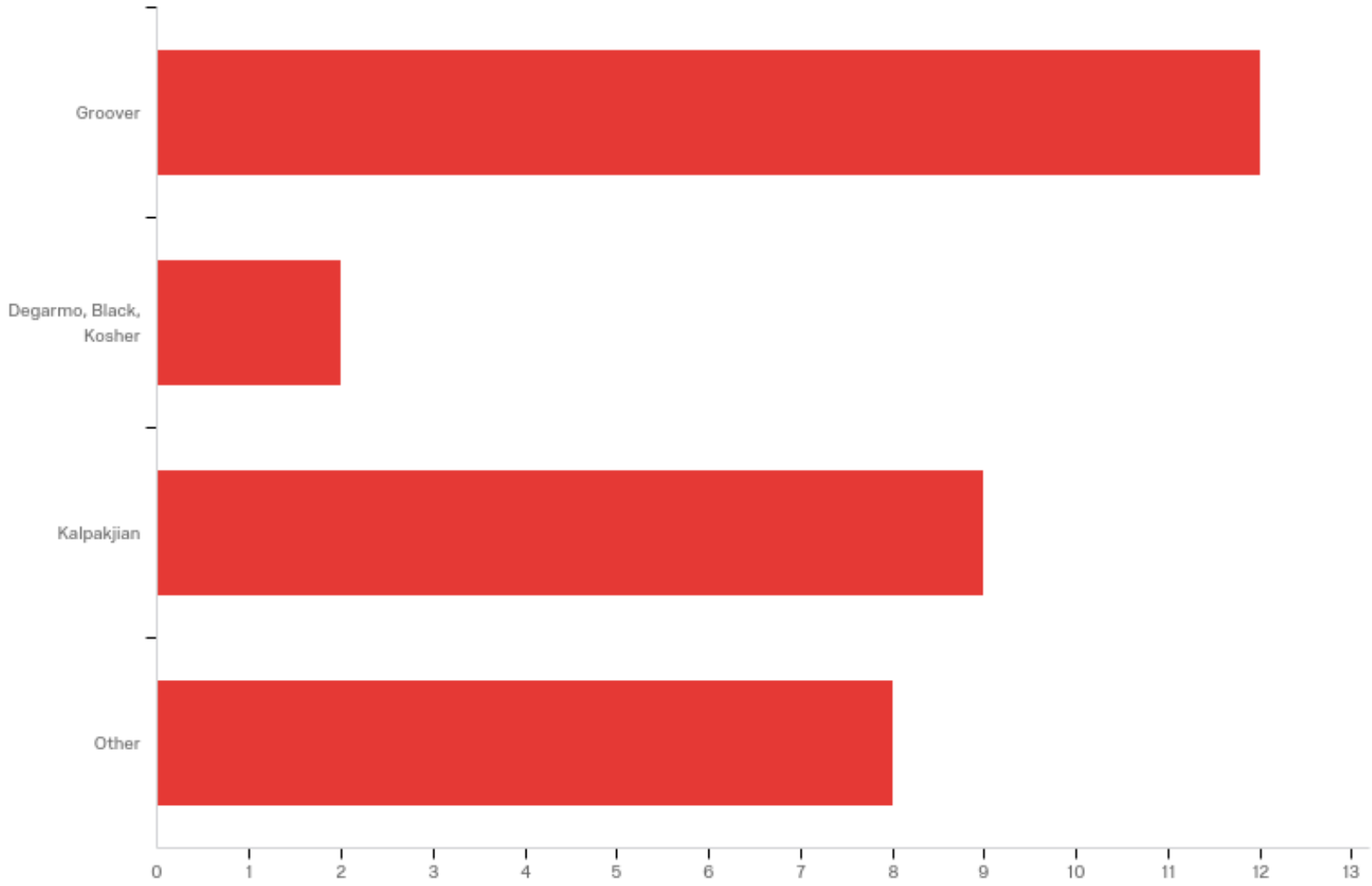
B4 - Which best describes your teaching experience?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Which best describes your teaching experience?	1.00	4.00	2.81	1.26	1.59	32

B4 - Which best describes your teaching experience?

#	Answer	%	Count
1	0-10 years	25.00%	8
2	10-15 years	15.63%	5
3	15-20 years	12.50%	4
4	> 20 years	46.88%	15
	Total	100%	32

B5 - I/We currently use the following book to teach manufacturing processes:



B5 - I/We currently use the following book to teach manufacturing processes:

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I/We currently use the following book to teach manufacturing processes : - Selected Choice	1.00	4.00	2.42	1.24	1.53	31

B5 - I/We currently use the following book to teach manufacturing processes:

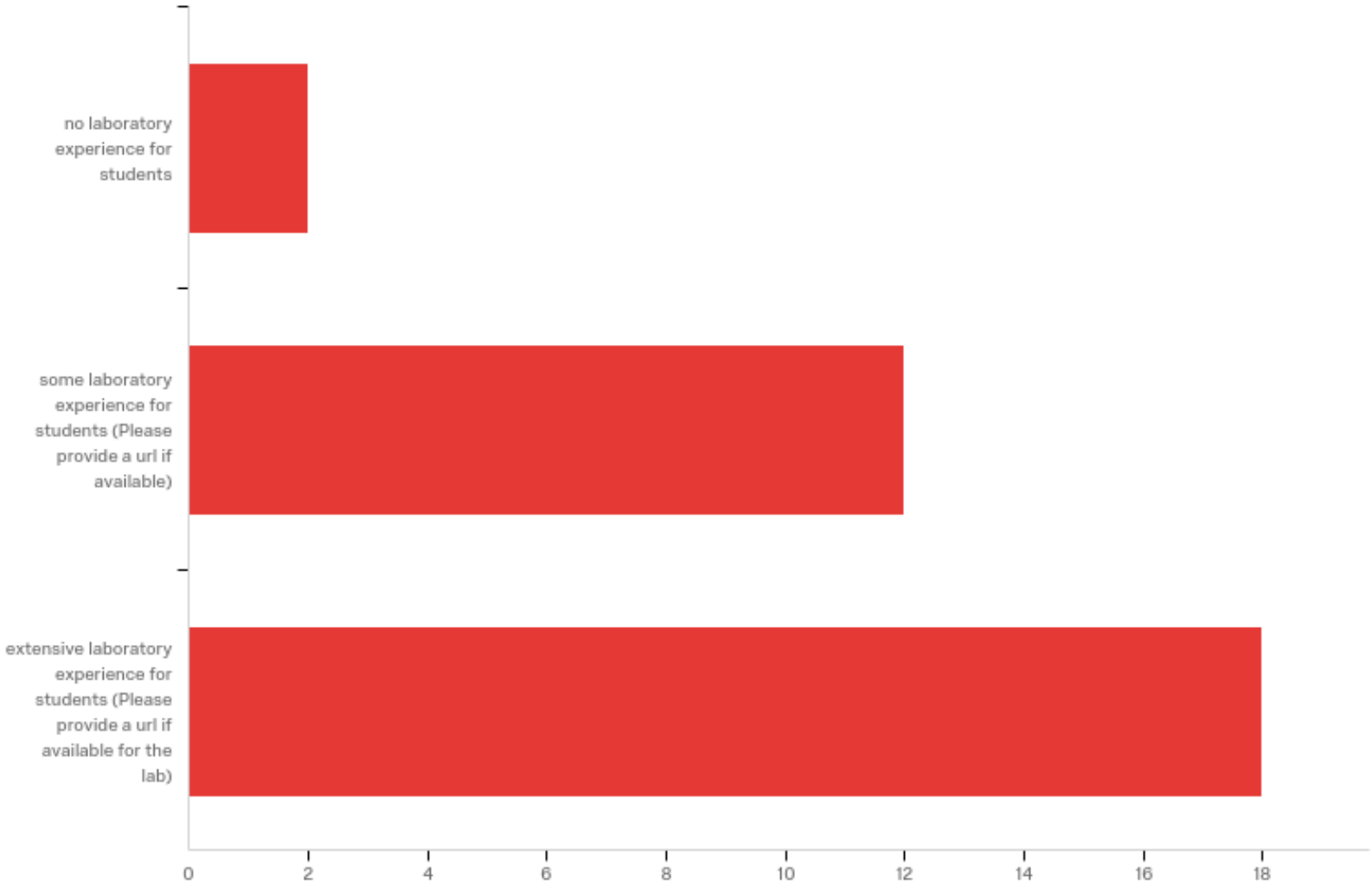
#	Answer	%	Count
1	Groover	38.71%	12
2	Degarmo, Black, Kosher	6.45%	2
3	Kalpakjian	29.03%	9
4	Other	25.81%	8
	Total	100%	31

B5 - I/We currently use the following book to teach manufacturing processes:

B5_4_TEXT - Other

Other - Text
Currently, we don't have a manufacturing process course. We will offer one in future semester.
no text
Schey, John A. (2000), Introduction to Manufacturing Processes, McGraw Hill, 3rd
Instructor materials
NA
NA

B6 - Our program has



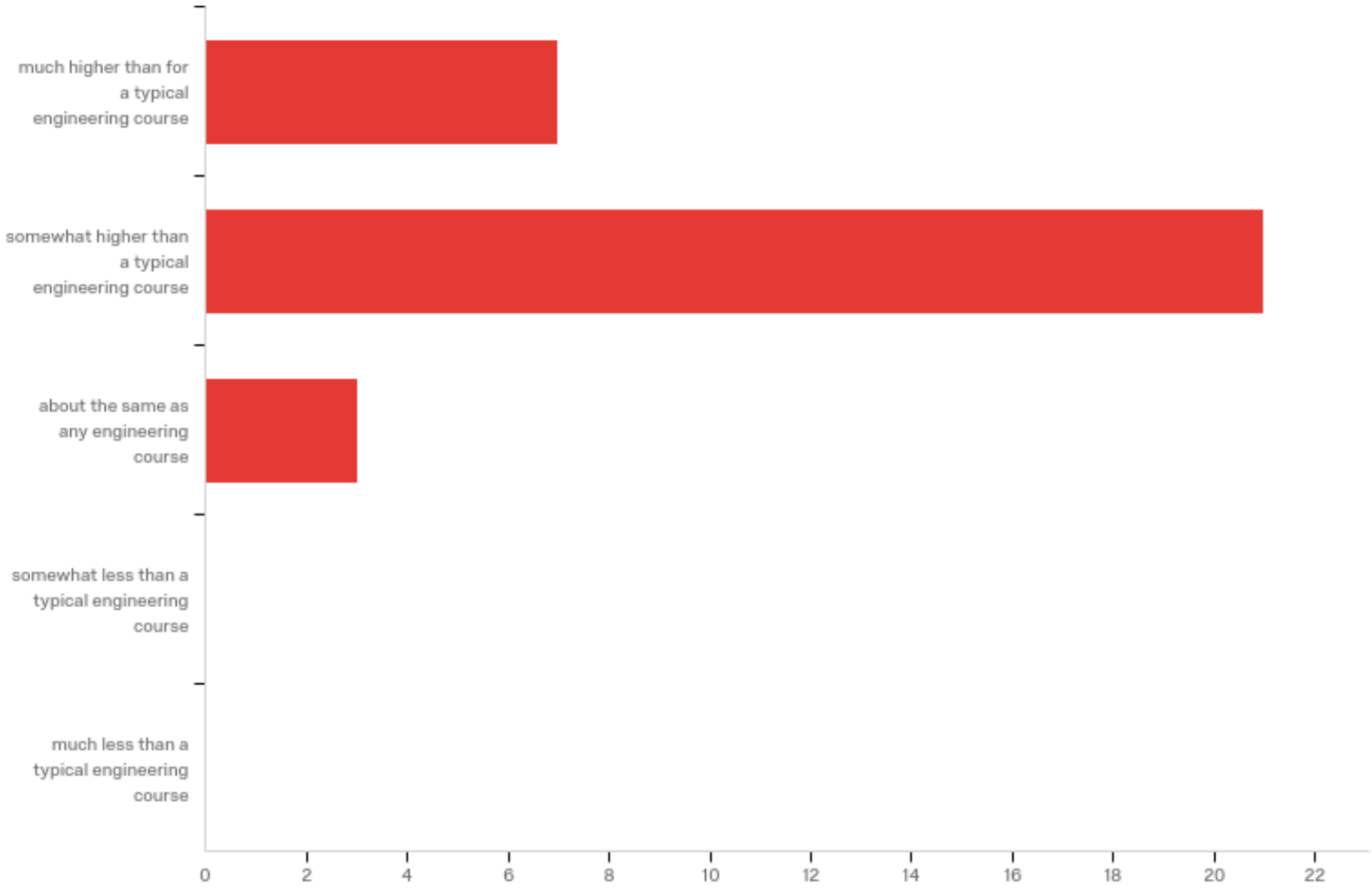
B6 - Our program has

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Our program has - Selected Choice	1.00	3.00	2.50	0.61	0.38	32

B6 - Our program has

#	Answer	%	Count
1	no laboratory experience for students	6.25%	2
2	some laboratory experience for students (Please provide a url if available)	37.50%	12
3	extensive laboratory experience for students (Please provide a url if available for the lab)	56.25%	18
	Total	100%	32

C2 - The time currently required to develop course materials for advanced manufacturing instruction is



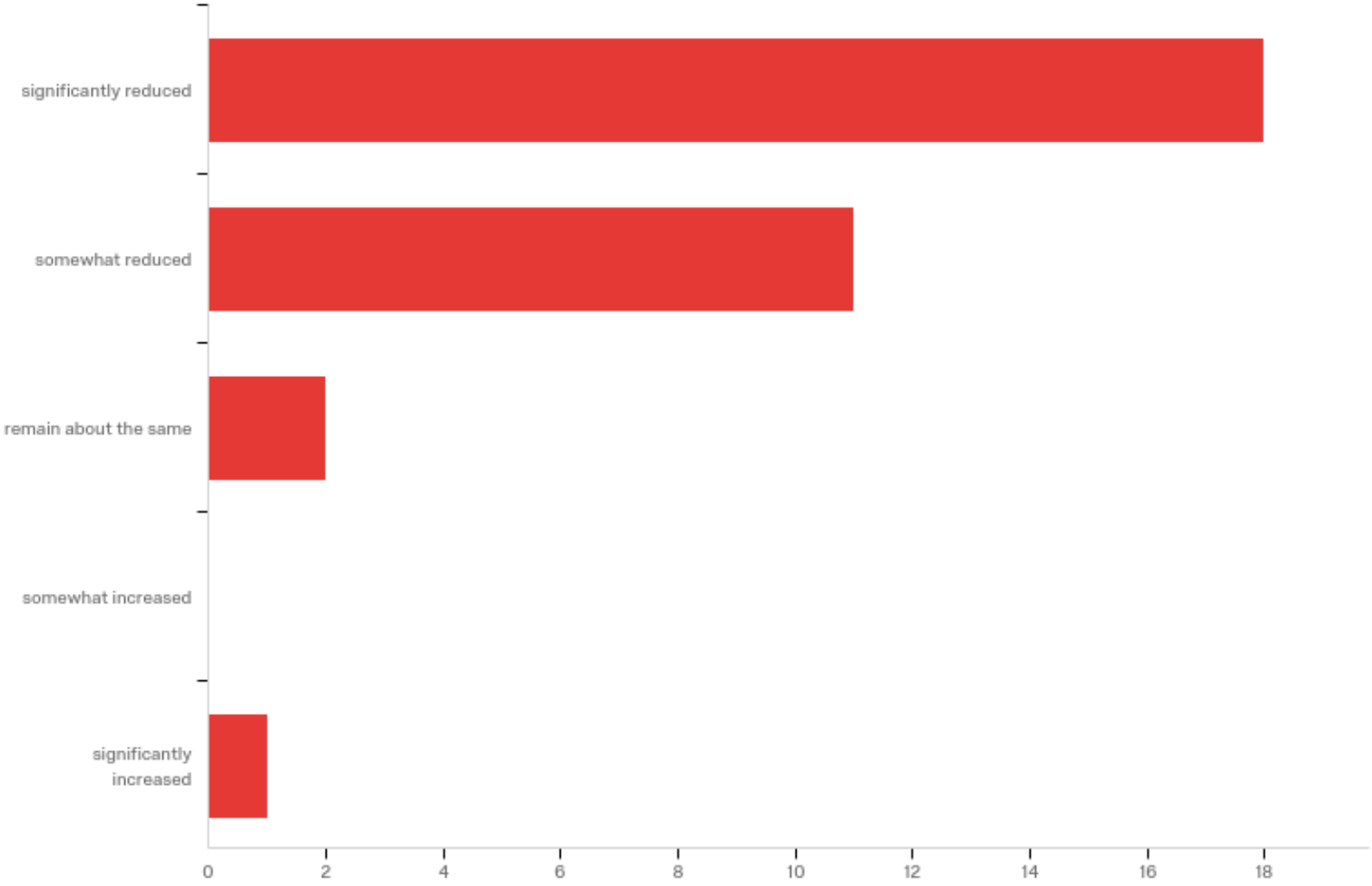
C2 - The time currently required to develop course materials for advanced manufacturing instruction is

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	The time currently required to develop course materials for advanced manufacturing instruction is	1.00	3.00	1.87	0.55	0.31	31

C2 - The time currently required to develop course materials for advanced manufacturing instruction is

#	Answer	%	Count
1	much higher than for a typical engineering course	22.58%	7
2	somewhat higher than a typical engineering course	67.74%	21
3	about the same as any engineering course	9.68%	3
4	somewhat less than a typical engineering course	0.00%	0
5	much less than a typical engineering course	0.00%	0
	Total	100%	31

C3 - If a repository of existing materials (lecture slides, self-help videos, reading materials), for advanced manufacturing was available for university instructors to utilize, the time required for course pr



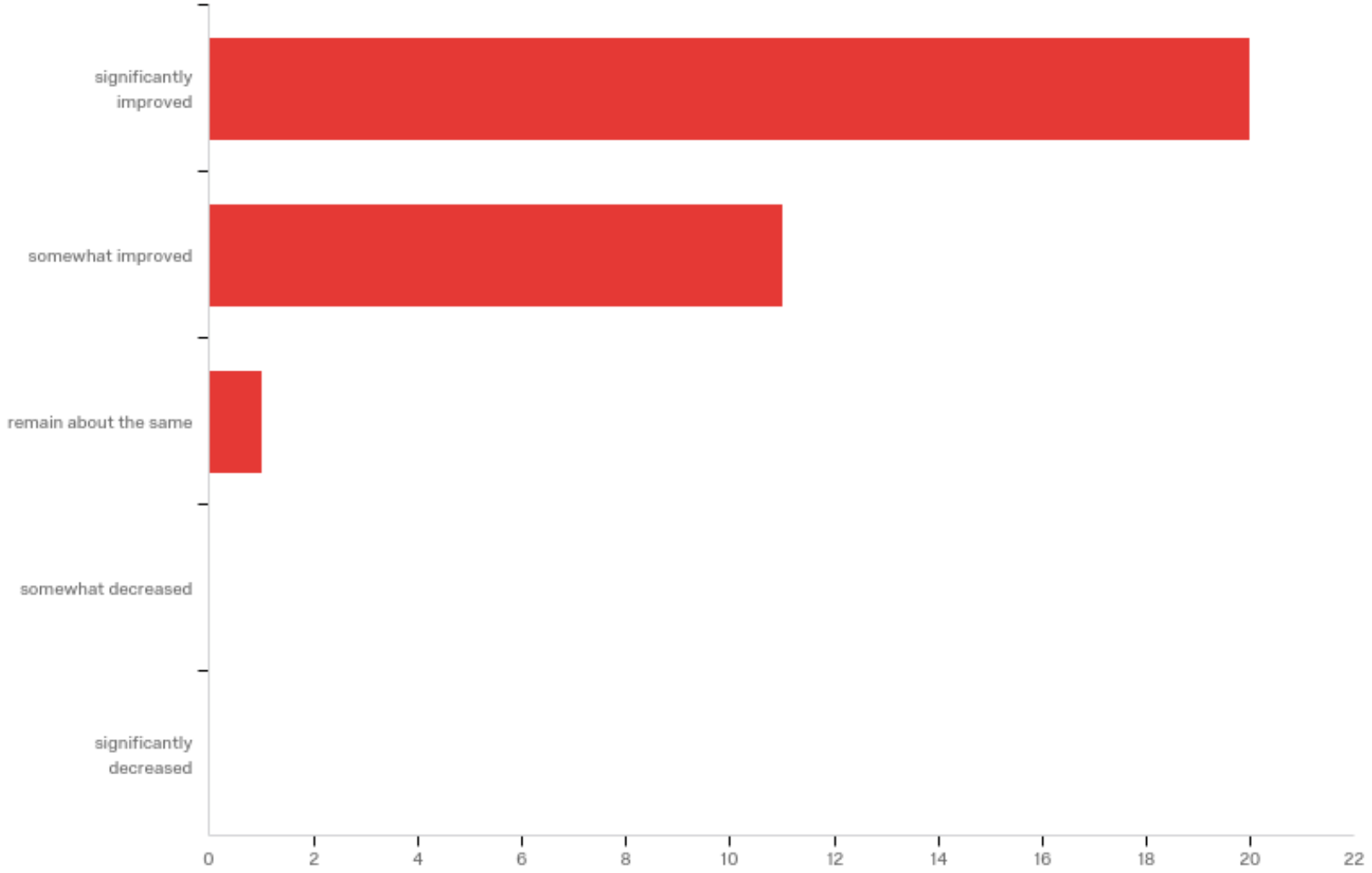
C3 - If a repository of existing materials (lecture slides, self-help videos, reading materials), for advanced manufacturing was available for university instructors to utilize, the time required for course preparation would be

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	If a repository of existing materials (lecture slides, self-help videos, reading materials), for advanced manufacturing was available for university instructors to utilize, the time	1.00	5.00	1.59	0.86	0.74	32

C3 - If a repository of existing materials (lecture slides, self-help videos, reading materials), for advanced manufacturing was available for university instructors to utilize, the time required for course preparation would be

#	Answer	%	Count
1	significantly reduced	56.25%	18
2	somewhat reduced	34.38%	11
3	remain about the same	6.25%	2
4	somewhat increased	0.00%	0
5	significantly increased	3.13%	1
	Total	100%	32

C4 - If a repository of existing materials for advanced manufacturing was available for university instructors to utilize, the quality and content of the course would be



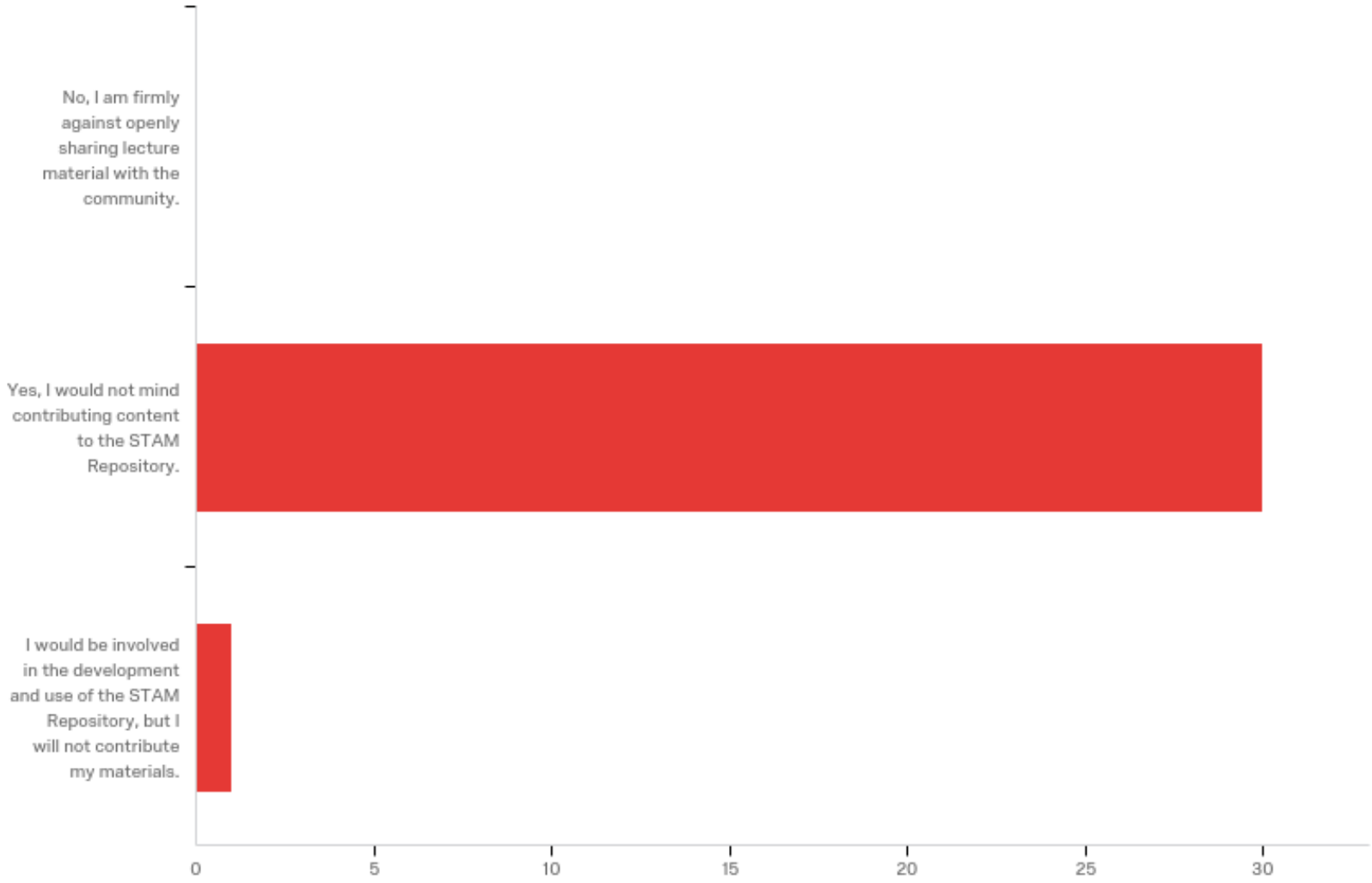
C4 - If a repository of existing materials for advanced manufacturing was available for university instructors to utilize, the quality and content of the course would be

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	If a repository of existing materials for advanced manufacturing was available for university instructors to utilize, the quality and content of the course	1.00	3.00	1.41	0.55	0.30	32

C4 - If a repository of existing materials for advanced manufacturing was available for university instructors to utilize, the quality and content of the course would be

#	Answer	%	Count
1	significantly improved	62.50%	20
2	somewhat improved	34.38%	11
3	remain about the same	3.13%	1
4	somewhat decreased	0.00%	0
5	significantly decreased	0.00%	0
	Total	100%	32

C5 - Would you be willing to contribute learning material to the STAM Repository?



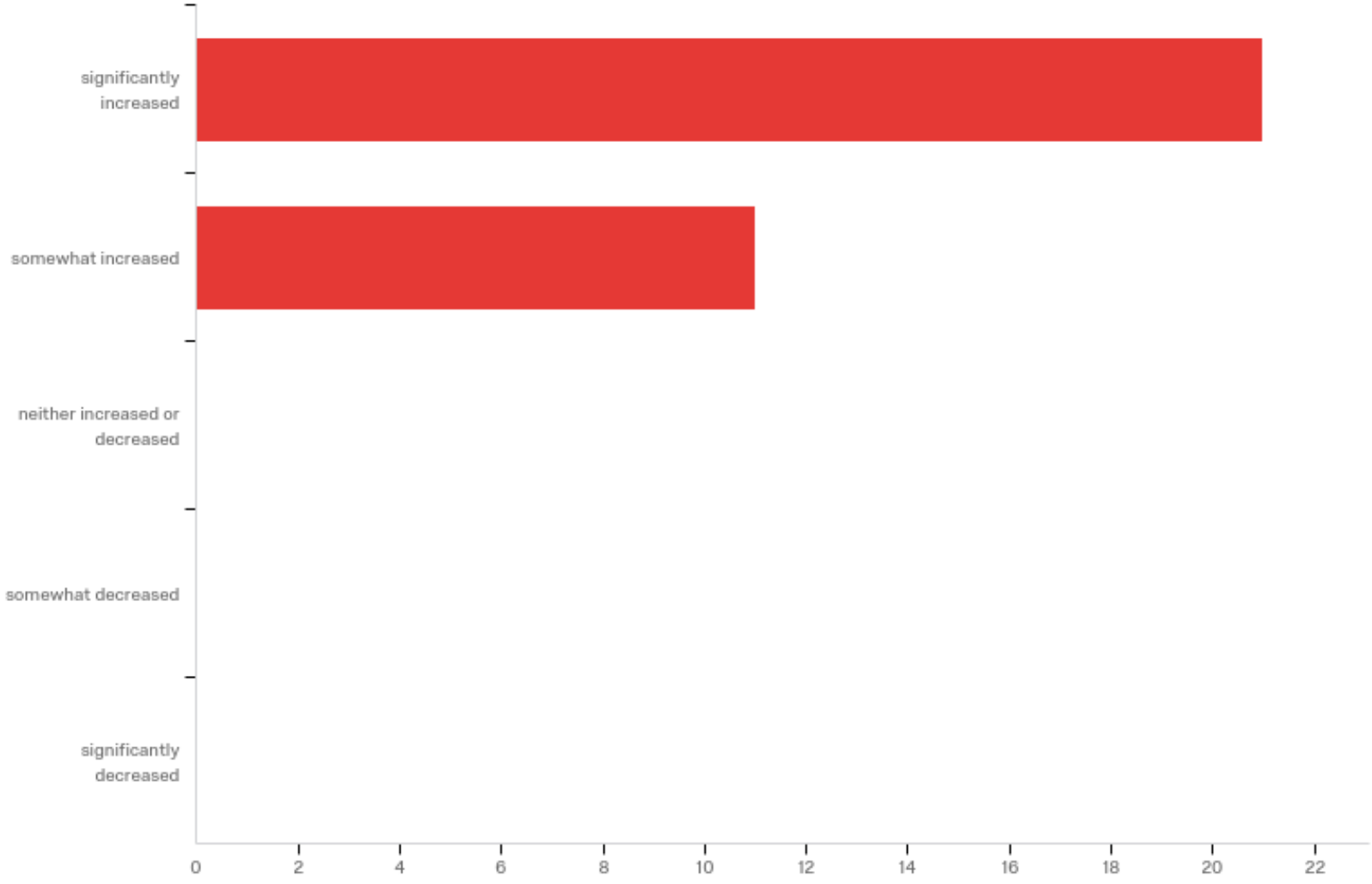
C5 - Would you be willing to contribute learning material to the STAM Repository?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Would you be willing to contribute learning material to the STAM Repository?	2.00	3.00	2.03	0.18	0.03	31

C5 - Would you be willing to contribute learning material to the STAM Repository?

#	Answer	%	Count
1	No, I am firmly against openly sharing lecture material with the community.	0.00%	0
2	Yes, I would not mind contributing content to the STAM Repository.	96.77%	30
3	I would be involved in the development and use of the STAM Repository, but I will not contribute my materials.	3.23%	1
	Total	100%	31

C6 - If a repository of existing materials for advanced manufacturing was available for university instructors to utilize, the breadth of the materials covered in the course would be



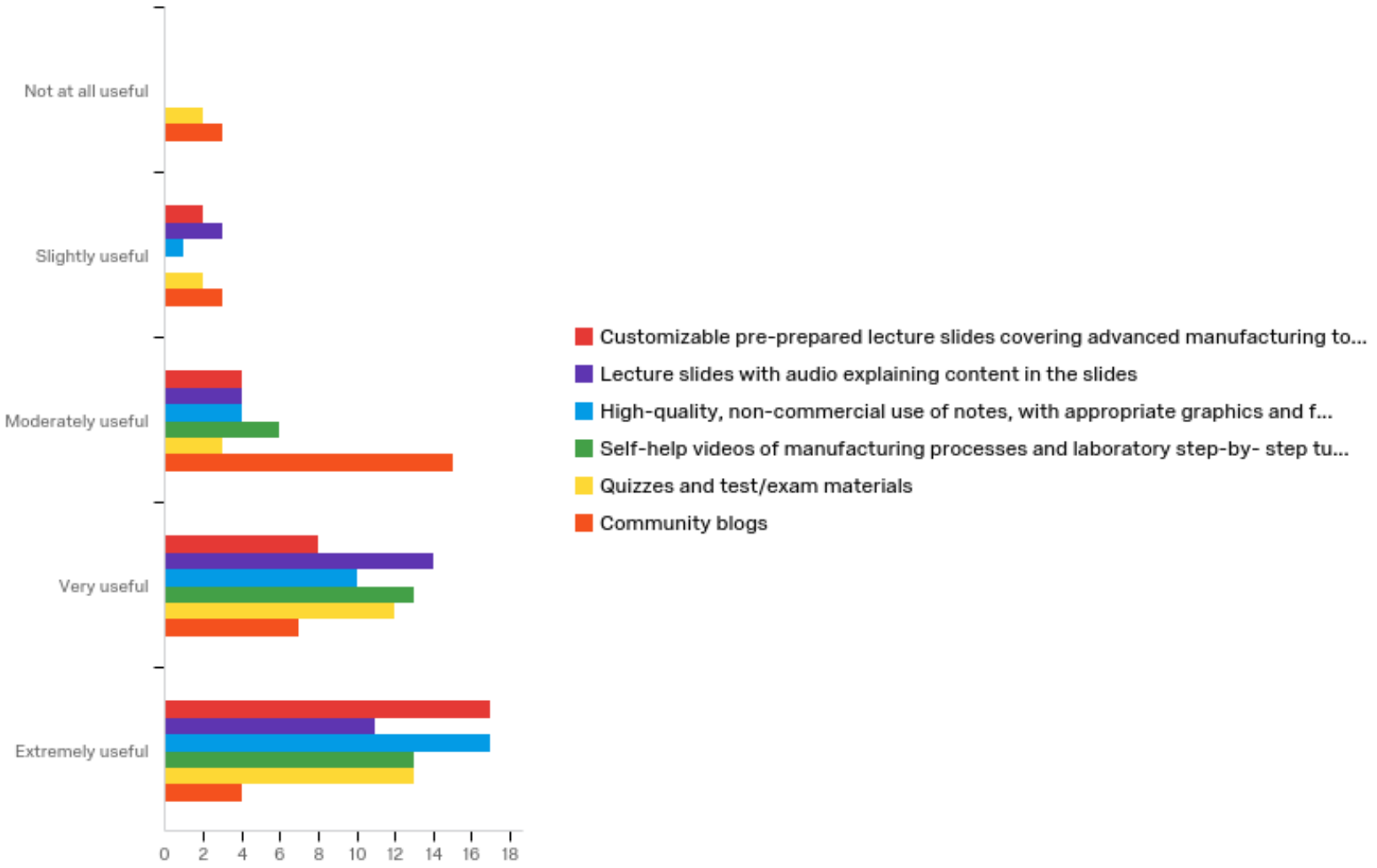
C6 - If a repository of existing materials for advanced manufacturing was available for university instructors to utilize, the breadth of the materials covered in the course would be

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	If a repository of existing materials for advanced manufacturing was available for university instructors to utilize, the breadth of the materials covered in the	1.00	2.00	1.34	0.47	0.23	32

C6 - If a repository of existing materials for advanced manufacturing was available for university instructors to utilize, the breadth of the materials covered in the course would be

#	Answer	%	Count
1	significantly increased	65.63%	21
2	somewhat increased	34.38%	11
3	neither increased or decreased	0.00%	0
4	somewhat decreased	0.00%	0
5	significantly decreased	0.00%	0
	Total	100%	32

C7 - Rate the usefulness of each STAM Repository component to course instruction and student learning.



C7 - Rate the usefulness of each STAM Repository component to course instruction and student learning.

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Customizable pre-prepared lecture slides covering advanced manufacturing topics	2.00	5.00	4.29	0.92	0.85	31
2	Lecture slides with audio explaining content in the slides	2.00	5.00	4.03	0.92	0.84	32
3	High-quality, non-	2.00	5.00	4.34	0.81	0.66	32

C7 - Rate the usefulness of each STAM Repository component to course instruction and student learning.

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
4	Self-help videos of manufacturing processes and laboratory step-by-step tutorials	3.00	5.00	4.22	0.74	0.55	32
5	Quizzes and test/exam materials	1.00	5.00	4.00	1.15	1.31	32
6	Community blogs	1.00	5.00	3.19	1.07	1.15	32

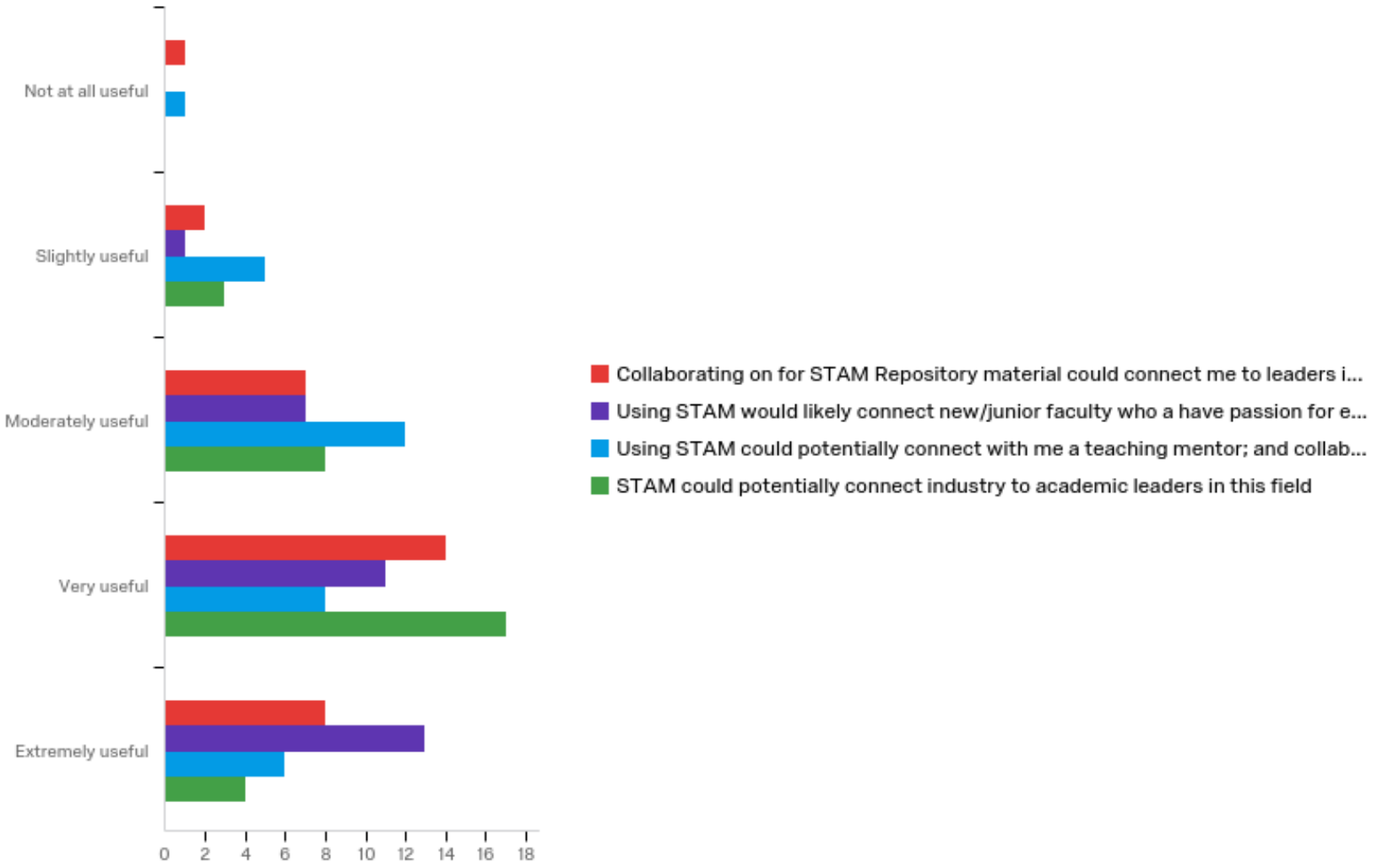
C7 - Rate the usefulness of each STAM Repository component to course instruction and student learning.

#	Question	Not at all useful		Slightly useful		Moderately useful		Very useful
1	Customizable pre-prepared lecture slides covering advanced manufacturing topics	0.00%	0	6.45%	2	12.90%	4	25.81%
2	Lecture slides with audio explaining content in the slides	0.00%	0	9.38%	3	12.50%	4	43.75%
3	High-quality,	0.00%	0	3.13%	1	12.50%	4	31.25%

C7 - Rate the usefulness of each STAM Repository component to course instruction and student learning.

#	Question	Not at all useful		Slightly useful		Moderately useful		Very useful
4	Self-help videos of manufacturing processes and laboratory step-by- step tutorials	0.00%	0	0.00%	0	18.75%	6	40.63%
5	Quizzes and test/exam materials	6.25%	2	6.25%	2	9.38%	3	37.50%
6	Community blogs	9.38%	3	9.38%	3	46.88%	15	21.88%

C8 - Rate the usefulness of the STAM Repository in facilitating connections to manufacturing and design educators.



C8 - Rate the usefulness of the STAM Repository in facilitating connections to manufacturing and design educators.

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Collaborating on for STAM Repository material could connect me to leaders in the field	1.00	5.00	3.81	0.98	0.96	32
2	Using STAM would likely connect new/junior faculty who a have passion for	2.00	5.00	4.13	0.86	0.73	32

C8 - Rate the usefulness of the STAM Repository in facilitating connections to manufacturing and design educators.

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
4	STAM could potentially connect industry to academic leaders in this field	2.00	5.00	3.69	0.81	0.65	32

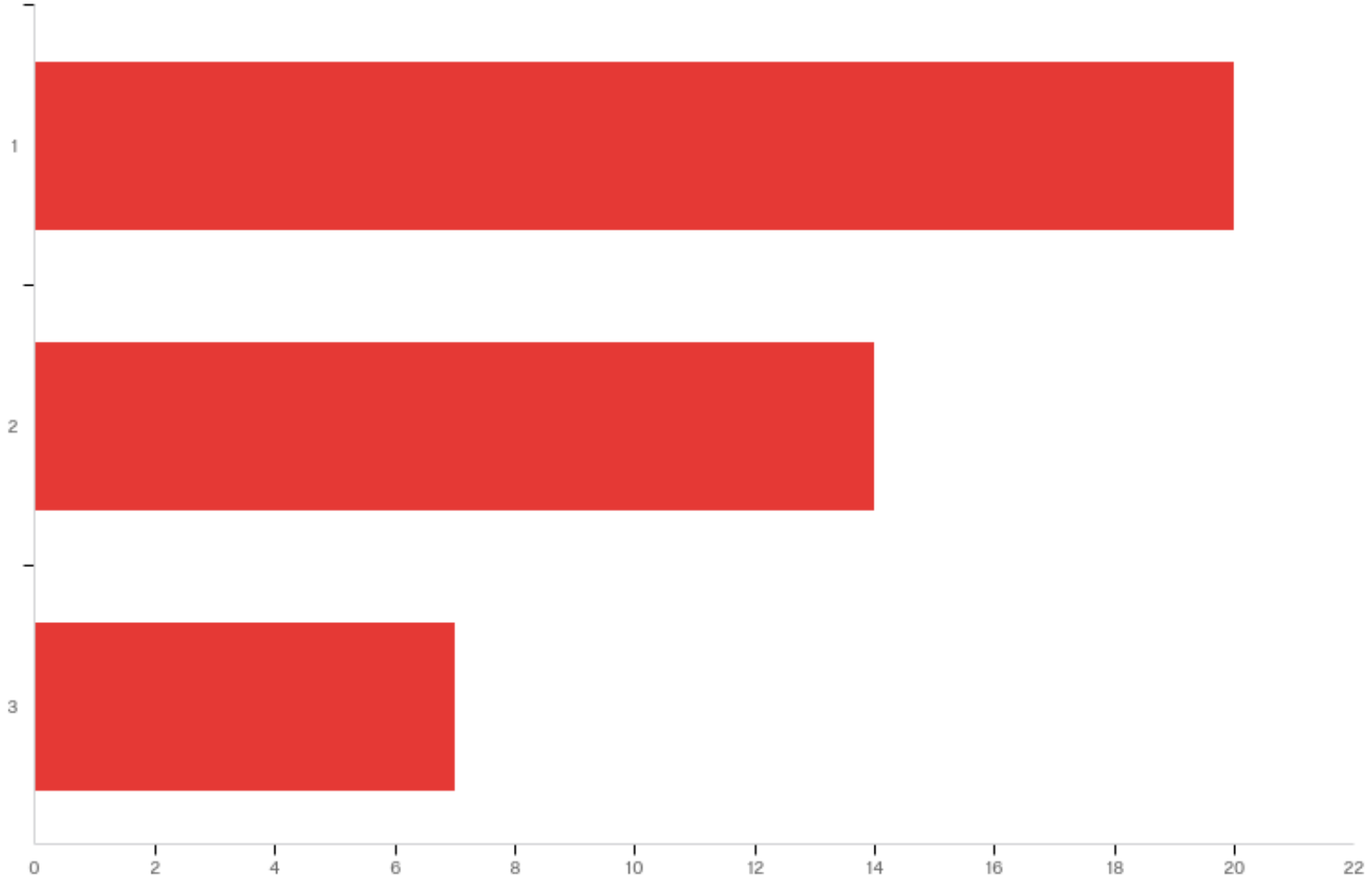
C8 - Rate the usefulness of the STAM Repository in facilitating connections to manufacturing and design educators.

#	Question	Not at all useful		Slightly useful		Moderately useful		Very useful
1	Collaborating on for STAM Repository material could connect me to leaders in the field	3.13%	1	6.25%	2	21.88%	7	43.75%
2	Using STAM would likely connect new/junior faculty who a have passion	0.00%	0	3.13%	1	21.88%	7	34.38%

C8 - Rate the usefulness of the STAM Repository in facilitating connections to manufacturing and design educators.

#	Question	Not at all useful		Slightly useful		Moderately useful		Very useful
4	STAM could potentially connect industry to academic leaders in this field	0.00%	0	9.38%	3	25.00%	8	53.13%

C9 - List up to three (3) utility/quality outcomes that could affect faculty course preparation and offering not listed above but important for the use of a course repository.



C9 - List up to three (3) utility/quality outcomes that could affect faculty course preparation and offering not listed above but important for the use of a course repository.

#	Answer	%	Count
1	1	48.78%	20
2	2	34.15%	14
3	3	17.07%	7
	Total	100%	41

C9 - List up to three (3) utility/quality outcomes that could affect faculty course preparation and offering not listed above but important for the use of a course repository.

C9_1_TEXT - 1

1 - Text
high quality materials will attract more students to the field of manufacturing
Detailed and attractive case studies to inspire students
Access to more recent (latest) materials
Effective communication skills in new faculty
User friendly
Provide faculty access to explanations by true subject matter experts
Content would be rapidly evolving and more current than textbooks
1/3:For a top education institution, we need to think about making the manufacturing process course more stimulating and challenging, and connect well with engineering sciences. While hands on aspect addresses some elements of this, notes, quizzes, etc., need to be completely redone to make the subject more exciting for the present generation.
Updated material
Ability to tailor courses for relevant regional industry

C9 - List up to three (3) utility/quality outcomes that could affect faculty course preparation and offering not listed above but important for the use of a course repository.

C9_1_TEXT - 1

1 - Text
Standardization for consistent content and vocabulary
Lessen student expenses/complaints concerning high-cost text
Developing material for departments with out manufacutring infrasturcutre
may guide the identification of laboratory equipment purchased to support student learning
Securing solution bank to avoid cheating, particularly applicable for online repository
Sample exams and homework questions will be helpful
improvement of laboratory experiments currently in use
Students evaluation of materials used in some existing mfg courses
Provide material for non-engineers to integrate into courses.
Detailed in-depth description of manufacturing process content is necessary

C9 - List up to three (3) utility/quality outcomes that could affect faculty course preparation and offering not listed above but important for the use of a course repository.

C9_2_TEXT - 2

2 - Text
the use of case studies would be extremely useful
The need for hands on activities
Higher quality laboratory experiences
Depth of coverage would be instructor-determined for each topic (not limited by publisher priorities)
real life examples
Access to innovative lab materials and lab setup designs
Easier transition to flipped (hybrid online) mode of instruction
More customizable
Methods for developing a small lab (closet sized)
Laboratory examples and videos are helpful, especially for faculty not having labs available

C9 - List up to three (3) utility/quality outcomes that could affect faculty course preparation and offering not listed above but important for the use of a course repository.

C9_2_TEXT - 2

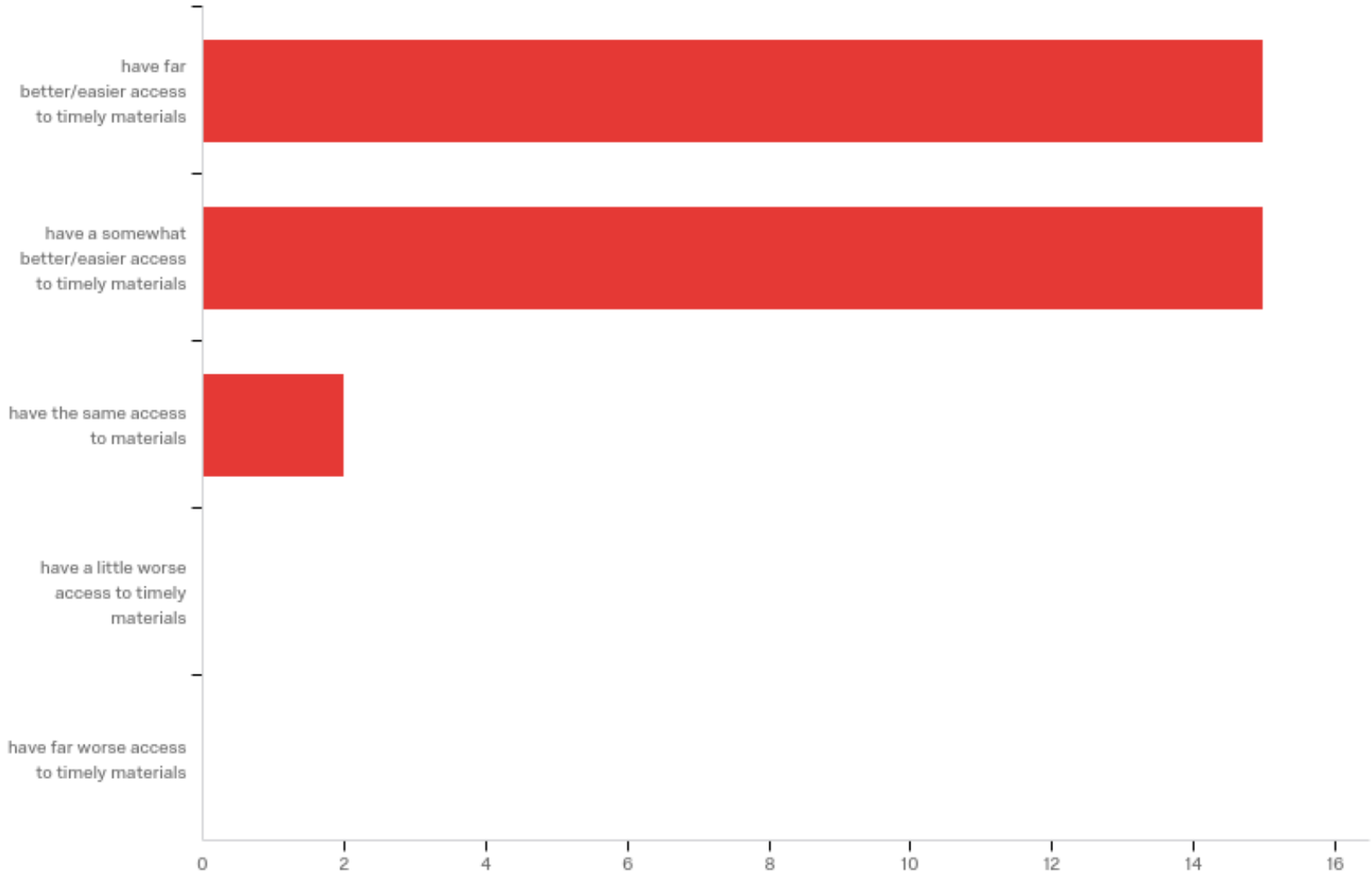
2 - Text
provides assistance with equipment needed for laboratories
Description of labs, equipment, manuals
Enable broader coverage of topics since student learning is now better geared for electronic delivery.
videos utilizing different brands of machines would need to be made available to cater to the variety of machines out there

C9 - List up to three (3) utility/quality outcomes that could affect faculty course preparation and offering not listed above but important for the use of a course repository.

C9_3_TEXT - 3

3 - Text
networking with peers
Materials needed
Content would be peer-evaluated on an ongoing basis, ensuring errors are caught and corrected
new processes
Lower barrier of entry for non-experts in mfg to teach
Active exercises to use during lecture
Allow for more design content in current courses.

D2 - Students enrolled in a course that utilizes a repository, will likely



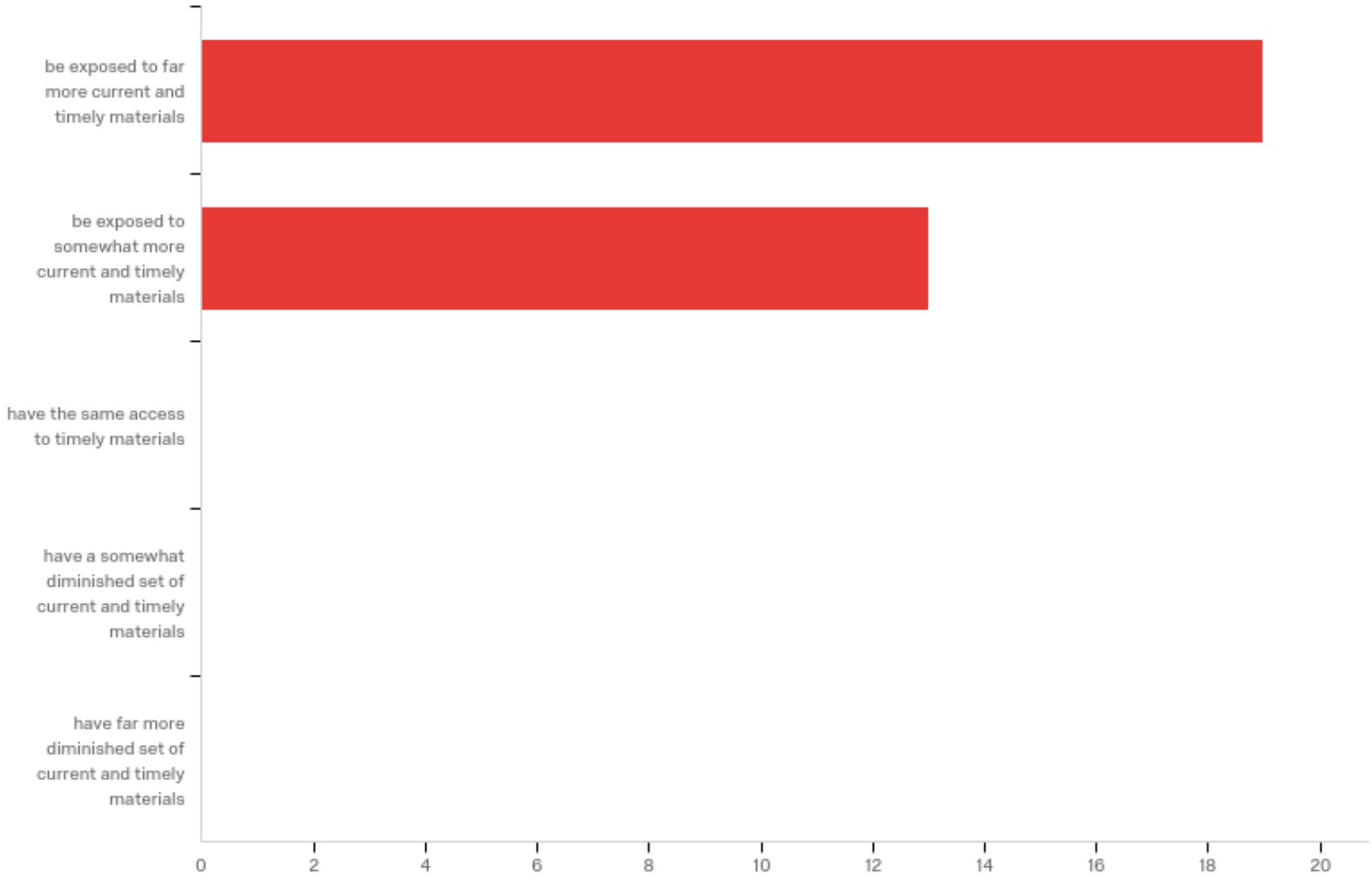
D2 - Students enrolled in a course that utilizes a repository, will likely

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Students enrolled in a course that utilizes a repository, will likely	1.00	3.00	1.59	0.61	0.37	32

D2 - Students enrolled in a course that utilizes a repository, will likely

#	Answer	%	Count
1	have far better/easier access to timely materials	46.88%	15
2	have a somewhat better/easier access to timely materials	46.88%	15
3	have the same access to materials	6.25%	2
4	have a little worse access to timely materials	0.00%	0
5	have far worse access to timely materials	0.00%	0
	Total	100%	32

D3 - Because of frequent updates to a repository, students enrolled in a course that utilizes a repository, will likely



D3 - Because of frequent updates to a repository, students enrolled in a course that utilizes a repository, will likely

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Because of frequent updates to a repository, students enrolled in a course that utilizes a repository, will likely	1.00	2.00	1.41	0.49	0.24	32

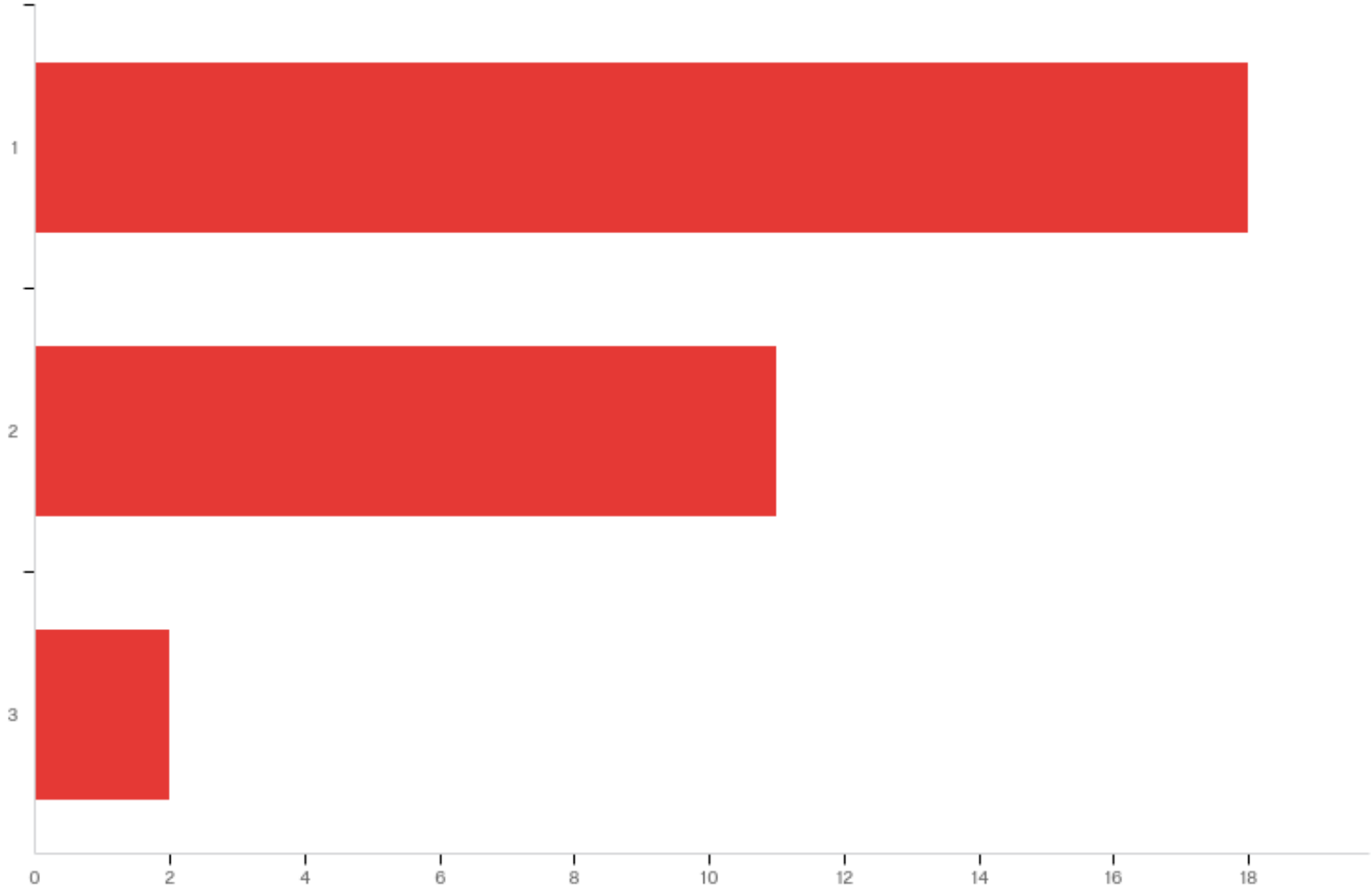
D3 - Because of frequent updates to a repository, students enrolled in a course that utilizes a repository, will likely

#	Answer	%	Count
1	be exposed to far more current and timely materials	59.38%	19
2	be exposed to somewhat more current and timely materials	40.63%	13
3	have the same access to timely materials	0.00%	0
4	have a somewhat diminished set of current and timely materials	0.00%	0
5	have far more diminished set of current and timely materials	0.00%	0

D3 - Because of frequent updates to a repository, students enrolled in a course that utilizes a repository, will likely

#	Answer	%	Count
	Total	100%	32

D4 - List up to three (3) utility/quality outcomes that could affect students taking a repository-based course not listed above but important for the use of a community accessible course repository.



D4 - List up to three (3) utility/quality outcomes that could affect students taking a repository-based course not listed above but important for the use of a community accessible course repository.

#	Answer	%	Count
1	1	58.06%	18
2	2	35.48%	11
3	3	6.45%	2
	Total	100%	31

D4 - List up to three (3) utility/quality outcomes that could affect students taking a repository-based course not listed above but important for the use of a community accessible course repository.

D4_1_TEXT - 1

1 - Text
same as previous question.. more students will be attracted to manufacturing
Increase students' confidence and interests since it provided state-of-the-art teaching materials
Awareness of leading teachers/professors in the field
students' access to a wide variety of teaching materials in mfg eng
Relevant information vs. obsolete
Independent accounts between faculty and students
Provide students access to explanations by true subject matter experts
have access to more examples and supplemental materials as-needed
Students have the potential to have a higher quality educational experience
connection or exposure to other educators nationwide
Cost

D4 - List up to three (3) utility/quality outcomes that could affect students taking a repository-based course not listed above but important for the use of a community accessible course repository.

D4_1_TEXT - 1

1 - Text
Students will essentially be in a cohort of people they have not met but may encounter in the work place
student would recognize that what the learning objectives for the course are globally accepted, not just what the course instructor dreamed-up
It saves them big on expensive textbooks cost
expands the laboratory 'capabilities' available to the student
materials taught in different schools (perhaps their future graduate school)
Allow instructors to spent more time on design issues.
Cheaper and contributes to reducing costs

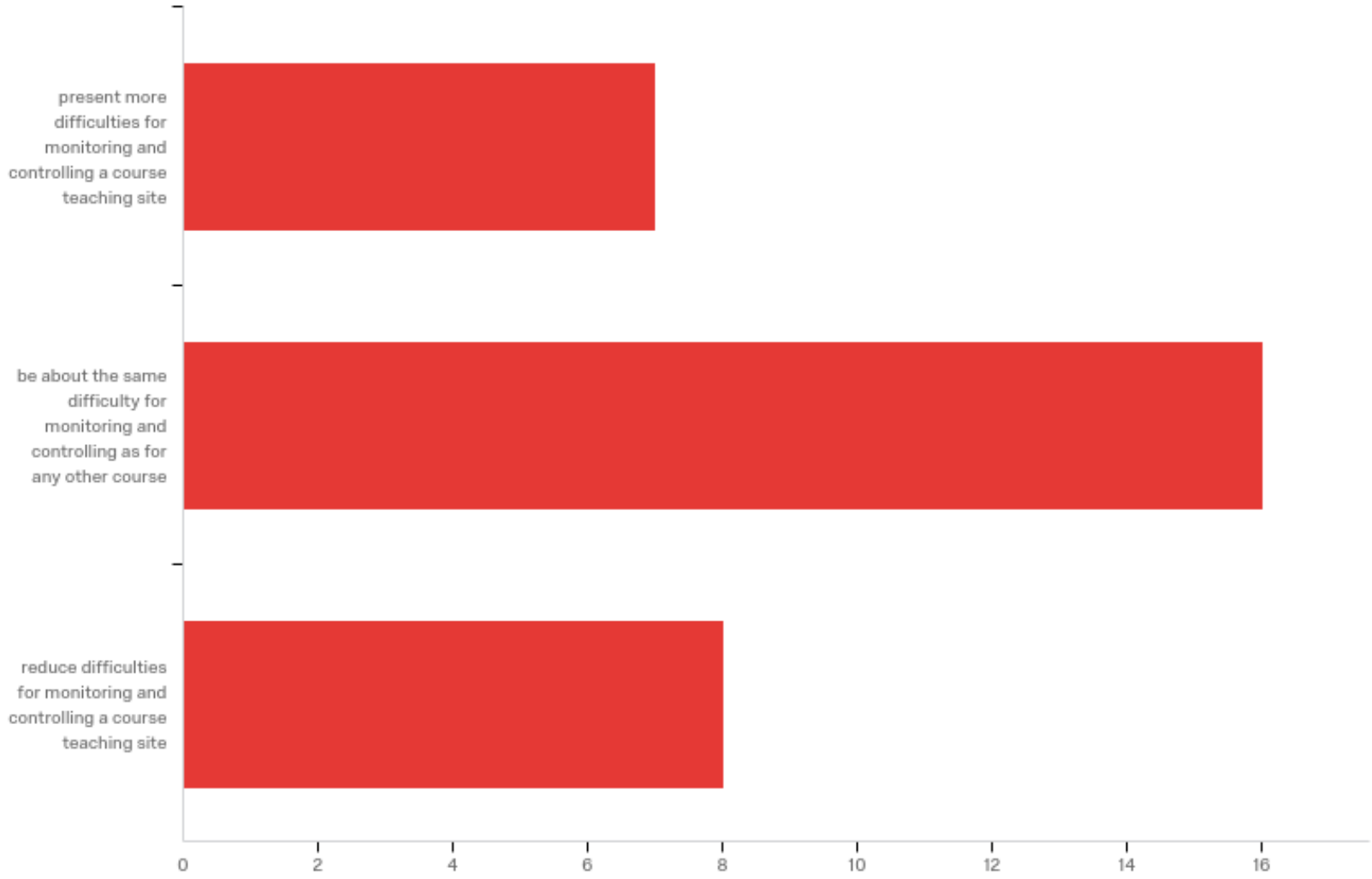
D4 - List up to three (3) utility/quality outcomes that could affect students taking a repository-based course not listed above but important for the use of a community accessible course repository.
D4_2_TEXT - 2

2 - Text
case studies are useful examples that students can relate to.
Higher quality laboratory experiences
have the opportunity to explore interesting topics in greater depth
Students have the potential to have richer lab experiences
Exposure to different perspectives/vocabulary than main instructor
Tmieliness
Students will recieve an education ona topic developed by a diverse group. This will ensure they recieve the most accurate and most diverse information
They can get access to more recent updated course topics materials
Materials prepared by experienced instructors, industry practitioners
Give a laboratory perspective to those at schools without facilities.
Good quality videos with utilizing best practices in online content

D4 - List up to three (3) utility/quality outcomes that could affect students taking a repository-based course not listed above but important for the use of a community accessible course repository.
D4_3_TEXT - 3

3 - Text
network students to other students / faculty / industry increasing professional involvement
They can get the same course materials as the students of other universities

E2 - Using a web-based repository to prepare an advanced manufacturing course will



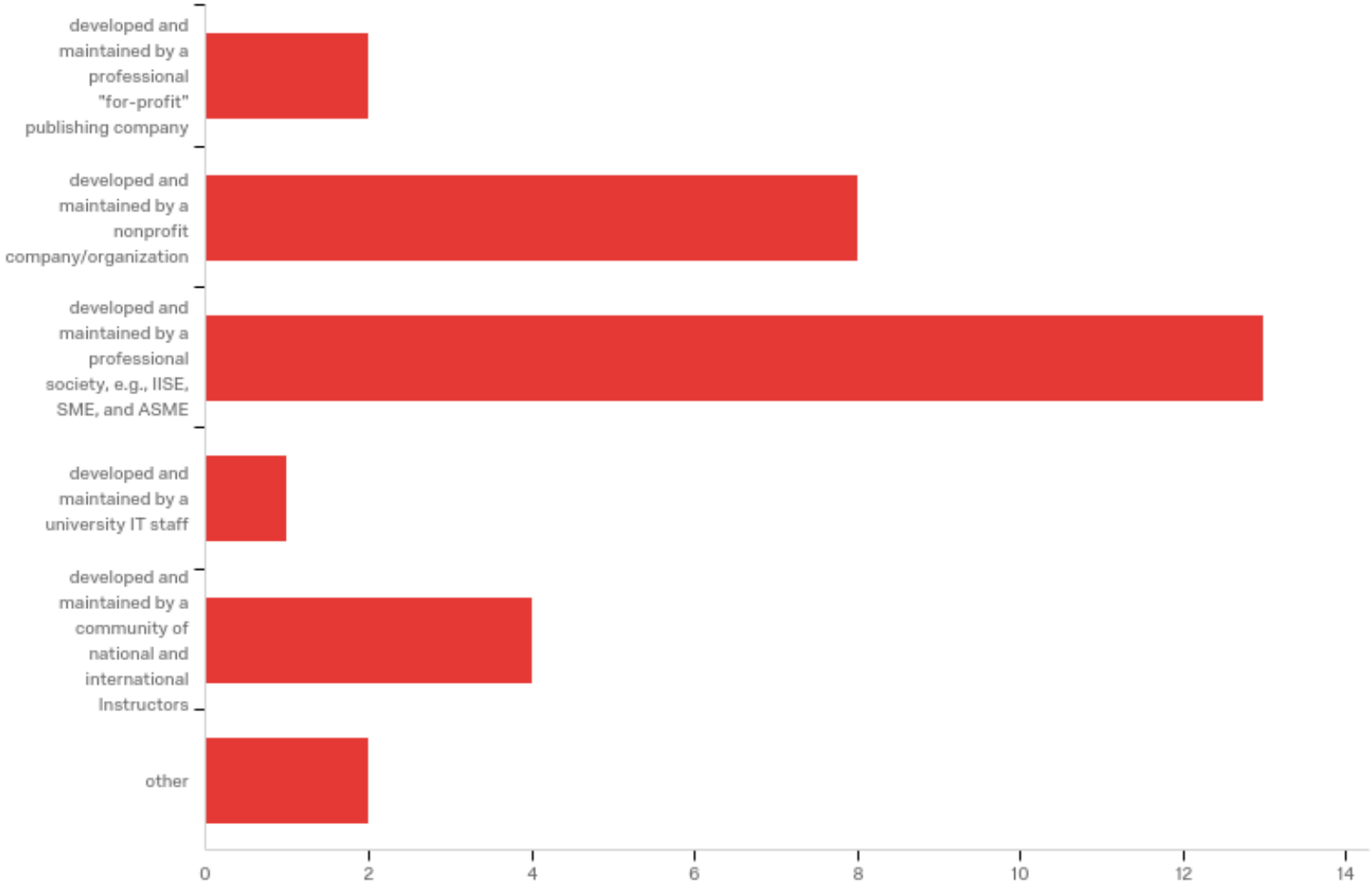
E2 - Using a web-based repository to prepare an advanced manufacturing course will

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Using a web-based repository to prepare an advanced manufacturing course will	1.00	3.00	2.03	0.69	0.48	31

E2 - Using a web-based repository to prepare an advanced manufacturing course will

#	Answer	%	Count
1	present more difficulties for monitoring and controlling a course teaching site	22.58%	7
2	be about the same difficulty for monitoring and controlling as for any other course	51.61%	16
3	reduce difficulties for monitoring and controlling a course teaching site	25.81%	8
	Total	100%	31

E3 - The STAM Repository should be



E3 - The STAM Repository should be

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	The STAM Repository should be - Selected Choice	1.00	6.00	3.10	1.30	1.69	30

E3 - The STAM Repository should be

#	Answer	%	Count
1	developed and maintained by a professional "for-profit" publishing company	6.67%	2
2	developed and maintained by a nonprofit company/organization	26.67%	8
3	developed and maintained by a professional society, e.g., IISE, SME, and ASME	43.33%	13
4	developed and maintained by a university IT staff	3.33%	1
5	developed and maintained by a community of national	13.33%	4

E3 - The STAM Repository should be

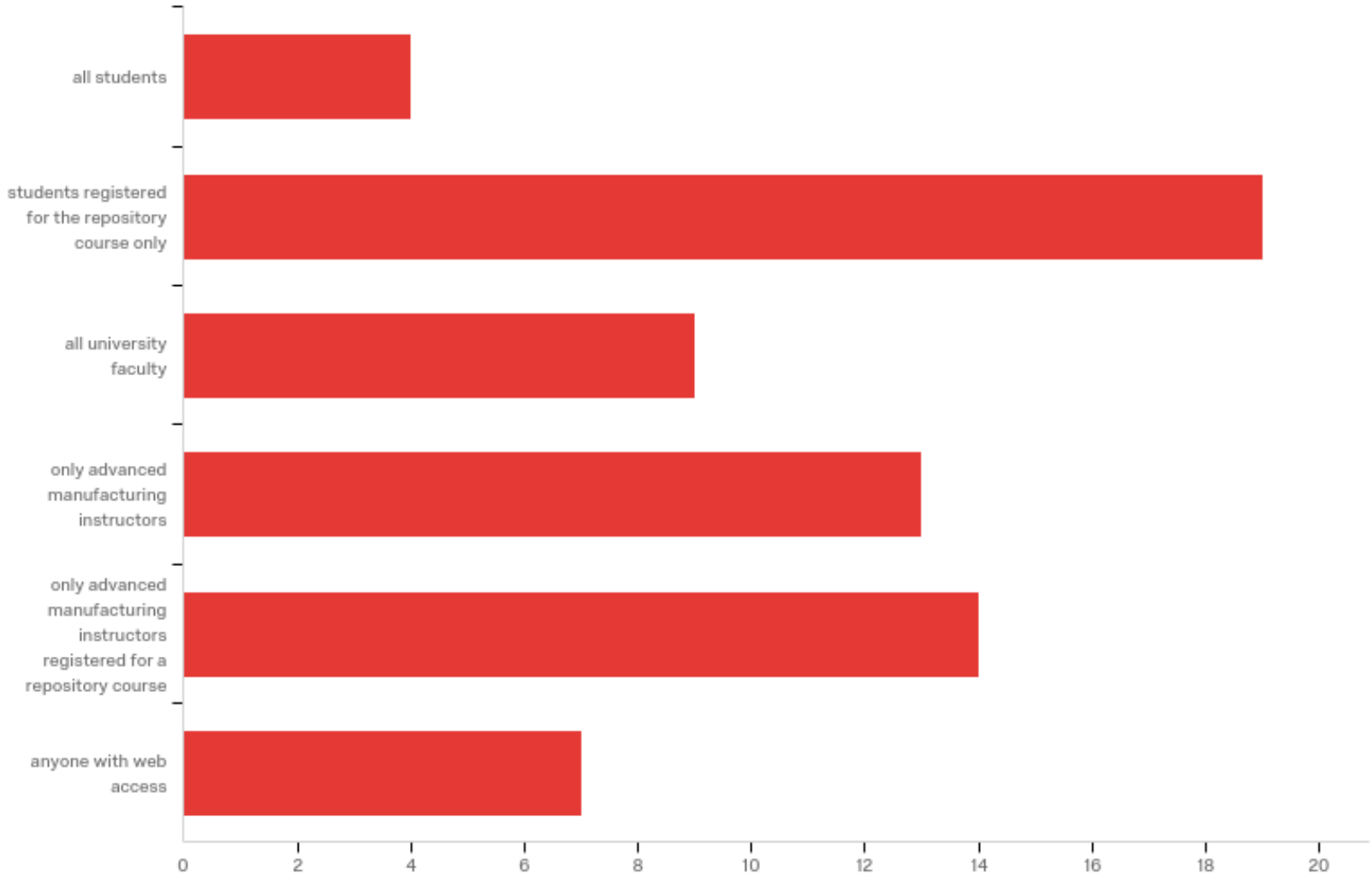
#	Answer	%	Count
6	other	6.67%	2
	Total	100%	30

E3 - The STAM Repository should be

E3_6_TEXT - other

other - Text
community of instructors under a non-profit umbrella
Nonprofit but will need a sustenable business model to keep going

E4 - The STAM Repository should be open to (choose as many as appropriate)



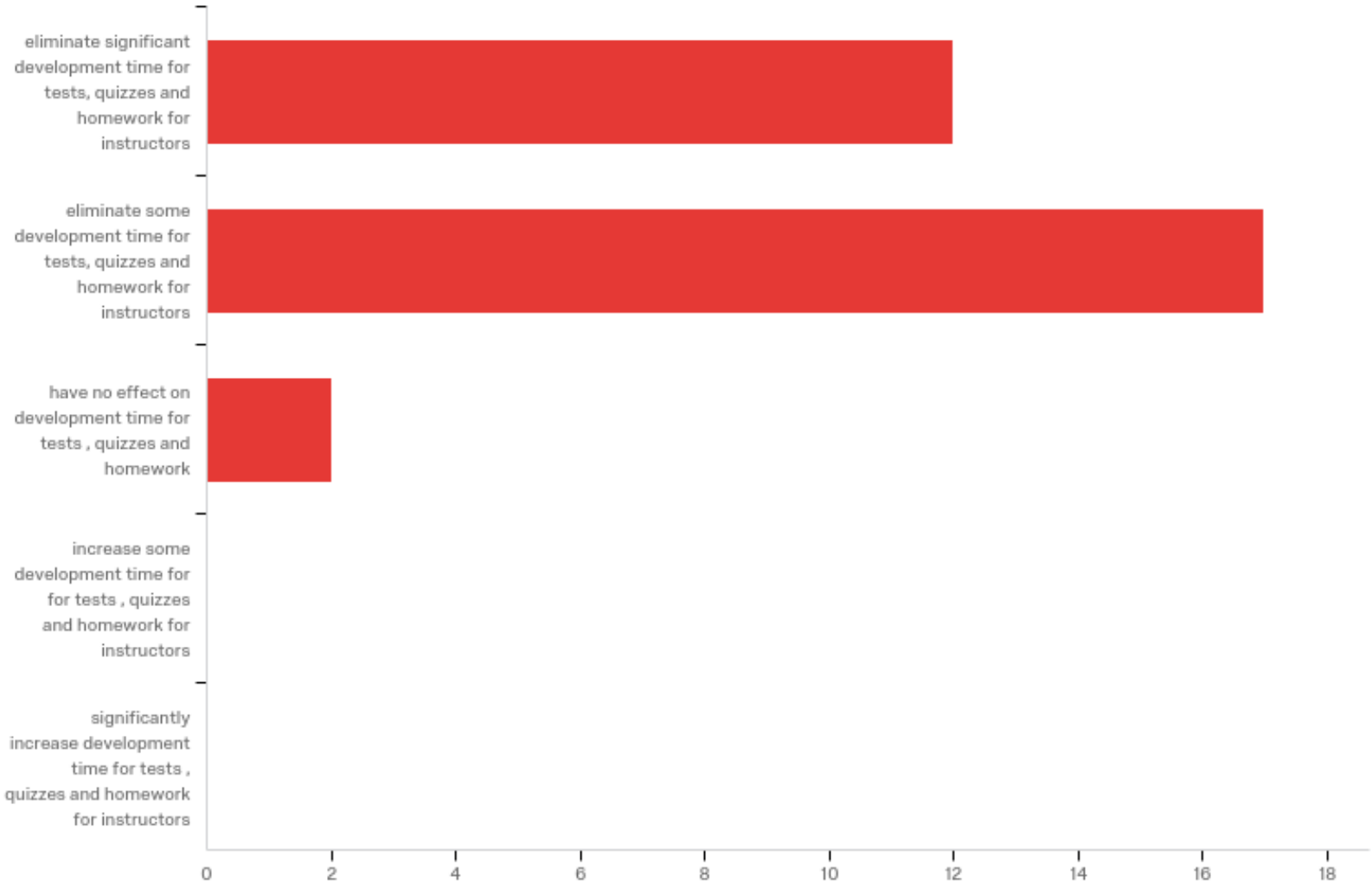
E4 - The STAM Repository should be open to (choose as many as appropriate)

#	Answer	%	Count
1	all students	6.06%	4
2	students registered for the repository course only	28.79%	19
3	all university faculty	13.64%	9
4	only advanced manufacturing instructors	19.70%	13
5	only advanced manufacturing instructors registered for a repository course	21.21%	14
6	anyone with web access	10.61%	7

E4 - The STAM Repository should be open to (choose as many as appropriate)

#	Answer	%	Count
	Total	100%	66

E5 - Evaluation rubrics (homework, quizzes and tests) need to be secured, but their availability will



E5 - Evaluation rubrics (homework, quizzes and tests) need to be secured, but their availability will

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Evaluation rubrics (homework, quizzes and tests) need to be secured, but their availability will	1.00	3.00	1.68	0.59	0.35	31

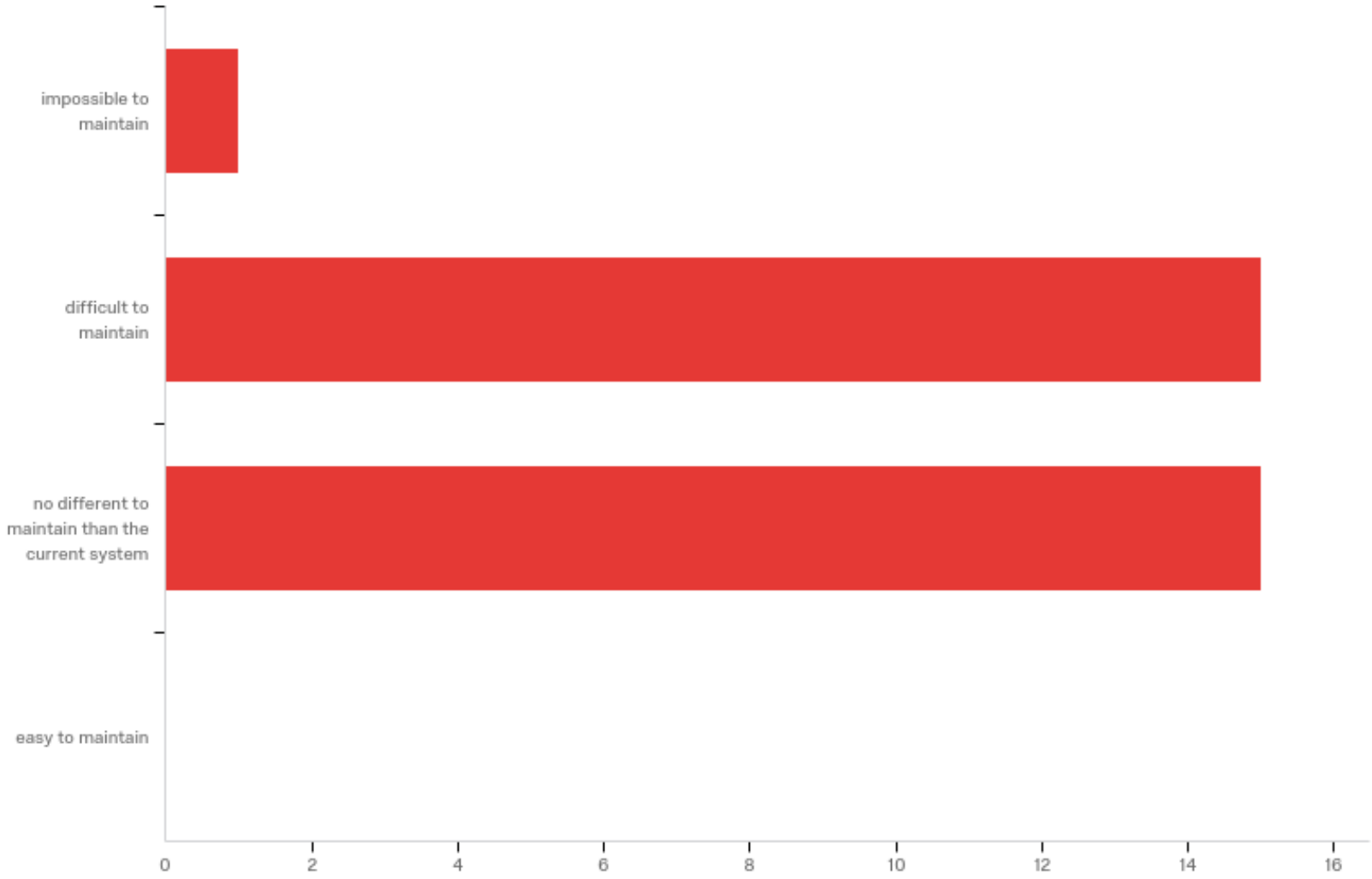
E5 - Evaluation rubrics (homework, quizzes and tests) need to be secured, but their availability will

#	Answer	%	Count
1	eliminate significant development time for tests, quizzes and homework for instructors	38.71%	12
2	eliminate some development time for tests, quizzes and homework for instructors	54.84%	17
3	have no effect on development time for tests , quizzes and homework	6.45%	2
4	increase some development time for for tests , quizzes and homework for instructors	0.00%	0

E5 - Evaluation rubrics (homework, quizzes and tests) need to be secured, but their availability will

#	Answer	%	Count
5	significantly increase development time for tests , quizzes and homework for instructors	0.00%	0
	Total	100%	31

E6 - The security for a repository system used by administrators, instructors and students will be



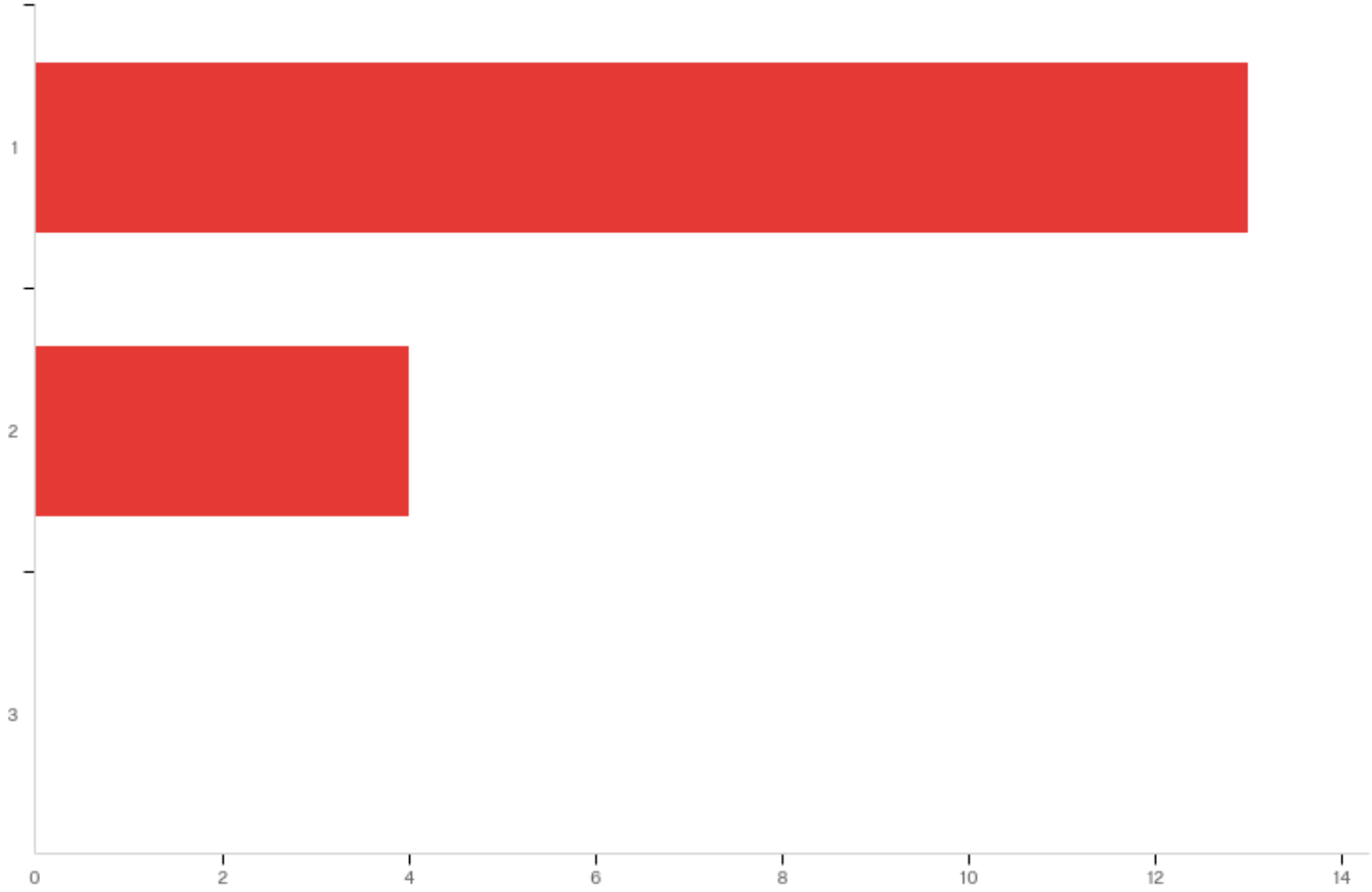
E6 - The security for a repository system used by administrators, instructors and students will be

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	The security for a repository system used by administrators, instructors and students will be	1.00	3.00	2.45	0.56	0.31	31

E6 - The security for a repository system used by administrators, instructors and students will be

#	Answer	%	Count
1	impossible to maintain	3.23%	1
2	difficult to maintain	48.39%	15
3	no different to maintain than the current system	48.39%	15
4	easy to maintain	0.00%	0
	Total	100%	31

E7 - List up to three (3) technology/tools issues that could affect utilizing a Repository-based course not listed above but important for the use of a Course Repository.



E7 - List up to three (3) technology/tools issues that could affect utilizing a Repository-based course not listed above but important for the use of a Course Repository.

#	Answer	%	Count
1	1	76.47%	13
2	2	23.53%	4
3	3	0.00%	0
	Total	100%	17

E7 - List up to three (3) technology/tools issues that could affect utilizing a Repository-based course not listed above but important for the use of a Course Repository.

E7_1_TEXT - 1

1 - Text
hacking
on-line or web-based test banks are very useful to measure teaching quality
Security and fidelity of information
An overwhelmingly large test bank is its own security - memorization of problems is not an option
Difficulty following or updating specific software tools/content
Better fit to current students
A website with log-in creditionals required. This would allow faculty to request acces, and then be identified as faculty. Students enrolled in the course will recieve a seperate log in and sections for each course offerring will direct the student to the best place.
Needs to ensure the quality of information put into the repository
the system will be difficult to maintain and even more difficult to SUSTAIN

E7 - List up to three (3) technology/tools issues that could affect utilizing a Repository-based course not listed above but important for the use of a Course Repository.

E7_1_TEXT - 1

1 - Text
Standardize the format of materials shared on the repository
Copyright issues
Changes in software.
make accessible to everyone but put a pay-wall around premium content (quizzes, tests, in-depth training videos)

E7 - List up to three (3) technology/tools issues that could affect utilizing a Repository-based course not listed above but important for the use of a Course Repository.

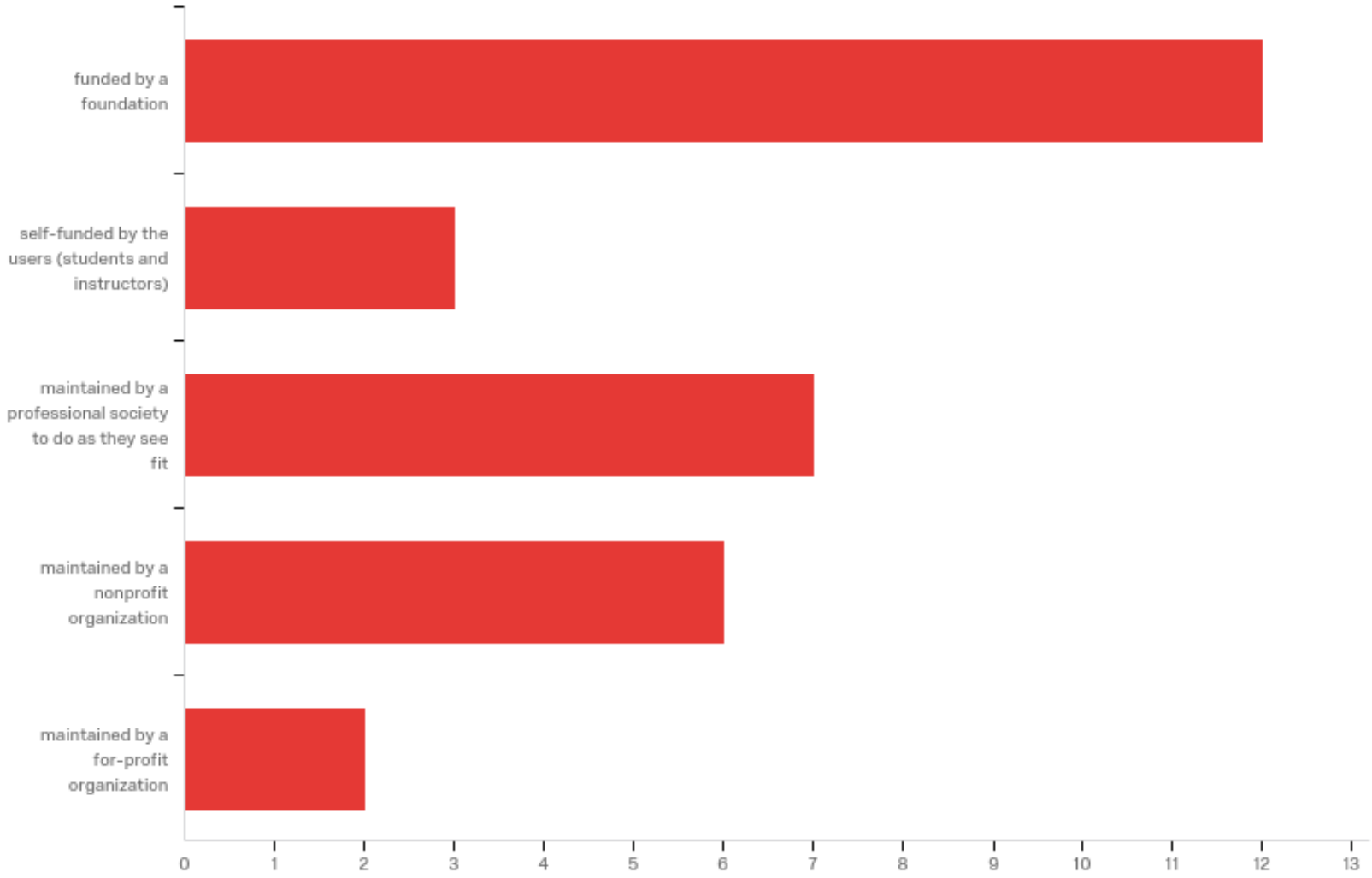
E7_2_TEXT - 2

2 - Text
lack of security
A website with password protection for Faculty only that we can download and use in our appropraite e-learning platforms.
Needs to ensure the security of the respository (for example, no bad-intentional deletion of
Classification of materials based on a set of criteria

E7 - List up to three (3) technology/tools issues that could affect utilizing a Repository-based course not listed above but important for the use of a Course Repository.

3 - Text

F2 - The cost associated with developing and maintaining an advanced manufacturing repository should be



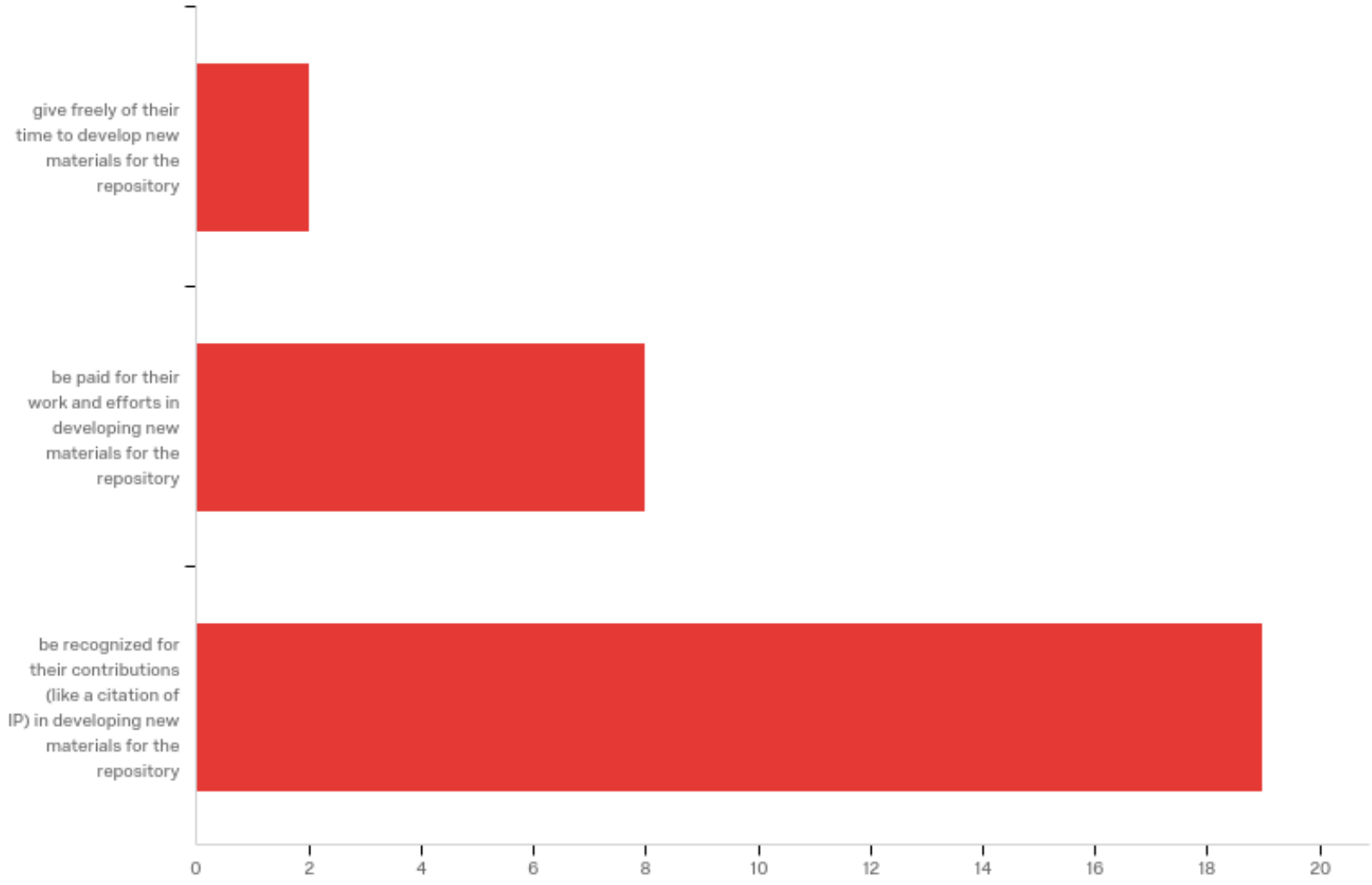
F2 - The cost associated with developing and maintaining an advanced manufacturing repository should be

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	The cost associated with developing and maintaining an advanced manufacturing repository should be	1.00	5.00	2.43	1.36	1.85	30

F2 - The cost associated with developing and maintaining an advanced manufacturing repository should be

#	Answer	%	Count
1	funded by a foundation	40.00%	12
2	self-funded by the users (students and instructors)	10.00%	3
3	maintained by a professional society to do as they see fit	23.33%	7
4	maintained by a nonprofit organization	20.00%	6
5	maintained by a for-profit organization	6.67%	2
	Total	100%	30

F3 - Instructors developing materials for the repository should



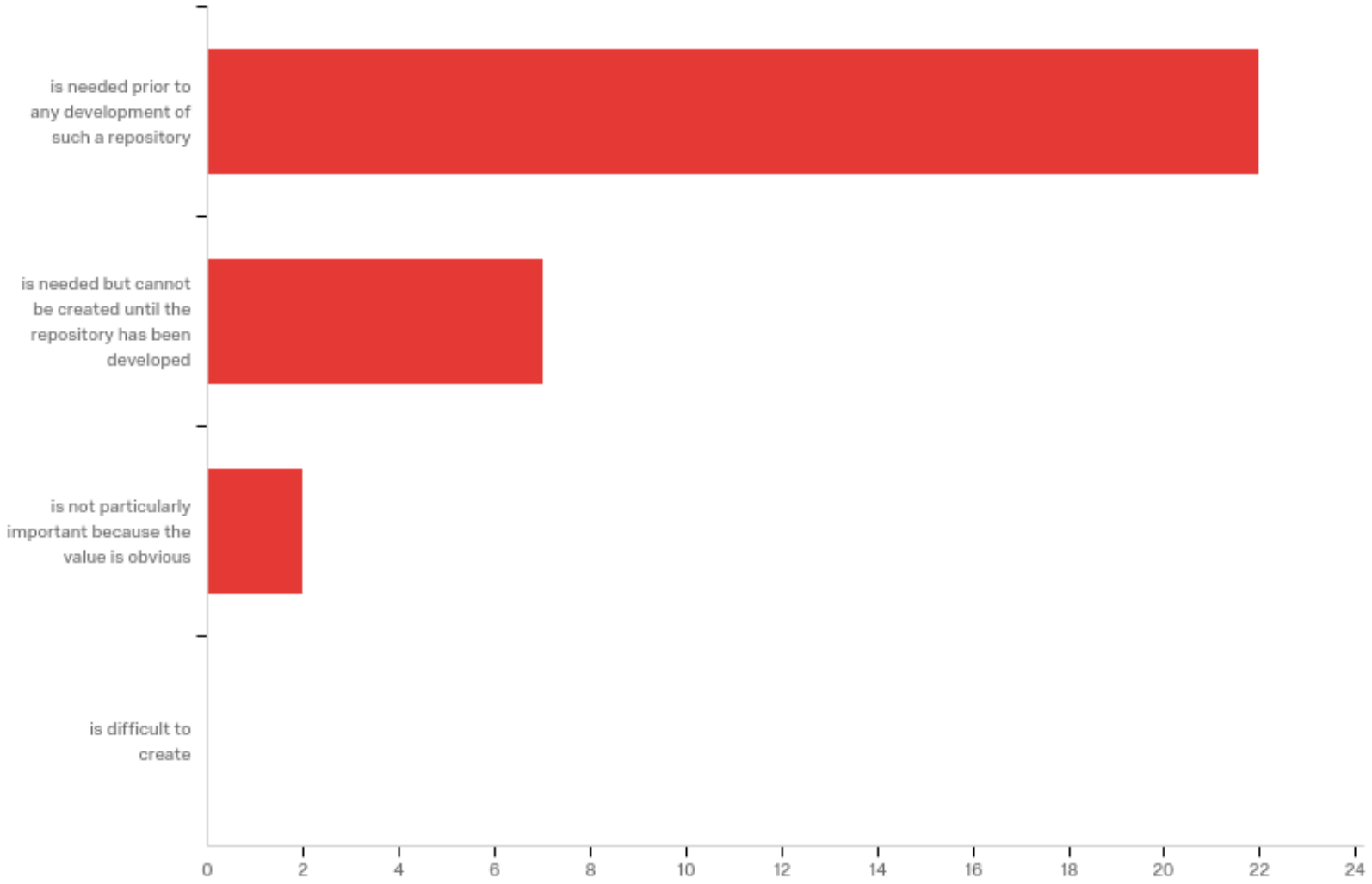
F3 - Instructors developing materials for the repository should

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Instructors developing materials for the repository should	1.00	3.00	2.59	0.62	0.38	29

F3 - Instructors developing materials for the repository should

#	Answer	%	Count
1	give freely of their time to develop new materials for the repository	6.90%	2
2	be paid for their work and efforts in developing new materials for the repository	27.59%	8
3	be recognized for their contributions (like a citation of IP) in developing new materials for the repository	65.52%	19
	Total	100%	29

F4 - An economic model for developing and using an advanced manufacturing repository



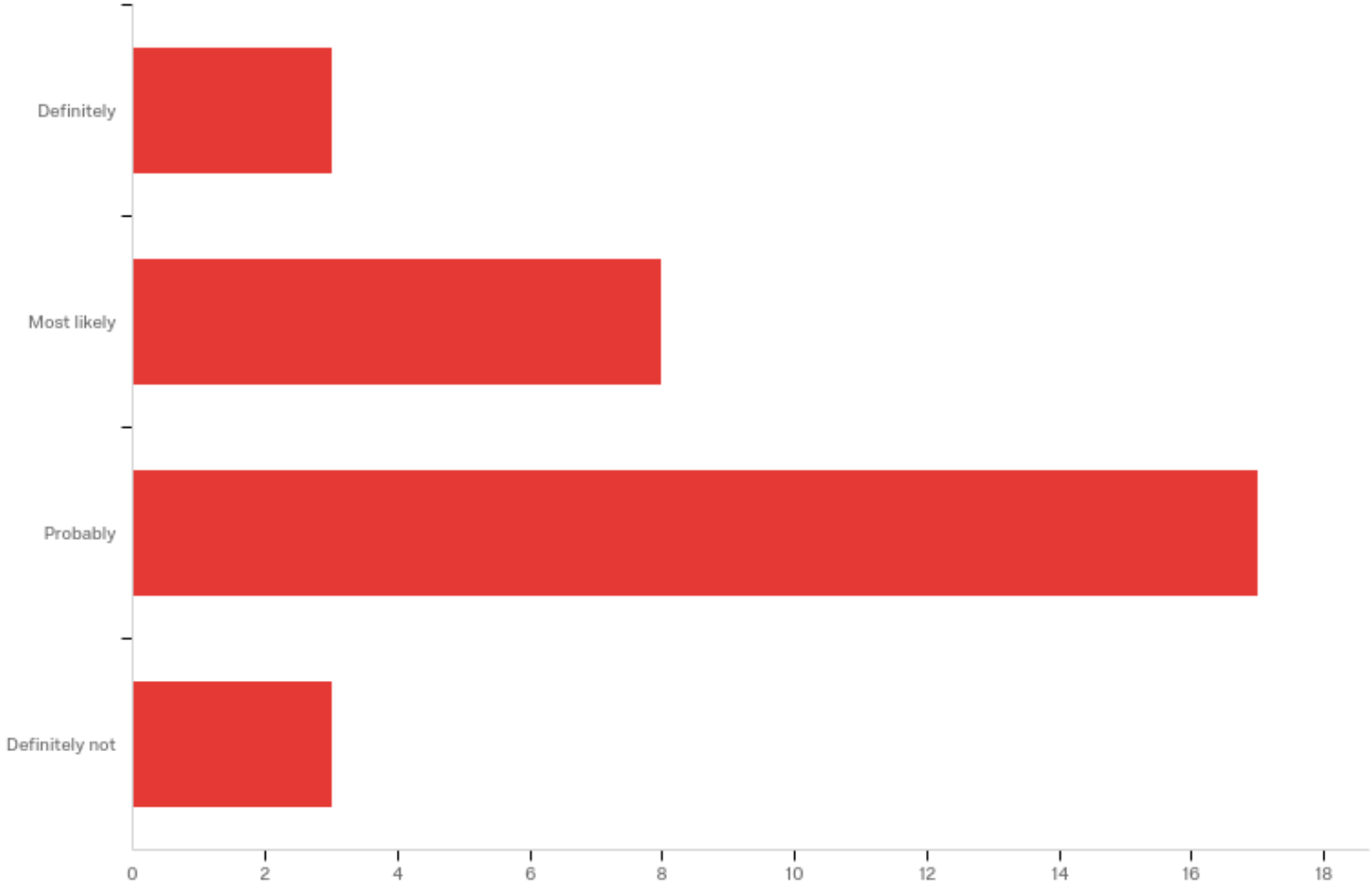
F4 - An economic model for developing and using an advanced manufacturing repository

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	An economic model for developing and using an advanced manufacturing repository	1.00	3.00	1.35	0.60	0.36	31

F4 - An economic model for developing and using an advanced manufacturing repository

#	Answer	%	Count
1	is needed prior to any development of such a repository	70.97%	22
2	is needed but cannot be created until the repository has been developed	22.58%	7
3	is not particularly important because the value is obvious	6.45%	2
4	is difficult to create	0.00%	0
	Total	100%	31

F5 - How likely will you or your institution be willing to pay a nominal subscription fee to help maintain the STAM Repository infrastructure?



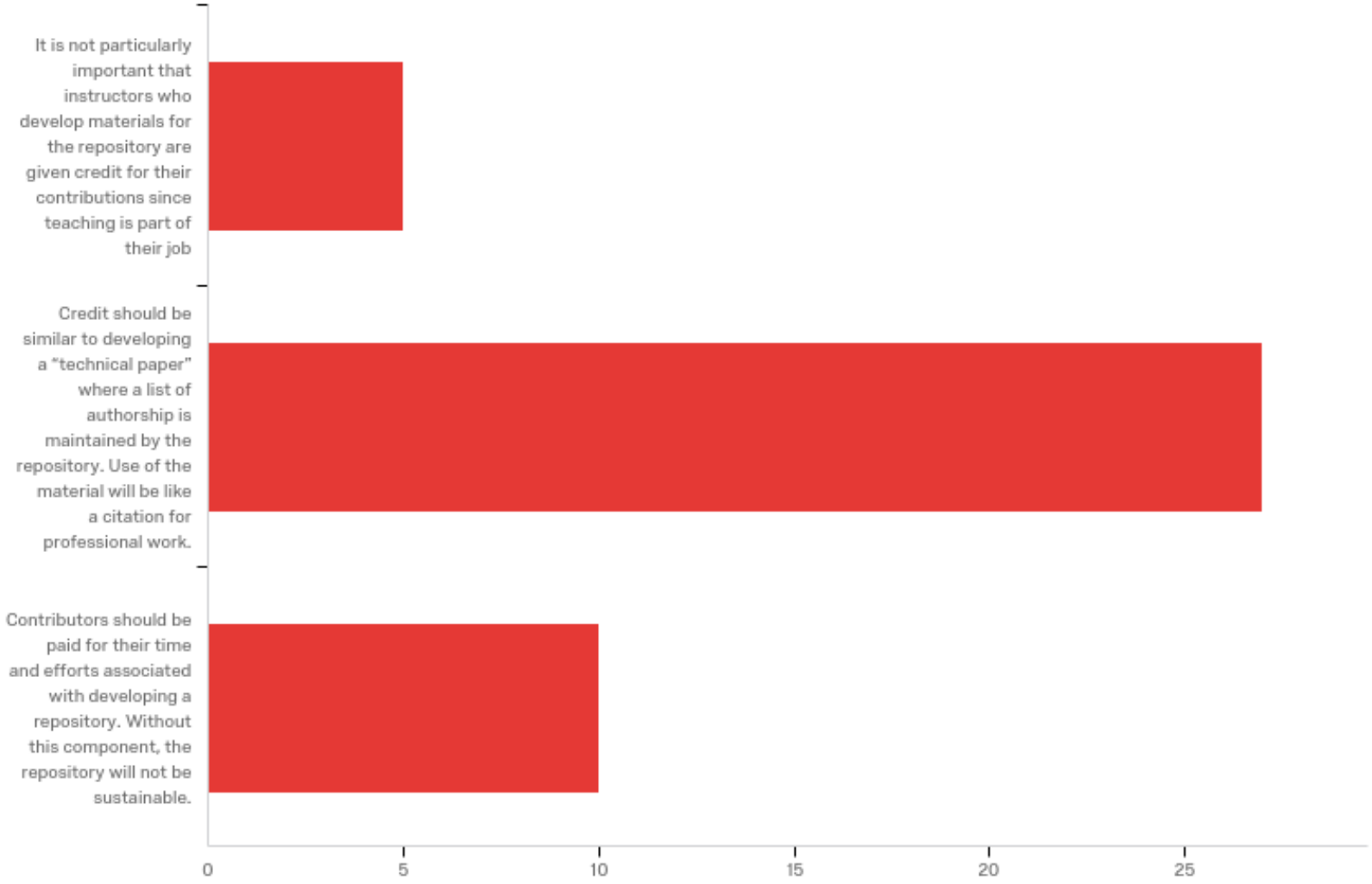
F5 - How likely will you or your institution be willing to pay a nominal subscription fee to help maintain the STAM Repository infrastructure?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How likely will you or your institution be willing to pay a nominal subscription fee to help maintain the STAM Repository infrastructure?	1.00	5.00	2.74	0.98	0.97	31

F5 - How likely will you or your institution be willing to pay a nominal subscription fee to help maintain the STAM Repository infrastructure?

#	Answer	%	Count
1	Definitely	9.68%	3
2	Most likely	25.81%	8
3	Probably	54.84%	17
5	Definitely not	9.68%	3
	Total	100%	31

F6 - One of the sustainability requirements for creating an “organic” repository that will renew and evolve is the constant development and renewal of new materials by instructors. Select all below all that you fee



F6 - One of the sustainability requirements for creating an “organic” repository that will renew and evolve is the constant development and renewal of new materials by instructors. Select all below all that you feel apply.

Data source is misconfigured for this visualization

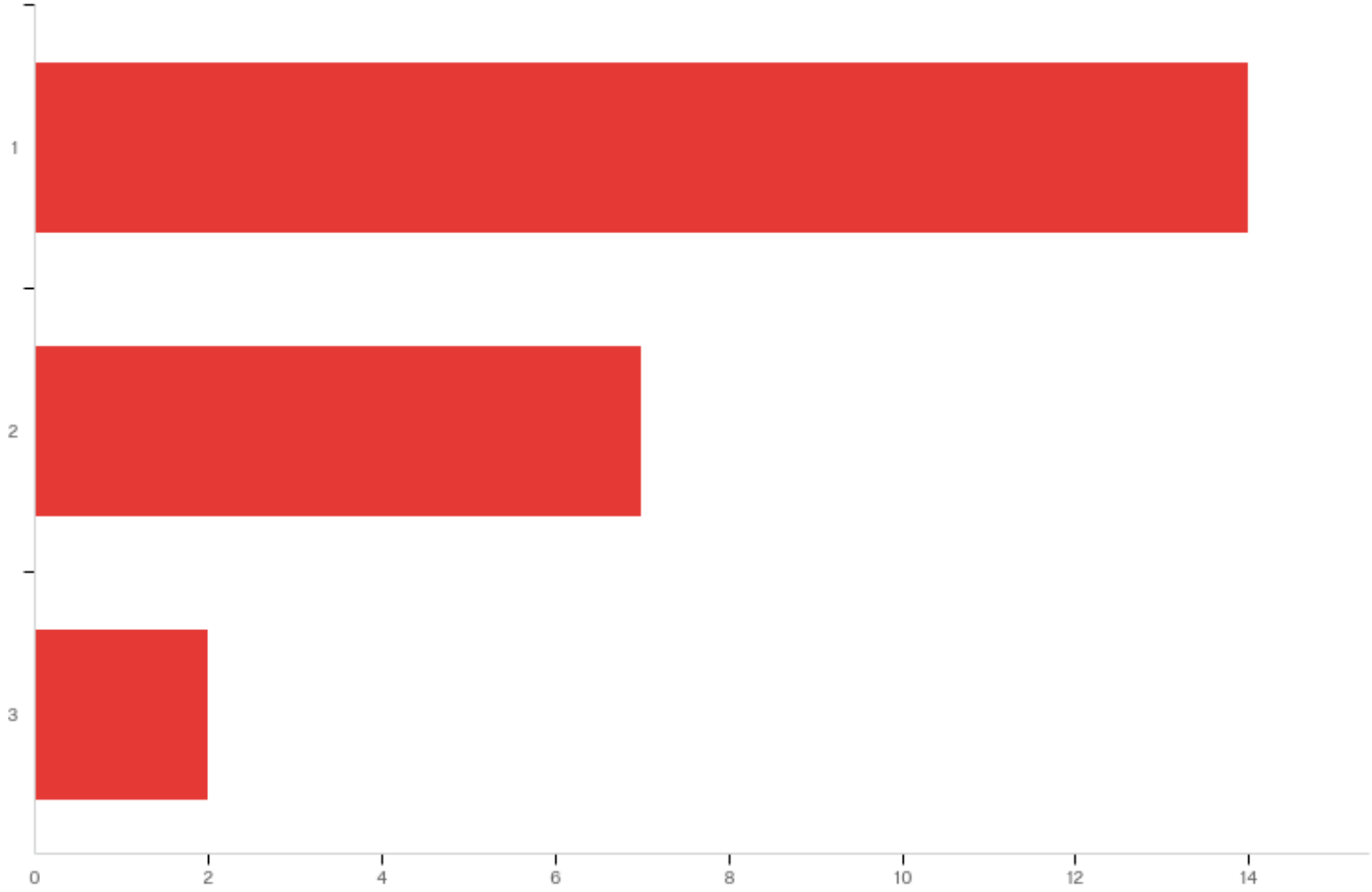
F6 - One of the sustainability requirements for creating an “organic” repository that will renew and evolve is the constant development and renewal of new materials by instructors. Select all below all that you feel apply.

#	Answer	%	Count
1	It is not particularly important that instructors who develop materials for the repository are given credit for their contributions since teaching is part of their job	11.90%	5
2	Credit should be similar to developing a “technical paper” where a list of authorship is maintained by the repository. Use of the material will be like a citation for professional work.	64.29%	27

F6 - One of the sustainability requirements for creating an “organic” repository that will renew and evolve is the constant development and renewal of new materials by instructors. Select all below all that you feel apply.

#	Answer	%	Count
3	Contributors should be paid for their time and efforts associated with developing a repository. Without this component, the repository will not be sustainable.	23.81%	10
	Total	100%	42

F7 - List up to three (3) sustainability issues that will affect utilizing a repository-based course not listed above but important for the use of a course repository.



F7 - List up to three (3) sustainability issues that will affect utilizing a repository-based course not listed above but important for the use of a course repository.

#	Answer	%	Count
1	1	60.87%	14
2	2	30.43%	7
3	3	8.70%	2
	Total	100%	23

F7 - List up to three (3) sustainability issues that will affect utilizing a repository-based course not listed above but important for the use of a course repository.

F7_1_TEXT - 1

1 - Text
a committed user group
major contributors to the program should be fully credited.
Sustained availability of the physical repository site
Intellectual property
There should be some incentives for contribution of QUALITY content. Gamification of content submission based on community feedback and use should be considered.
Hard to get people to contribute updated material on a voluntary basis
Related to the item "Instructors developing materials for the repository should ..." The instructor should be recognized as well. Because multiple selection was not possible, it is indicated here.
The quality of materials must be high in order to sustain the effort
Support from a stable professional society would be very important
Accuracy

F7 - List up to three (3) sustainability issues that will affect utilizing a repository-based course not listed above but important for the use of a course repository.

F7_1_TEXT - 1

1 - Text
Making sure updated information is accurate. EX: have a group od editors who rotate out each year to monitor/approve updates to materials
students may pay some minor fees for the use of the materials
Authors do not update materials.
copyright issues surrounding existing content already developed

F7 - List up to three (3) sustainability issues that will affect utilizing a repository-based course not listed above but important for the use of a course repository.

F7_2_TEXT - 2

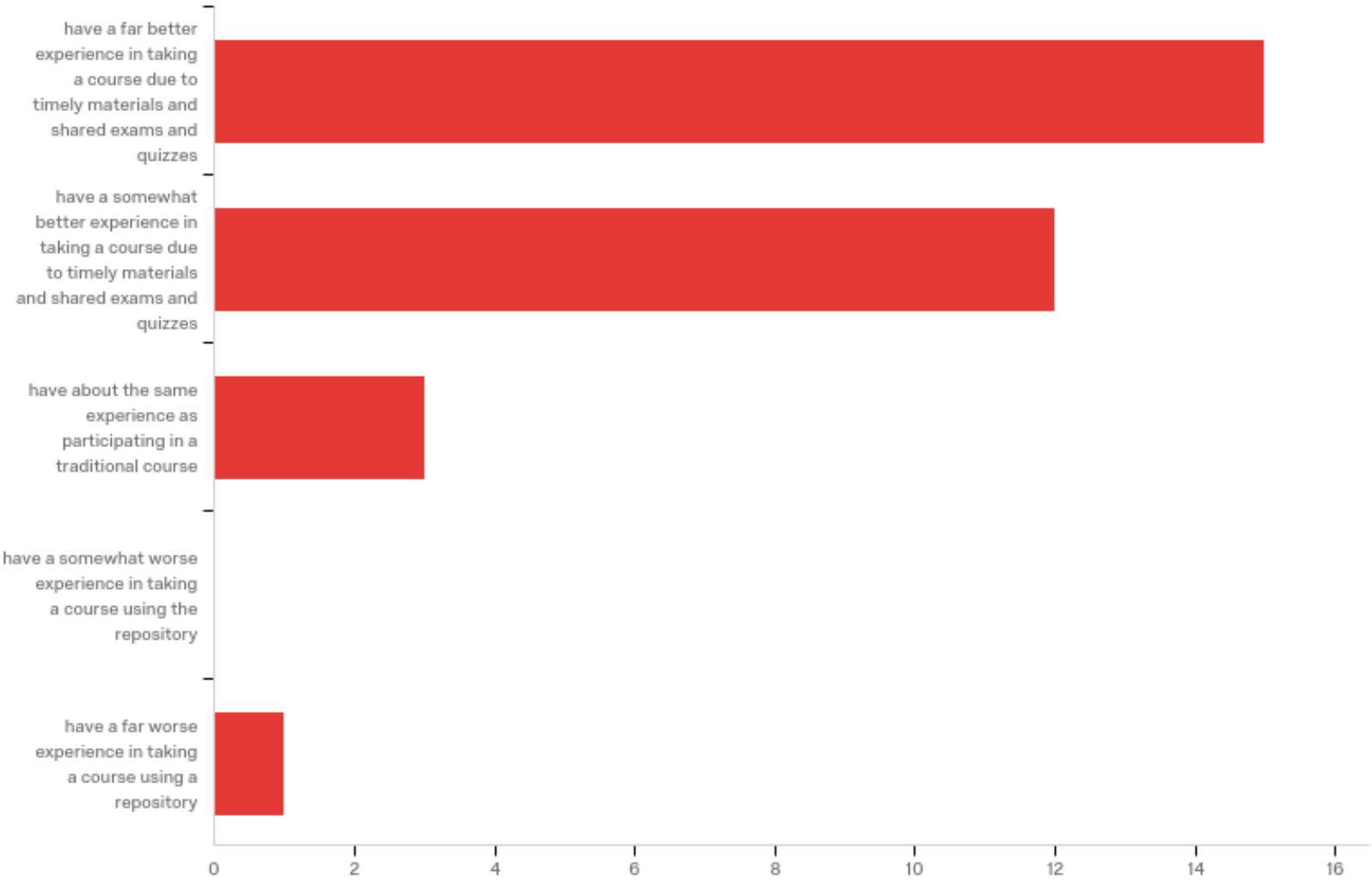
2 - Text
ease of use
Academic metrics (perceived value of repository contribution to promotion & tenure)
An initial development grant from foundation or govt org would be key
Timeliness of topics
should come up witn some deals with education institute to use the repository with some student fees structure
Must be able to locate different materials on same topic for selection.
university claiming rights to lecture content built by Faculty

F7 - List up to three (3) sustainability issues that will affect utilizing a repository-based course not listed above but important for the use of a course repository.

F7_3_TEXT - 3

3 - Text
Faculty sense of ownership of material retrieved from repository
Modules should be small in scope to make "piecing" materials together easier.

F8 - Students enrolled in a course that utilizes a repository, will likely



F8 - Students enrolled in a course that utilizes a repository, will likely

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Students enrolled in a course that utilizes a repository, will likely	1.00	5.00	1.71	0.89	0.79	31

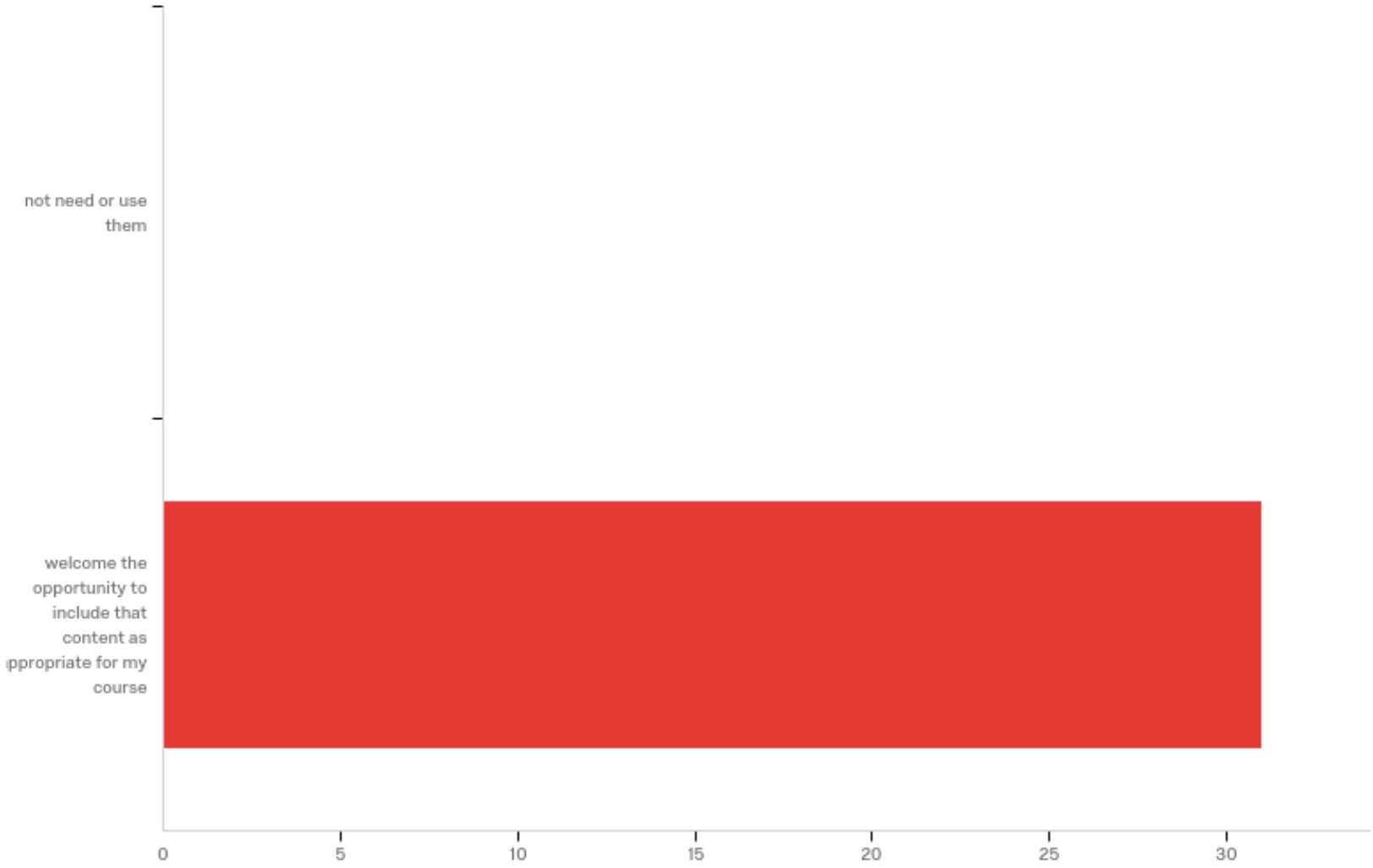
F8 - Students enrolled in a course that utilizes a repository, will likely

#	Answer	%	Count
1	have a far better experience in taking a course due to timely materials and shared exams and quizzes	48.39%	15
2	have a somewhat better experience in taking a course due to timely materials and shared exams and quizzes	38.71%	12
3	have about the same experience as participating in a traditional course	9.68%	3
4	have a somewhat worse experience in taking a course using the repository	0.00%	0

F8 - Students enrolled in a course that utilizes a repository, will likely

#	Answer	%	Count
5	have a far worse experience in taking a course using a repository	3.23%	1
	Total	100%	31

F9 - If the repository contained videos and data from lab experiments that would illustrate concepts, would you



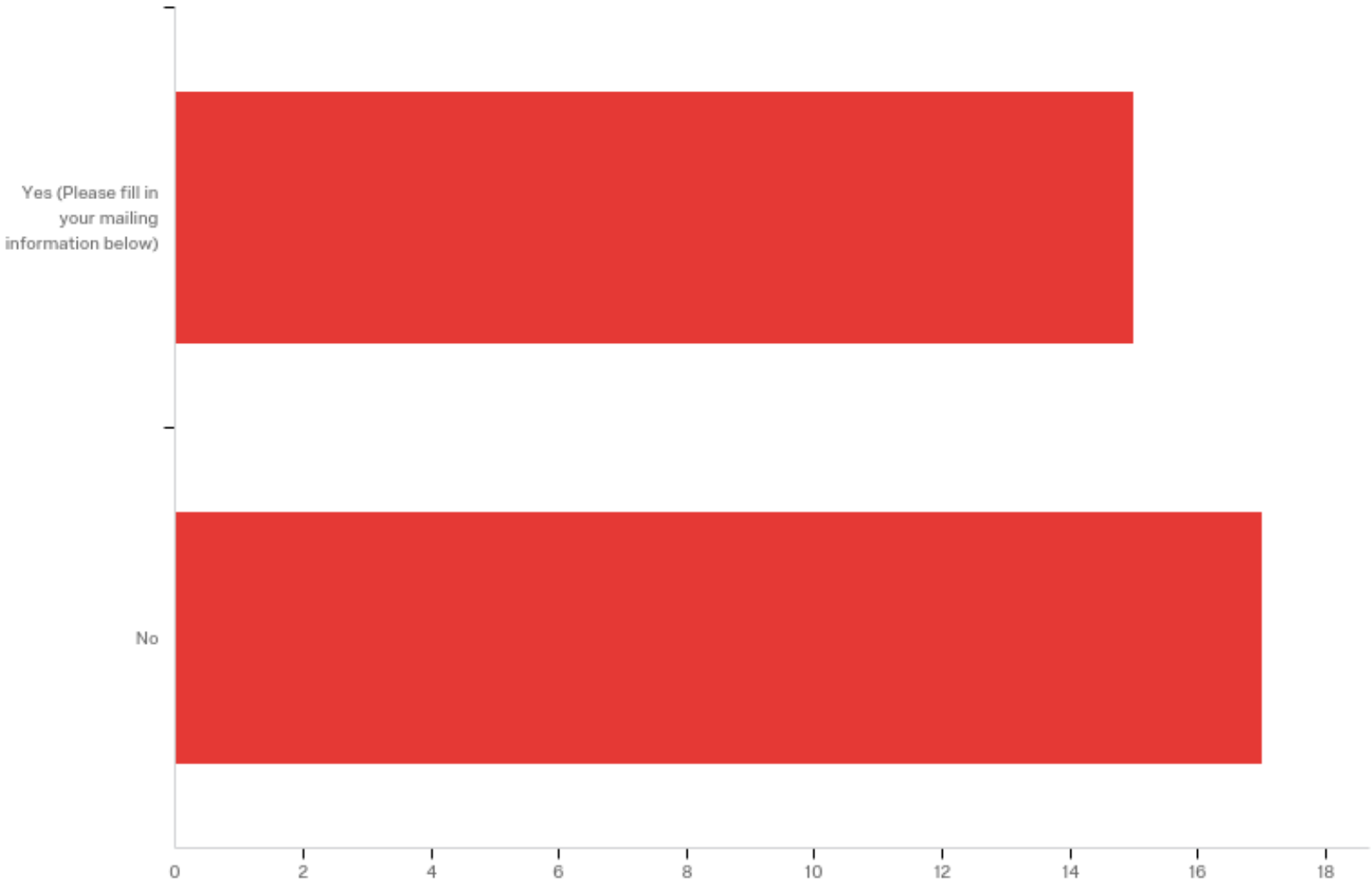
F9 - If the repository contained videos and data from lab experiments that would illustrate concepts, would you

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	If the repository contained videos and data from lab experiments that would illustrate concepts, would you	2.00	2.00	2.00	0.00	0.00	31

F9 - If the repository contained videos and data from lab experiments that would illustrate concepts, would you

#	Answer	%	Count
1	not need or use them	0.00%	0
2	welcome the opportunity to include that content as appropriate for my course	100.00%	31
	Total	100%	31

G1 - Do you wish to receive an honorarium for completing this survey?



G1 - Do you wish to receive an honorarium for completing this survey?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you wish to receive an honorarium for completing this survey?	1.00	2.00	1.53	0.50	0.25	32

G1 - Do you wish to receive an honorarium for completing this survey?

#	Answer	%	Count
1	Yes (Please fill in your mailing information below)	46.88%	15
2	No	53.13%	17
	Total	100%	32

G2 - Full Name

Full Name
Bopaya Bidanda
Richard Liang
Chuck Zhang
Gary Cheng
Karl Haapala
Katie Basinger
Jerald Brevick
Guha Manogharan
Namhun Kim
Yuan-Shin Lee
Linkan Bian

G2 - Full Name

Full Name
Rohan Shirwaiker
Paul Cohen
Binil Starly

G3 - Email

Email
bidanda@pitt.edu
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chuck.zhang@gatech.edu
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karl.haapala@oregonstate.edu
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yslee@ncsu.edu
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G3 - Email

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pcohen@ncsu.edu
bstarly@ncsu.edu

G4 - Address

Address
1025 Benedum Hall
2525 Pottsdamer St
Room 374, GTMI
3572 Hamilton Street
204 Rogers Hall, School of Mech/Ind/Mfg Engineering
2702 NW 52nd Place
6859 Bowerman Street West
232 Reber Building
720 Grace Hodge Drive
212 Benwell Ct
260 Mccain Building

G4 - Address

Address
4200 Kellett Ln
NC State/Fitts Industrial & Systems Engineering
111 Lampe Drive

G5 - Address #2

Address #2
University of Pittsburgh
813 Ferst Dr., NW
Oregon State University
400 Daniels Hall/Box 7906
Campus Box 7906

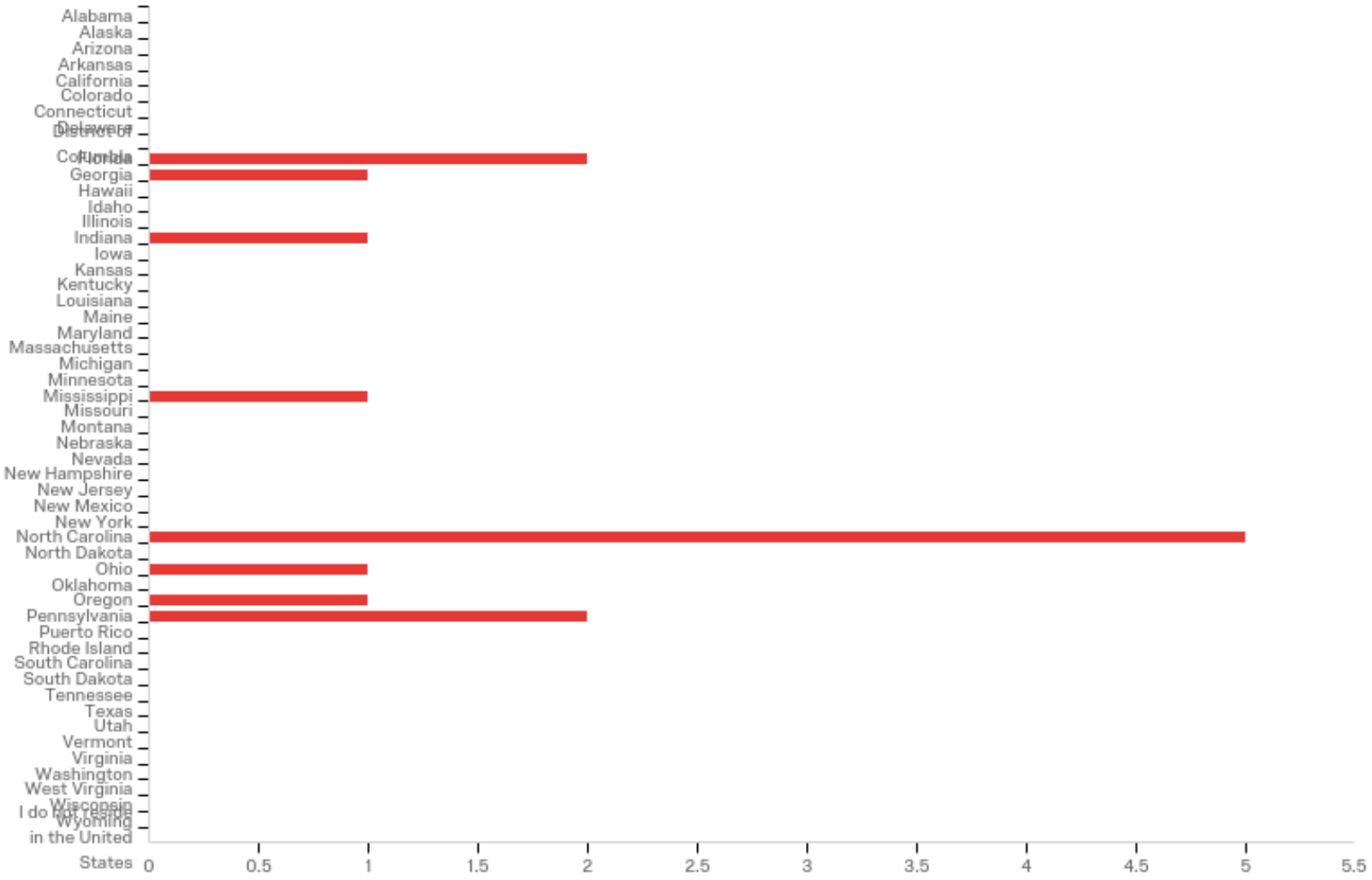
G6 - City

City
Pittsburgh
Tallahassee
Atlanta
West Lafayette
Corvallis
Gainesville
Worthington
State College
Cary
Cary
Miss State

G6 - City

City
Raleigh
Raleigh
Raleigh

G7 - 50 States, D.C. and Puerto Rico



G7 - 50 States, D.C. and Puerto Rico

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	50 States, D.C. and Puerto Rico	10.00	39.00	28.07	11.02	121.49	14

G7 - 50 States, D.C. and Puerto Rico

#	Answer	%	Count
1	Alabama	0.00%	0
2	Alaska	0.00%	0
3	Arizona	0.00%	0
4	Arkansas	0.00%	0
5	California	0.00%	0
6	Colorado	0.00%	0
7	Connecticut	0.00%	0
8	Delaware	0.00%	0
9	District of Columbia	0.00%	0
10	Florida	14.29%	2
11	Georgia	7.14%	1

G7 - 50 States, D.C. and Puerto Rico

#	Answer	%	Count
12	Hawaii	0.00%	0
13	Idaho	0.00%	0
14	Illinois	0.00%	0
15	Indiana	7.14%	1
16	Iowa	0.00%	0
17	Kansas	0.00%	0
18	Kentucky	0.00%	0
19	Louisiana	0.00%	0
20	Maine	0.00%	0
21	Maryland	0.00%	0
22	Massachusetts	0.00%	0

G7 - 50 States, D.C. and Puerto Rico

#	Answer	%	Count
23	Michigan	0.00%	0
24	Minnesota	0.00%	0
25	Mississippi	7.14%	1
26	Missouri	0.00%	0
27	Montana	0.00%	0
28	Nebraska	0.00%	0
29	Nevada	0.00%	0
30	New Hampshire	0.00%	0
31	New Jersey	0.00%	0
32	New Mexico	0.00%	0
33	New York	0.00%	0

G7 - 50 States, D.C. and Puerto Rico

#	Answer	%	Count
34	North Carolina	35.71%	5
35	North Dakota	0.00%	0
36	Ohio	7.14%	1
37	Oklahoma	0.00%	0
38	Oregon	7.14%	1
39	Pennsylvania	14.29%	2
40	Puerto Rico	0.00%	0
41	Rhode Island	0.00%	0
42	South Carolina	0.00%	0
43	South Dakota	0.00%	0
44	Tennessee	0.00%	0

G7 - 50 States, D.C. and Puerto Rico

#	Answer	%	Count
45	Texas	0.00%	0
46	Utah	0.00%	0
47	Vermont	0.00%	0
48	Virginia	0.00%	0
49	Washington	0.00%	0
50	West Virginia	0.00%	0
51	Wisconsin	0.00%	0
52	Wyoming	0.00%	0
53	I do not reside in the United States	0.00%	0
	Total	100%	14

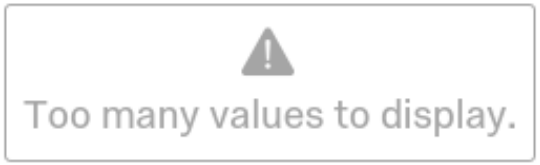
G8 - Zip Code

Zip Code
15260
32310-6046
30332
47906
97331
32605
43085
16803
27519
27519
39762

G8 - Zip Code

Zip Code
27616
27695
27695

G9 - List of Countries



G9 - List of Countries

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	List of Countries	187.00	187.00	187.00	0.00	0.00	14

G9 - List of Countries

#	Answer	%	Count
1	Afghanistan	0.00%	0
2	Albania	0.00%	0
3	Algeria	0.00%	0
4	Andorra	0.00%	0
5	Angola	0.00%	0
6	Antigua and Barbuda	0.00%	0
7	Argentina	0.00%	0
8	Armenia	0.00%	0
9	Australia	0.00%	0
10	Austria	0.00%	0
11	Azerbaijan	0.00%	0

G9 - List of Countries

#	Answer	%	Count
12	Bahamas	0.00%	0
13	Bahrain	0.00%	0
14	Bangladesh	0.00%	0
15	Barbados	0.00%	0
16	Belarus	0.00%	0
17	Belgium	0.00%	0
18	Belize	0.00%	0
19	Benin	0.00%	0
20	Bhutan	0.00%	0
21	Bolivia	0.00%	0
22	Bosnia and Herzegovina	0.00%	0

G9 - List of Countries

#	Answer	%	Count
23	Botswana	0.00%	0
24	Brazil	0.00%	0
25	Brunei Darussalam	0.00%	0
26	Bulgaria	0.00%	0
27	Burkina Faso	0.00%	0
28	Burundi	0.00%	0
29	Cambodia	0.00%	0
30	Cameroon	0.00%	0
31	Canada	0.00%	0
32	Cape Verde	0.00%	0
33	Central African Republic	0.00%	0

G9 - List of Countries

#	Answer	%	Count
34	Chad	0.00%	0
35	Chile	0.00%	0
36	China	0.00%	0
37	Colombia	0.00%	0
38	Comoros	0.00%	0
39	Congo, Republic of the...	0.00%	0
40	Costa Rica	0.00%	0
41	Côte d'Ivoire	0.00%	0
42	Croatia	0.00%	0
43	Cuba	0.00%	0
44	Cyprus	0.00%	0

G9 - List of Countries

#	Answer	%	Count
45	Czech Republic	0.00%	0
46	Democratic People's Republic of Korea	0.00%	0
47	Democratic Republic of the Congo	0.00%	0
48	Denmark	0.00%	0
49	Djibouti	0.00%	0
50	Dominica	0.00%	0
51	Dominican Republic	0.00%	0
52	Ecuador	0.00%	0
53	Egypt	0.00%	0
54	El Salvador	0.00%	0

G9 - List of Countries

#	Answer	%	Count
55	Equatorial Guinea	0.00%	0
56	Eritrea	0.00%	0
57	Estonia	0.00%	0
58	Ethiopia	0.00%	0
59	Fiji	0.00%	0
60	Finland	0.00%	0
61	France	0.00%	0
62	Gabon	0.00%	0
63	Gambia	0.00%	0
64	Georgia	0.00%	0
65	Germany	0.00%	0

G9 - List of Countries

#	Answer	%	Count
66	Ghana	0.00%	0
67	Greece	0.00%	0
68	Grenada	0.00%	0
69	Guatemala	0.00%	0
70	Guinea	0.00%	0
71	Guinea-Bissau	0.00%	0
72	Guyana	0.00%	0
73	Haiti	0.00%	0
74	Honduras	0.00%	0
75	Hong Kong (S.A.R.)	0.00%	0
76	Hungary	0.00%	0

G9 - List of Countries

#	Answer	%	Count
77	Iceland	0.00%	0
78	India	0.00%	0
79	Indonesia	0.00%	0
80	Iran, Islamic Republic of...	0.00%	0
81	Iraq	0.00%	0
82	Ireland	0.00%	0
83	Israel	0.00%	0
84	Italy	0.00%	0
85	Jamaica	0.00%	0
86	Japan	0.00%	0
87	Jordan	0.00%	0

G9 - List of Countries

#	Answer	%	Count
88	Kazakhstan	0.00%	0
89	Kenya	0.00%	0
90	Kiribati	0.00%	0
91	Kuwait	0.00%	0
92	Kyrgyzstan	0.00%	0
93	Lao People's Democratic Republic	0.00%	0
94	Latvia	0.00%	0
95	Lebanon	0.00%	0
96	Lesotho	0.00%	0
97	Liberia	0.00%	0
98	Libyan Arab Jamahiriya	0.00%	0

G9 - List of Countries

#	Answer	%	Count
99	Liechtenstein	0.00%	0
100	Lithuania	0.00%	0
101	Luxembourg	0.00%	0
102	Madagascar	0.00%	0
103	Malawi	0.00%	0
104	Malaysia	0.00%	0
105	Maldives	0.00%	0
106	Mali	0.00%	0
107	Malta	0.00%	0
108	Marshall Islands	0.00%	0
109	Mauritania	0.00%	0

G9 - List of Countries

#	Answer	%	Count
110	Mauritius	0.00%	0
111	Mexico	0.00%	0
112	Micronesia, Federated States of...	0.00%	0
113	Monaco	0.00%	0
114	Mongolia	0.00%	0
115	Montenegro	0.00%	0
116	Morocco	0.00%	0
117	Mozambique	0.00%	0
118	Myanmar	0.00%	0
119	Namibia	0.00%	0
120	Nauru	0.00%	0

G9 - List of Countries

#	Answer	%	Count
121	Nepal	0.00%	0
122	Netherlands	0.00%	0
123	New Zealand	0.00%	0
124	Nicaragua	0.00%	0
125	Niger	0.00%	0
126	Nigeria	0.00%	0
127	North Korea	0.00%	0
128	Norway	0.00%	0
129	Oman	0.00%	0
130	Pakistan	0.00%	0
131	Palau	0.00%	0

G9 - List of Countries

#	Answer	%	Count
132	Panama	0.00%	0
133	Papua New Guinea	0.00%	0
134	Paraguay	0.00%	0
135	Peru	0.00%	0
136	Philippines	0.00%	0
137	Poland	0.00%	0
138	Portugal	0.00%	0
139	Qatar	0.00%	0
140	Republic of Korea	0.00%	0
141	Republic of Moldova	0.00%	0
142	Romania	0.00%	0

G9 - List of Countries

#	Answer	%	Count
143	Russian Federation	0.00%	0
144	Rwanda	0.00%	0
145	Saint Kitts and Nevis	0.00%	0
146	Saint Lucia	0.00%	0
147	Saint Vincent and the Grenadines	0.00%	0
148	Samoa	0.00%	0
149	San Marino	0.00%	0
150	Sao Tome and Principe	0.00%	0
151	Saudi Arabia	0.00%	0
152	Senegal	0.00%	0

G9 - List of Countries

#	Answer	%	Count
153	Serbia	0.00%	0
154	Seychelles	0.00%	0
155	Sierra Leone	0.00%	0
156	Singapore	0.00%	0
157	Slovakia	0.00%	0
158	Slovenia	0.00%	0
159	Solomon Islands	0.00%	0
160	Somalia	0.00%	0
161	South Africa	0.00%	0
162	South Korea	0.00%	0
163	Spain	0.00%	0

G9 - List of Countries

#	Answer	%	Count
164	Sri Lanka	0.00%	0
165	Sudan	0.00%	0
166	Suriname	0.00%	0
167	Swaziland	0.00%	0
168	Sweden	0.00%	0
169	Switzerland	0.00%	0
170	Syrian Arab Republic	0.00%	0
171	Tajikistan	0.00%	0
172	Thailand	0.00%	0
173	The former Yugoslav Republic of Macedonia	0.00%	0

G9 - List of Countries

#	Answer	%	Count
174	Timor-Leste	0.00%	0
175	Togo	0.00%	0
176	Tonga	0.00%	0
177	Trinidad and Tobago	0.00%	0
178	Tunisia	0.00%	0
179	Turkey	0.00%	0
180	Turkmenistan	0.00%	0
181	Tuvalu	0.00%	0
182	Uganda	0.00%	0
183	Ukraine	0.00%	0
184	United Arab Emirates	0.00%	0

G9 - List of Countries

#	Answer	%	Count
185	United Kingdom of Great Britain and Northern Ireland	0.00%	0
186	United Republic of Tanzania	0.00%	0
187	United States of America	100.00%	14
188	Uruguay	0.00%	0
189	Uzbekistan	0.00%	0
190	Vanuatu	0.00%	0
191	Venezuela, Bolivarian Republic of...	0.00%	0
192	Viet Nam	0.00%	0
193	Yemen	0.00%	0

G9 - List of Countries

#	Answer	%	Count
580	Zambia	0.00%	0
1357	Zimbabwe	0.00%	0
	Total	100%	14