

2021 Guarini School of Graduate and Advanced Studies Survey Overall Results

Dartmouth College
Office of Institutional Research
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Executive Summary

Methods

One thousand and three graduate students (including Ph.D. and Master's) from the Guarini School of Graduate and Advanced Studies and Thayer were invited to participate via email. The survey was administered electronically by the Office of Institutional Research. The survey invitation and four email reminders were sent from the Office of Institutional Research. The overall response rate was 47% (467/1,003). The response rate for Ph.D. students was 53% (350/662) and for Master's was 34% (117/341). A gift certificate to the Pine restaurant for \$50.00 was provided as incentive.

There were no statistically significant differences between survey respondents and non-respondents due to race/ethnicity ($\chi^2 = 2.14$, $p > 0.05$), or student type ($\chi^2 = 0.38$, $p > 0.05$). Statistically significant differences were found between majors ($\chi^2 = 109.03$, $p < 0.0001$), with responses highest among students who majored in Molecular Medicine (PEMM, 85%), and lowest among students who majored in Health Care Delivery Science (HCDS, 11%). See Appendix 1 for details.

Demographics

Forty-seven percent of respondents self-identified as White, followed by International (34%) and Minority (16%). Fifty-five percent of the respondents were female and 45% were male. Respondents were largely continuing graduate students (72%) and 28% were first-year graduate students.

Overall Key Findings

Academic experience, resources, and services

- The majority of respondents (75%) were satisfied or very satisfied with their graduate education.
- Sixty-four percent of the respondents rated their academic experience at Dartmouth as very good or excellent but only less than one third (32%) rated their student life experience at Dartmouth as very good or excellent. Half (50%) rated their overall experience at Dartmouth as very good or excellent.
- Sixty percent or more of the respondents rated the following support and services provided by Dartmouth as very good or excellent: Laboratory, clinical, studio, or other physical facilities (70%), Information technology resources (67%), programs and resources of the teaching center or program (DCAL; 64%), and Campus health care services (62%).
- Sixty-six percent of the respondents rated housing support as poor or fair, and 50% rated power dynamic support as poor or fair.

Ratings of program climate

- Seventy-five percent or more of the respondents rated their department or program climate as being friendly (82%), welcoming (82%), encouraging (77%), respectful (77%), and supportive (75%). However, less than half rated their department or program climate as being diverse (34%), positive for persons with disabilities (41%), positive for people with mental health

struggles (42%), positive for people of color (47%), and positive for people of spiritual/religious backgrounds (48%).

- Ninety percent of the respondents reported their own relationship and interactions with faculty were positive. Seventy or more of the respondents also reported their peers valued their research/scholarship (81%), they had the resources they needed to succeed (77%), and their program's procedures were fair and equitable to all (72%).

Ratings of contact with advisors

- Sixty-four percent of the respondents interacted with faculty on a weekly basis or more often; 14% interacted with faculty twice a month.
- Seventy-two percent of the respondents had the right amount of contact with their advisors, 15% mentioned they did not have enough contact or did not receive the guidance they needed.

Ratings of faculty, courses, and other aspects of academics

- Over three-fourths of the respondents agreed that their primary advisor respected other professionals, regardless of race, gender, religion, etc. (86%), discussed research with them on a regular basis (81%), gave them constructive feedback on their work (80%), and shared her/his considerable experience and/or training (76%).
- Thirty or more percent of respondents reported the following as a major obstacle to their academic progress in the last year: academic or social isolation (41%), cost of housing (37%), self-confidence (30%), and physical and/or mental health issues (30%). In addition, 64% reported "Other" as their major obstacle.
- Over half of the respondents rated their development as very good or excellent on the following aspects: Quality of academic advising and guidance (58%), Developing me as a scholar (57%), Quality of graduate-level teaching by faculty (56%), and Developing me as a communicator (52%). However, only 29% rated their development as a teacher as very good or excellent.
- Over sixty percent of the respondents rated course content depth and breadth outside their area as very good or excellent (67% ~ 70%). Course content depth and breadth within their area were both rated lower (56% ~ 61%).
- Over ninety percent of the respondents agreed or strongly agreed that: the conduct of qualifying exams was fair (96%), the exam topics were relevant to their training (94%), and the qualifying exams were useful in consolidating their knowledge (91%).

Ratings of research opportunities

- Early research opportunities (e.g., laboratory rotations, research assistantships, faculty-advised research projects or papers) were rated as somewhat effective or very effective by 86% of the respondents. Over 70% of the respondents also rated the following as somewhat effective or very effective: organized exposure to faculty and their current research interests (74%), work with/mentor undergraduate students in the department (71%), and colloquia/seminars/workshops on professional development (71%).

Ratings of teaching assistantships

- More than half of the respondents (57%) had one or more teaching assistantships at Dartmouth recently, and 38% of those who had teaching assistantships noted that these teaching appointments increased their interest in teaching in the future.

Scholarly activities and productivity

- In the past year, 25% of the respondents attended and 18% presented a paper/poster at a professional conference. Twenty-five percent of the respondents submitted scholarly work for publication and 22% published scholarly work. Seventeen percent of the respondents wrote or assisted in writing a grant proposal.

Future plans

- When entering their program, 53% of the respondents envisioned themselves working in academia and 36% in business/industry/self-employment after graduation. In contrast, at the time of the survey, 38% envisioned themselves working in academia and 45% in business/industry/self-employment after graduation. About 11% of the respondents currently plan on a career in the government/non-profit sector.
- Sixty-nine percent of the respondents stated that their programs were preparing them adequately for their current career goals.

Looking back

- Eighty-six percent of the respondents indicated that they would probably or definitely choose to pursue a PhD or Master's if they could start all over again; 83% would choose the same field of study; and 64% would choose to come to Dartmouth.
- Sixty-four percent of the respondents would probably or definitely recommend Dartmouth to someone considering their field of study.

Differences in results due to Major

There are many differences between majors in respondent ratings (see Appendix 2). Significant between-group differences are highlighted in color.

Differences in results due to Race/Ethnicity/Citizenship

There are many differences in results due to race/ethnicity/citizenship (See Appendix 2). Significant between-group differences are highlighted in color.

Differences in results due to Student Type

There are many differences in results due to student type (continuing vs. new graduate students; see Appendix 2). Significant between-group differences are highlighted in color.

Respondent Characteristics

Major		
	N	Percent
Biochemistry & Cell Biology (BCB)	27	6%
Cancer Biology (CANB)	9	2%
Chemistry (CHEM)	34	7%
Comparative Literature (COLT)	4	1%
Computer Science (COSC)	44	9%
Earth Sciences (EARS)	13	3%
Ecology & Evolutionary Biology (EEB)	8	2%
Ecology, Evolution, Ecosystems & Society (EEES)	23	5%
Engineering Sciences (ENGS)	54	12%
Health Care Delivery Science (HCDS)	7	1%
Health Pol & Clinical Practice (HPCP)	2	0%
Master of Arts in Liberal Studies (MALS)	55	12%
Math (MATH)	11	2%
Microbiology (MICR)	33	7%
Molecular & Cellular Biology (MCB)	20	4%
Molecular and Systems Biology (MSB)	12	3%
Music (MUS)	4	1%
Physics (PHYS)	16	3%
Program in Molecular Medicine (PEMM)	22	5%
Psychological & Brain Sciences (PBS)	33	7%
Quantitative Biomedical Sciences (QBS)	34	7%
The Dartmouth Institute (TDI)	2	0%
	467	100%

Gender		
	N	Percent
Female	258	55%
Male	209	45%
	467	100%

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Race/Ethnicity/Citizenship		
	N	Percent
International	160	34%
Minority	76	16%
Unknown	10	2%
White	221	47%
	467	100%

Student Type		
	N	Percent
Continuing	336	72%
New	131	28%
	467	100%

Stage of graduate studies

Q1. Year in Program:		
	N	Percent
First year	123	26%
Second year	114	24%
Third year	88	19%
Fourth year	58	12%
Fifth year	46	10%
> 5 years	37	8%
	466	100%

Overall Satisfaction

Q2. Overall, how satisfied are you with your graduate education?						
Scale: 1 = Very dissatisfied, ... 5 = Very satisfied						
Overall Average	Very dissatisfied	Generally dissatisfied	Ambivalent	Generally satisfied	Very satisfied	N
3.79	2%	8%	14%	59%	16%	451

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Q3. Please rate each of the following.							
Scale: 1 = Poor, 2 = Fair, 3 = Good, 4 = Very good, 5 = Excellent							
	Overall Average	Poor	Fair	Good	Very Good	Excellent	N
Your academic experience at Dartmouth	3.71	3%	10%	24%	41%	23%	466
Your student life experience at Dartmouth	2.96	11%	21%	36%	22%	10%	462
Your overall experience at Dartmouth	3.44	3%	13%	34%	37%	13%	461

Resources and Services

Q4. Please rate the quality of the following support and services provided by Dartmouth.									
Scale: 1 = Poor, 2 = Fair, 3 = Good, 4 = Very good, 5 = Excellent									
	Overall Average	Poor	Fair	Good	Very Good	Excellent	N	N Not Available or Not used	N Total
Financial support provided by Dartmouth	3.36	8%	19%	28%	19%	26%	366	71	437
Programs and resources of the writing center or program (RWIT)	3.69	2%	8%	38%	24%	28%	125	311	436
Programs and resources of the teaching center or program (DCAL)	3.87	1%	7%	27%	32%	32%	216	220	436
Parental support	3.30	18%	14%	18%	18%	32%	114	321	435
Housing support	2.22	42%	24%	14%	11%	10%	279	156	435
Power dynamics support	2.70	26%	24%	19%	16%	15%	210	224	434
Health insurance coverage provided by Dartmouth	3.17	13%	20%	23%	24%	20%	353	83	436
Information technology resources	3.91	1%	7%	25%	35%	32%	350	83	433
Laboratory, clinical, studio, or other physical facilities	3.98	1%	6%	22%	34%	36%	343	93	436
Your personal workspace (e.g., desk or office)	3.48	5%	19%	25%	25%	26%	361	74	435
Guarini School professional development offerings	3.23	9%	19%	32%	23%	18%	262	172	434
Psychological counseling services	3.08	17%	18%	25%	21%	20%	198	237	435
Campus health care services	3.80	2%	10%	26%	30%	32%	348	86	434
Programs and services for international students	3.24	8%	24%	23%	24%	21%	160	276	436

Program Climate

Q5. Using a scale of 1–5, please rate the department or program climate on the following dimensions							
1 = Negative... 5 = Positive (Value was recoded for items with an *)							
	Overall Average	1	2	3	4	5	N
friendly: hostile*	4.23	1%	5%	12%	33%	49%	418
collegial: contentious*	3.95	2%	5%	20%	38%	33%	421
non-sexist: sexist*	3.63	2%	15%	29%	25%	29%	420
collaborative: individualistic*	3.73	5%	12%	18%	34%	31%	422
cooperative: competitive*	3.93	3%	7%	17%	40%	33%	421
not supportive: supportive	3.89	4%	9%	13%	42%	33%	424
rigid: flexible	3.66	4%	9%	25%	41%	21%	422
threatening: protective	3.70	3%	5%	32%	40%	20%	422
encouraging: discouraging*	3.98	3%	6%	15%	42%	35%	423
inclusive: exclusionary*	3.76	3%	10%	23%	37%	28%	421
positive for persons with disabilities: negative for persons with disabilities*	3.48	4%	8%	47%	19%	22%	410
positive for people who are non-US citizens: negative for people who are non-US citizens*	3.69	2%	8%	36%	28%	26%	415
positive for people with mental health struggles: negative for people with mental health struggles*	3.31	8%	16%	34%	21%	21%	418
positive for people with non-traditional education/career trajectories: negative for people with non-traditional education/career trajectories*	3.56	6%	10%	32%	27%	25%	418
positive for people who identify as lesbian, gay, bisexual, queer or transgender: negative for people who identify as lesbian, gay, bisexual, queer or transgender*	3.80	1%	6%	35%	27%	31%	411
positive for people of spiritual/religious backgrounds: negative for people of spiritual/religious backgrounds*	3.62	2%	5%	46%	25%	23%	411
positive for People of Color: negative for People of Color*	3.48	4%	13%	35%	24%	23%	415
positive for non-native English speakers: negative for non-native English speakers*	3.62	1%	9%	40%	27%	23%	411
welcoming: not welcoming*	4.12	2%	5%	11%	43%	39%	423
homogeneous: diverse	2.91	13%	29%	24%	23%	11%	421
disrespectful: respectful	4.01	3%	6%	14%	42%	35%	423

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Q6. Rate the extent to which you agree or disagree with the following statements.									
Scale: 1 = Strongly disagree, ... 5 = Strongly agree									
	Overall Average	Strongly disagree	Generally disagree	Neither agree nor disagree	Generally agree	Strongly agree	N	N NA or don't know	N Total
My peers value my research/scholarship	4.07	0%	5%	15%	48%	33%	405	12	417
I have to work harder than some of my peers to be perceived as a legitimate scholar	2.96	12%	27%	25%	22%	13%	393	24	417
My own relationships and interactions with faculty are positive	4.29	1%	4%	4%	44%	46%	419	0	419
I have the resources I need to succeed	3.88	4%	7%	12%	51%	26%	414	5	419
My program is responsive to student concerns	3.49	8%	14%	18%	43%	18%	406	10	416
Financial support for students in my program is distributed fairly	3.80	5%	6%	22%	37%	30%	333	85	418
My program's procedures are fair and equitable to all	3.75	5%	9%	15%	49%	23%	392	24	416
I am comfortable voicing my feelings and opinions in front of others in my program	3.65	6%	16%	13%	40%	26%	417	3	420

Obstacles to Academic Success

Q7. Rate the extent to which the following have been obstacles to your academic progress in the last year.							
1 = Not an obstacle, 2 = A minor obstacle, 3 = A major obstacle							
	Overall Average	Not an obstacle	A minor obstacle	A major obstacle	N	N Not applicable	N Total
Program structure or requirements	1.50	59%	31%	10%	402	5	407
Academic or social isolation	2.19	22%	37%	41%	397	9	406
Your self-confidence	2.01	29%	41%	30%	399	6	405
Time management difficulties	1.93	32%	43%	25%	403	5	408
Current job market	1.81	43%	33%	24%	295	112	407
Finding housing	1.80	47%	26%	27%	352	56	408
Transportation to Dartmouth	1.53	60%	26%	13%	353	54	407
Other major obstacle (please describe)	2.31	33%	3%	64%	39	61	100
Availability of faculty	1.43	64%	29%	7%	395	12	407
Relationship with advisor	1.38	71%	19%	10%	388	21	409
Competition among your peers	1.29	75%	21%	4%	384	23	407
Cost of housing	2.08	29%	34%	37%	375	34	409
Family obligations	1.58	55%	33%	13%	365	43	408
Insufficient financial support from Dartmouth	1.63	52%	33%	15%	366	40	406
Immigration laws and regulations	1.62	58%	22%	20%	239	168	407
Physical and/or mental health issues	1.98	32%	37%	30%	388	19	407

Mentoring and Advising

Q8a. During the last year, did you receive helpful advice or assistance on the following? If so, from whom - faculty, Graduate Studies staff, students, or others?				
	Faculty	Staff	Students/ Others	N/A- Didn't seek advice
Navigating the systems and culture of graduate education	28%	13%	49%	42%
Selecting courses	40%	10%	44%	41%
Preparing for qualifying exams	30%	4%	29%	64%
Developing/improving your teaching	25%	14%	22%	59%
Developing your dissertation topic	52%	6%	23%	45%
Conducting your dissertation research	55%	12%	37%	41%
Writing and revising your dissertation	29%	6%	16%	67%
Consideration of academic career options	34%	9%	30%	53%
Consideration of non-academic or other professional career options	27%	10%	37%	52%

Q8b. During the last year, did you receive helpful advice or assistance on the following? If so, from whom - faculty, Graduate Studies staff, students, or others? (Excluding N/A)			
	Faculty	Staff	Students/ Others
Navigating the systems and culture of graduate education	47%	23%	83%
Selecting courses	67%	16%	74%
Preparing for qualifying exams	83%	12%	80%
Developing/improving your teaching	63%	35%	53%
Developing your dissertation topic	94%	11%	42%
Conducting your dissertation research	92%	21%	62%
Writing and revising your dissertation	88%	20%	50%
Consideration of academic career options	72%	19%	63%
Consideration of non-academic or other professional career options	56%	20%	77%

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Q9. How many faculty members at Dartmouth do you consider to be your advisors or mentors (i.e., faculty who give you advice about your education, career development, or other matters of concern to you as a graduate student)?		
	N	Percent
0	24	6%
1	129	32%
2	137	34%
3	78	20%
4 or more	31	8%
	399	100%

Q10. How often do you typically have substantive contact with your primary advisor about your academic progress and research?		
	N	Percent
Less often than yearly	19	5%
Once a year	8	2%
Once a term	24	6%
2-3 times a term	15	4%
Monthly	23	6%
Twice a month	57	14%
Weekly or more often	256	64%
	402	100%

Q11. Is this frequency about right, not enough contact, or too much contact?		
	N	Percent
There is too much contact; I do not have enough independence	7	2%
Just about the right amount of contact	289	72%
There is not enough contact; I do not receive all the guidance I need	59	15%
I am not sure	47	12%
	402	100%

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Q12. For each of the following statements, indicate the extent to which it describes your primary advisor.							
1 = Strongly disagree, ... 5 = Strongly agree							
	Overall Average	Strongly disagree	Generally disagree	Neither agree nor disagree	Generally agree	Strongly agree	N
Discusses my research with me on a regular basis	4.20	3%	5%	11%	29%	52%	385
Encourage my interests outside of being a graduate student	3.62	6%	10%	27%	29%	28%	385
Respects other professionals, regardless of race, gender, religion, etc.	4.42	2%	2%	11%	23%	63%	385
Helps me find funding for my graduate work if applicable	3.90	3%	2%	35%	22%	38%	378
Gives me constructive feedback on my work	4.13	3%	4%	13%	36%	44%	384
Clearly states expectations for my academic progress	3.67	6%	8%	25%	36%	26%	387
Has reasonable expectations for my academic progress	4.08	4%	3%	14%	40%	40%	386
Promotes my professional development	4.01	3%	5%	18%	35%	39%	384
Shares considerable experience and/or training	4.07	3%	5%	16%	33%	43%	384
Expects me to work so many hours that it is hard to have a personal life	2.02	45%	25%	19%	6%	5%	386
Has made me feel valued	4.00	4%	5%	17%	32%	41%	386
Sees me as a source of labor to advance career	2.17	41%	23%	20%	8%	7%	386

Q13. Have you received assistance or support on each of the following? If so, how helpful was the assistance or support? (Based on those who have received assistance/support)								
1 = Not at all helpful, ... 4 = Very helpful								
	Overall Average	Not at all helpful	Not very helpful	Somewhat helpful	Very helpful	N	N Have not received assistance or support	N Total
Standards for academic or professional writing in my field	3.24	4%	6%	52%	38%	260	118	378

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Q13. Have you received assistance or support on each of the following? If so, how helpful was the assistance or support? (Based on those who have received assistance/support)								
1 = Not at all helpful, ... 4 = Very helpful								
	Overall Average	Not at all helpful	Not very helpful	Somewhat helpful	Very helpful	N	N Have not received assistance or support	N Total
Avoiding plagiarism and other violations of the standards of academic integrity	3.25	3%	8%	51%	38%	252	127	379
Understanding the professional and research ethics in my field	3.26	3%	7%	52%	39%	292	91	383
Writing grant or fellowship proposals	3.20	4%	13%	43%	40%	224	154	378
Preparing articles for publication	3.30	5%	8%	39%	48%	220	161	381
Effective oral communication and presentations	3.35	2%	6%	47%	45%	273	107	380
Academic career planning	2.97	5%	16%	56%	23%	201	180	381
Non-academic career planning	2.77	12%	25%	38%	25%	173	204	377

Program Quality

Q14. Please rate your program in the following areas.							
Scale: 1 = Poor, 2 = Fair, 3 = Good, 4 = Very good, 5 = Excellent							
	Overall Average	Poor	Fair	Good	Very Good	Excellent	N
Quality of graduate curriculum	3.26	7%	19%	28%	30%	15%	387
Quality of graduate-level teaching by faculty	3.50	7%	15%	22%	32%	24%	387
Quality of academic advising and guidance	3.51	9%	15%	18%	32%	26%	378
The opportunity to collaborate across disciplines	3.37	10%	18%	22%	27%	23%	386
Developing me as a scholar	3.60	3%	14%	25%	33%	24%	383
Developing me as a teacher	2.85	14%	29%	27%	16%	13%	376
Developing me as a communicator	3.45	5%	17%	25%	30%	22%	385

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Q15. Rate the quality of courses offered to you.									
Scale: 1 = Poor, 2 = Fair, 3 = Average, 4 = Good, 5 = Excellent									
	Overall Average	Poor	Fair	Average	Good	Excellent	N	N Not applicable	N Total
Depth of content in courses within your area of specialty	3.53	12%	11%	16%	33%	28%	367	17	384
Breadth of content in courses within your area of specialty	3.42	13%	12%	18%	32%	24%	368	16	384
Depth of content in courses outside your area of specialty	3.74	6%	9%	18%	39%	28%	352	32	384
Breadth of content in courses outside your area of specialty	3.81	6%	7%	18%	40%	30%	357	27	384
State-of-the-art course content	3.54	8%	13%	20%	36%	23%	359	22	381

Q16. If you completed a qualifying exam this past year, what was your experience? Check the circle that best represents your agreement with the statements.									
Scale: 1 = Strongly disagree, ... 4 = Strongly agree									
	Overall Average	Strongly disagree	Disagree	Agree	Strongly agree	N	N Not applicable	N Total	
The conduct of exam was fair	3.55	3%	2%	34%	62%	118	241	359	
The exam was useful in consolidating my knowledge	3.39	4%	5%	38%	53%	117	242	359	
The exam topics were relevant to my training	3.50	2%	4%	36%	58%	118	240	358	

Early Advice and Support Provided by Departments or Programs

Q17a. Does your department or program provide pre-candidacy students with the following opportunities or resources?				
	No, not available	Available but I did not participate/receive	I participated	N
A departmental/program orientation to help you understand the process of completing your graduate degree	15%	11%	74%	364
A written set of expectations about academic requirements and expected progress in your program	11%	4%	85%	364
Organized exposure to faculty and their current research interests	21%	8%	71%	363

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Q17a. Does your department or program provide pre-candidacy students with the following opportunities or resources?				
	No, not available	Available but I did not participate/receive	I participated	N
Early research opportunities (e.g., laboratory rotations, research assistantships, faculty-advised research projects or papers)	23%	16%	60%	363
A written assessment of your academic progress, other than course grades and qualifying exams, at least annually	53%	6%	42%	359
A meeting with your Director of Graduate Studies and/or other faculty to assess your academic progress, at least annually	36%	17%	47%	365
Work with/mentor undergraduate students in the department	55%	46%	0%	200
Colloquia/seminars/workshops on inclusivity	55%	45%	0%	159
Colloquia/seminars/workshops on professional development	44%	56%	0%	166

Q17b. If participated, how effective were the following opportunities or resources provided by your department or program to pre-candidacy students? If participated, how effective was it?							
Scale: 1 = Very ineffective, ... 5 = Very effective							
	Overall Average	Very ineffective	Somewhat ineffective	Neither effective nor ineffective	Somewhat effective	Very effective	N
A departmental/program orientation to help you understand the process of completing your graduate degree	3.72	7%	9%	16%	41%	27%	271
A written set of expectations about academic requirements and expected progress in your program	3.70	6%	11%	14%	43%	26%	311
Organized exposure to faculty and their current research interests	3.86	7%	7%	12%	42%	32%	259
Early research opportunities (e.g., laboratory rotations, research assistantships, faculty-advised research projects or papers)	4.28	3%	3%	8%	34%	52%	219

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Q17b. If participated, how effective were the following opportunities or resources provided by your department or program to pre-candidacy students? If participated, how effective was it?							
Scale: 1 = Very ineffective, ... 5 = Very effective							
	Overall Average	Very ineffective	Somewhat ineffective	Neither effective nor ineffective	Somewhat effective	Very effective	N
A written assessment of your academic progress, other than course grades and qualifying exams, at least annually	3.75	6%	7%	18%	42%	26%	149
A meeting with your Director of Graduate Studies and/or other faculty to assess your academic progress, at least annually	3.74	10%	6%	16%	34%	33%	170
Work with/mentor undergraduate students in the department	3.84	5%	8%	16%	41%	30%	185
Colloquia/seminars/workshops on inclusivity	3.56	6%	13%	20%	43%	19%	220
Colloquia/seminars/workshops on professional development	3.76	6%	7%	18%	47%	24%	217

Developing Your Teaching

Q18. Have you recently had one or more teaching assistantship appointments at Dartmouth?		
	N	Percent
No	163	43%
Yes	215	57%
	378	100%

Q19. Rate the extent to which you agree or disagree with the following statements about this most recent teaching appointment. (Excluding those who did not have teaching assistantships)							
1 = Strongly disagree, ... 5 = Strongly agree							
	Overall Average	Strongly disagree	Generally disagree	Neither agree nor disagree	Generally agree	Strongly agree	N
I understood the goals of the course	4.36	1%	2%	11%	34%	52%	254
I understood what the faculty expected of me	4.35	1%	2%	11%	33%	53%	254

Guarini 2021 Survey Results

Q19. Rate the extent to which you agree or disagree with the following statements about this most recent teaching appointment. (Excluding those who did not have teaching assistantships)							
1 = Strongly disagree, ... 5 = Strongly agree							
	Overall Average	Strongly disagree	Generally disagree	Neither agree nor disagree	Generally agree	Strongly agree	N
This teaching appointment was related to my program of study	4.04	3%	7%	16%	30%	43%	251
I received helpful feedback about my teaching from the course instructor	3.71	6%	10%	25%	25%	34%	252

Q20. How has this teaching appointment affected your interest in teaching in the future?		
	N	Percent
Decreased my interest	29	14%
Made no difference	99	48%
Increased my interest	77	38%
	205	100%

Career Development

Q21. While a graduate student at Dartmouth, have you done any of the following?			
	In the past year	Since starting this program	Neither
Attended a professional conference	25%	33%	57%
Presented a paper or poster at a conference	18%	25%	67%
Submitted articles, book chapters, or technical reports that are under review	25%	22%	66%
Published or had accepted for publication articles, book chapters, or technical reports	22%	23%	68%
Wrote or assisted in writing a grant proposal	17%	19%	72%

Q22. When you entered your program, in which of the following did you envision yourself working upon completion of your degree?		
	N	Percent
Academia	195	53%
Business, industry, self-employment	131	36%

Guarini 2021 Survey Results

Q22. When you entered your program, in which of the following did you envision yourself working upon completion of your degree?		
	N	Percent
Government, non-profit	26	7%
Other, please describe:	15	4%
	367	100%

Q23. In which of the following do you now envision yourself working?		
	N	Percent
Academia	142	38%
Business, industry, self-employment	166	45%
Government, non-profit	41	11%
Other, please describe:	24	6%
	373	100%

Q24. My program is preparing me adequately for my current career goals.						
1 = Strongly disagree, ... 5 = Strongly agree						
Overall Average	Strongly disagree	Generally disagree	Neither agree nor disagree	Generally agree	Strongly agree	N
3.71	5%	9%	17%	48%	21%	375

Revisiting Your Graduate Studies

Q25. How likely are you to stay in your program until you achieve your ultimate degree objective?						
1 = Very unlikely, ... 5 = Very likely						
Overall Average	Very unlikely	Somewhat unlikely	Not sure	Somewhat likely	Very likely	N
4.66	2%	1%	5%	12%	80%	372

Guarini 2021 Survey Results

Q26. If you could start all over again...							
1 = Definitely not, 2 = Probably not, 3 = Maybe, 4 = Probably, 5 = Definitely							
	Overall Average	Definitely not	Probably not	Maybe	Probably	Definitely	N
Would you choose to pursue a PhD or Master's?	4.40	3%	3%	8%	23%	63%	373
Would you choose the same field of study?	4.28	2%	6%	10%	29%	54%	375
Would you choose to come to Dartmouth?	3.79	5%	11%	18%	28%	36%	374

Guarini 2021 Survey Results

Q27. Would you recommend Dartmouth to someone considering your field of study?						
1 = Definitely not, 2 = Probably not, 3 = Maybe, 4 = Probably, 5 = Definitely						
Overall Average	Definitely not	Probably not	Maybe	Probably	Definitely	N
3.77	4%	10%	22%	31%	33%	374

Appendix 1

Respondent vs. Non-Respondent Comparison

Guarini 2021 Survey Results

Major

	Number of Survey Respondents	Number of Invitations	Response Rate
Biochemistry & Cell Biology (BCB)	27	43	63%
Cancer Biology (CANB)	9	14	64%
Chemistry (CHEM)	34	55	62%
Comparative Literature (COLT)	4	7	57%
Computer Science (COSC)	44	107	41%
Earth Sciences (EARS)	13	18	72%
Ecology & Evolutionary Biology (EEB)	8	21	38%
Ecology, Evolution, Ecosystems & Society (EEES)	23	29	79%
Engineering Sciences (ENGS)	54	140	39%
Health Care Delivery Science (HCDS)	7	62	11%
Health Pol & Clinical Practice (HPCP)*	2	2	100%
Master of Arts in Liberal Studies (MALS)	55	152	36%
Math (MATH)	11	28	39%
Microbiology (MICR)	33	69	48%
Molecular & Cellular Biology (MCB)	20	29	69%
Molecular and Systems Biology (MSB)	12	20	60%
Music (MUS)	4	6	67%
Physics (PHYS)	16	50	32%
Program in Molecular Medicine (PEMM)	22	26	85%
Psychological & Brain Sciences (PBS)	33	49	67%
Quantitative Biomedical Sciences (QBS)	34	70	49%
The Dartmouth Institute (TDI)*	2	4	50%
Total	467	1001	47%

*HPCP and TDI were excluded from the analysis (Number of Invitations <5). There were statistically significant differences between survey respondents and non-respondents due to major ($\chi^2 = 109.03$, $p < 0.0001$).

Race/Ethnicity/Citizenship

	Number of Survey Respondents	Number of Invitations	Response Rate
International	160	323	50%
Minority	76	176	43%
Unknown*	10	19	53%
White	221	485	46%
Total	467	1003	47%

*Excluding respondents with "Unknown" race, there were no statistically significant differences between survey respondents and non-respondents due to race/ethnicity ($\chi^2 = 2.14$, $p = 0.3423$).

Guarini 2021 Survey Results

Student type

	Number of Survey Respondents	Number of Invitations	Response Rate
Continuing	336	731	46%
New	131	272	48%
Total	467	1003	47%

There were no statistically significant differences between survey respondents and non-respondents due to student type ($\chi^2 = 0.38$, $p = 0.5351$).

Appendix 2

**Comparisons of Average Differences by Major,
Race/Ethnicity/Citizenship, and Student Type**

Guarini 2021 Survey Results

By Major

Variable	Question	N	Overall Average	BCB	CHEM	COSC	EARS	EEES	ENGS	MALS	MATH	MICR	MCB	MSB	PHYS	PEMM	PBS	QBS	ProbF	eta2
	Q2. Overall, how satisfied are you with your graduate education? (1=Very dissatisfied, ... 5=Very satisfied)	415	3.78	4.04	3.61	4.07	3.17	3.81	3.70	3.85	4.27	3.78	3.95	3.82	3.75	3.82	3.35	3.72	0.04	0.06
	Q3. Please rate each of the following: (1=Poor, 2=Fair, 3=Good, 4=Very good, 5=Excellent)																			
Q3_1	Your academic experience at Dartmouth	431	3.68	3.93	3.44	4.07	3.46	3.91	3.59	3.98	3.91	3.45	3.80	3.83	3.44	3.41	3.29	3.62	0.03	0.06
Q3_2	Your student life experience at Dartmouth	428	2.97	3.52 d	2.88	3.14 d	1.92 acfg	3.04	3.19 d	3.11 d	3.09	3.15	2.74	3.25	2.94	2.73	2.58	2.65	0.00	0.07
Q3_3	Your overall experience at Dartmouth	426	3.43	3.81	3.26	3.73	2.77	3.74	3.39	3.77	3.64	3.42	3.26	3.42	3.25	3.43	3.00	3.21	0.00	0.08
	Q4. Please rate the quality of the following support and services provided by Dartmouth: (1= Poor, 2=Fair, 3=Good, 4=Very good, 5=Excellent)																			
Q4_1	Financial support provided by Dartmouth	342	3.37	2.72 g	3.04	3.79 n	3.50	3.95 n	3.64 n	3.97 ano	3.75	3.00	3.65	2.89	3.43	3.11	2.40 cefg	2.89 g	<.0001	0.14
Q4_2	Health insurance coverage provided by Dartmouth	330	3.20	2.46 f	3.33	3.50	3.55	3.33	3.84 ain	3.57	3.88	2.66 f	3.19	2.80	3.31	2.83	2.60 f	3.23	0.00	0.12
Q4_3	Information technology resources	327	3.91	3.74	3.70	4.03	3.67	3.95	4.23	4.13	4.00	3.54	4.11	3.50	4.27	3.54	3.79	3.93	0.09	0.07
Q4_4	Laboratory, clinical, studio, or other physical facilities	321	3.96	4.04	3.58	4.25	3.90	4.28	3.83	4.21	4.67	3.87	4.05	4.09	3.73	4.00	3.76	3.95	0.26	0.05
Q4_5	Your personal workspace (e.g., desk or office)	340	3.47	3.38	3.30	3.76	2.80 h	3.10 h	3.51	3.78	4.78 dejm	3.50	2.93 h	3.64	3.50	2.67 h	3.86	3.46	0.00	0.10
Q4_6	Guarini School professional development offerings	244	3.21	3.24	3.27	3.46	2.00	3.25	3.26	3.23	4.00	3.05	4.00	3.13	3.60	3.26	3.06	3.00	0.37	0.06

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	BCB	CHEM	COSC	EARS	EEES	ENGS	MALS	MATH	MICR	MCB	MSB	PHYS	PEMM	PBS	QBS	ProbF	eta2
Q4_7	Psychological counseling services	187	3.07	2.00 c	2.73	3.74 a	2.00	3.64	3.38	3.17	5.00	2.54	2.82	2.75	3.10	3.55	2.79	3.08	0.01	0.16
Q4_8	Campus health care services	327	3.79	3.36	3.56	3.97	3.64	4.38 n	4.07	4.05	5.00 n	3.61	3.69	3.10	3.82	3.94	3.18 eh	3.96	0.00	0.11
Q4_9	Programs and services for international students	153	3.22	2.33	3.39	3.52	2.50	3.00	3.42	3.69	5.00	2.79	2.71	2.50	3.25	2.75	2.60	3.38	0.24	0.12
Q4_10	Programs and resources of the writing center or program (RWIT)	121	3.69	3.43	3.59	4.20	3.00	4.00	3.21	4.15	5.00	2.83	4.75	3.14	4.00	4.25	3.00	3.63	0.00	0.26
Q4_11	Programs and resources of the teaching center or program (DCAL)	204	3.86	3.83	4.04	4.05	3.56	3.90	3.86	3.82	4.63	3.71	4.20	3.17	4.42	3.90	3.31	3.56	0.10	0.11
Q4_12	Parental support	110	3.28	3.20	3.64	3.29	2.00	3.00	3.18	4.33	5.00 k	2.67	3.25	1.60 h	3.60	2.75	3.00	3.58	0.10	0.19
Q4_13	Housing support	263	2.26	1.50 g	2.05	2.85	1.33	1.92	2.26	3.09 an	2.63	1.86	2.50	2.22	2.82	1.64	1.61 g	2.43	0.00	0.13
Q4_14	Power dynamics support	201	2.70	3.00	2.75	4.04 defimn	2.14 c	2.31 c	2.50 c	2.69	4.00	2.21 c	3.71	2.57	3.13	2.10 c	1.88 c	2.67	<.0001	0.22
	Q5. Using a scale of 1–5, please rate the department or program climate on the following dimensions. (1 = Negative ... 5 = Positive)																			
Q5_1	friendly: hostile*	392	4.21	4.67 bn	3.80 ac	4.55 bn	4.00	4.48 n	4.28	4.33 n	4.40	4.32	4.47	4.10	3.93	4.05	3.52 aceg	3.90	0.00	0.10
Q5_2	positive for persons with disabilities: negative for persons with disabilities*	385	3.43	3.50	3.40	3.95 in	3.15	3.30	3.68	3.41	3.60	3.00 c	3.47	3.00	3.27	3.26	2.95 c	3.50	0.01	0.07
Q5_3	positive for people who identify as lesbian, gay, bisexual, queer or transgender: negative for people who identify as lesbian, gay, bisexual, queer or transgender*	383	3.76	3.77	3.73	4.05 n	3.46	3.80	3.76	3.96 n	4.20 n	3.86	3.68	3.80	4.07 n	3.50	2.90 cghl	3.67	0.02	0.07

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	BCB	CHEM	COSC	EARS	EEES	ENGS	MALS	MATH	MICR	MCB	MSB	PHYS	PEMM	PBS	QBS	ProbF	eta2
Q5_4	positive for people of spiritual/religious backgrounds: negative for people of spiritual/religious backgrounds*	384	3.60	3.59	3.70	3.85	3.46	3.60	3.67	3.72	4.00	3.20	3.74	3.30	3.67	3.47	3.25	3.53	0.29	0.04
Q5_5	positive for People of Color: negative for People of Color*	388	3.45	3.35	3.47	3.76 n	3.31	3.05	3.55 n	3.63 n	3.80	3.47	3.53	3.20	3.73 n	3.26	2.45 c f g l	3.48	0.02	0.07
Q5_6	positive for non-native English speakers: negative for non-native English speakers*	385	3.59	3.35	3.63	3.95	3.31	3.50	3.48	3.67	3.80	3.70	3.63	3.20	3.87	3.47	3.35	3.48	0.34	0.04
Q5_7	welcoming: not welcoming*	395	4.11	4.29 n	3.84	4.31 n	3.69	4.33 n	4.18 n	4.33 n	4.20	3.97	4.47 n	4.30	4.07	4.30 n	3.30 a c e f g j m	3.87	0.00	0.09
Q5_8	homogeneous: diverse	393	2.90	2.88	2.87 n	3.38 e m n	2.31	2.33 c g	3.04 n	3.50 e m n	2.90	2.71	3.05 n	2.80	3.07	2.30 c g	1.75 b c f g j o	3.00 n	<.0001	0.13
Q5_9	disrespectful: respectful	395	3.98	4.25	3.87	4.43 l n	3.92	4.19	4.02	4.13	4.00	3.94	4.47 l n	3.90	3.27 c j	3.90	3.30 c j	3.84	0.00	0.10
Q5_10	collegial: contentious*	393	3.92	4.25 n	3.47	4.14 n	3.54	4.14	3.94	4.08	4.10	4.00	4.11	3.90	4.13	3.90	3.24 a c	3.71	0.01	0.07
Q5_11	non-sexist: sexist*	393	3.59	3.67	3.55	4.12 n	3.15	3.57	3.61 n	3.76 n	3.40	3.68 n	4.05 n	3.10	3.33	3.55	2.55 c f g j o	3.71 n	0.00	0.09
Q5_12	collaborative: individualistic*	394	3.70	4.13	3.29	3.71	3.46	3.57	3.75	3.60	3.80	4.16	4.26	4.10	3.73	3.80	3.25	3.48	0.05	0.06
Q5_13	cooperative: competitive*	394	3.90	4.25 n	3.74	3.95	3.77	4.19	4.08	3.90	4.10	4.13	4.16	3.90	4.00	4.00	3.20 a	3.32	0.01	0.08
Q5_14	not supportive: supportive	396	3.86	4.13 n	3.35 e	4.14 n	3.77	4.38 b n	4.06 n	4.00 n	4.00	3.90 n	4.05 n	3.60	3.27	4.20 n	2.86 a c e f g j m	3.74	<.0001	0.12
Q5_15	rigid: flexible	394	3.64	4.00 l	3.19 f	3.79	3.77	4.00 l	4.08 b l n	3.79	3.10	3.45	3.58	3.70	2.80 a e f	3.90	3.05 f	3.45	<.0001	0.12
Q5_16	threatening: protective	394	3.68	4.04 n	3.48	3.90 n	3.46	3.86	3.74	3.79	3.90	3.84	3.63	3.80	3.47	3.60	3.00 a c	3.58	0.04	0.06
Q5_17	encouraging: discouraging*	395	3.95	4.29 n	3.74	4.14 n	3.46	4.29 n	4.06	4.23 n	3.90	3.84	4.47 n	3.40	3.67	4.10	3.20 a c e g j	3.58	0.00	0.10
Q5_18	inclusive: exclusionary*	393	3.75	4.21 n	3.58	4.05 n	3.31	3.90 n	3.86 n	3.93 n	3.60	3.81 n	3.89 n	3.60	3.47	3.85 n	2.65 a c e f g i j m	3.61	0.00	0.10

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	BCB	CHEM	COSC	EARS	EEES	ENGS	MALS	MATH	MICR	MCB	MSB	PHYS	PEMM	PBS	QBS	ProbF	eta2
Q5_21	positive for people who are non-US citizens: negative for people who are non-US citizens*	387	3.66	3.55	3.53	3.98	3.46	3.86	3.63	3.82	3.60	3.63	3.63	3.10	3.73	3.53	3.45	3.68	0.58	0.03
Q5_22	positive for people with mental health struggles: negative for people with mental health struggles*	390	3.28	3.18	3.27	3.52	2.85	3.48	3.43	3.72 n	2.90	2.97	3.42	3.30	3.07	3.25	2.57 g	3.29	0.06	0.06
Q5_23	positive for people with non-traditional education/career trajectories: negative for people with non-traditional education/career trajectories*	390	3.52	3.57	3.39	3.73	2.62 g	3.35	3.75	3.94 d	3.10	3.27	3.68	3.40	3.40	3.68	3.05	3.55	0.02	0.07
	Q6. Rate the extent to which you agree or disagree with the following statements. (1=Strongly disagree, ... 5=Strongly agree)																			
Q6_1	My peers value my research/scholarship	379	4.08	4.13	4.00	4.24	4.08	4.24	4.12	4.21	4.00	4.21	4.00	3.80	4.20	4.14	3.50	3.90	0.21	0.05
Q6_2	I have to work harder than some of my peers to be perceived as a legitimate scholar	367	2.99	2.71	3.42	2.95	3.25	3.00	2.87	2.95	3.00	3.24	2.67	3.20	3.07	2.75	3.25	2.77	0.67	0.03
Q6_3	My own relationships and interactions with faculty are positive	392	4.28	4.33	3.97	4.43	4.25	4.35	4.43	4.40	4.60	4.23	4.26	4.30	4.07	4.29	3.71	4.32	0.11	0.05
Q6_4	I have the resources I need to succeed	387	3.88	3.92	3.77	4.17 n	3.75	4.10	3.98	4.02	4.67 n	3.86	3.79	3.80	3.60	4.19 n	3.15 chm	3.48	0.00	0.08
Q6_5	My program is responsive to student concerns	380	3.48	3.71 n	2.93 cg	3.93 bn	3.75	3.86 n	3.68 n	3.88 bn	3.60	3.21	3.33	3.33	2.87	3.33	2.47 acefg	3.52	<.0001	0.13
Q6_6	Financial support for students in my program is distributed fairly	310	3.81	3.56	3.29 c	4.29 bi	4.17	4.10	4.07	3.95	4.00	3.37 c	3.75	3.67	4.14	3.89	3.20	3.58	0.00	0.11

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	BCB	CHEM	COSC	EARS	EEES	ENGS	MALS	MATH	MICR	MCB	MSB	PHYS	PEMM	PBS	QBS	ProbF	eta2
Q6_7	My program's procedures are fair and equitable to all	366	3.75	3.87 n	3.20 cg	4.12 bn	3.50	3.75	3.86 n	4.16 bn	4.00	3.79 n	3.89 n	3.67	3.40	3.75	2.74 acfgijo	3.79 n	0.00	0.11
Q6_8	I am comfortable voicing my feelings and opinions in front of others in my program	390	3.63	4.00 n	3.13 c	4.07 bn	3.50	3.40	3.82 n	4.02 n	3.90	3.33	3.58	3.40	4.07 n	3.71	2.76 acfgl	3.42	0.00	0.10
	Q12. For each of the following statements, indicate the extent to which it describes your primary advisor. (1 = Strongly disagree, ... 5 = Strongly agree)																			
Q12_1	Discusses my research with me on a regular basis	361	4.19	4.91 go	4.15	4.37 g	4.55	4.40 g	4.33 g	3.39 acefil	4.30	4.34 g	3.81	4.50	4.71 g	4.00	3.90	3.74 a	<.0001	0.14
Q12_2	Gives me constructive feedback on my work	360	4.11	4.62	4.37	4.39	3.82	4.30	4.04	3.89	4.20	4.17	3.69	4.20	4.36	4.14	3.75	3.85	0.05	0.07
Q12_3	Clearly states expectations for my academic progress	363	3.64	3.86	3.74	3.98	3.09	3.70	3.49	3.65	3.70	3.62	3.44	3.90	3.71	3.90	3.29	3.56	0.50	0.04
Q12_4	Has reasonable expectations for my academic progress	362	4.07	4.41	3.93	4.27	3.36	4.45	4.12	3.81	4.20	4.14	3.69	4.10	4.21	4.05	4.00	4.07	0.15	0.05
Q12_5	Promotes my professional development	360	3.99	4.36	4.11	4.24	3.64	4.10	3.96	3.74	4.50	3.90	3.56	4.00	4.36	3.95	3.90	3.64	0.11	0.06
Q12_6	Shares considerable experience and/or training	360	4.04	4.45 o	3.78	4.46 o	3.64	4.58 o	4.08	3.78	4.10	4.21	3.81	4.10	4.29	3.95	3.90	3.41 ace	0.00	0.10
Q12_7	Expects me to work so many hours that it is hard to have a personal life	362	2.02	1.82	2.22	2.12	1.36	1.55	2.37	2.00	1.80	2.10	2.69	1.70	2.07	1.71	1.75	1.81	0.07	0.06
Q12_8	Has made me feel valued	362	3.98	4.43	3.96	4.29	3.27	4.30	3.86	3.92	4.30	3.86	3.69	4.00	4.29	3.90	3.81	3.74	0.13	0.06
Q12_9	Sees me as a source of labor to advance career	362	2.20	2.14	2.48	2.00	2.73	1.85	2.00	2.11	2.30	2.10	2.63	2.40	1.64	2.00	2.71	2.48	0.20	0.05
Q12_10	Encourage my interests outside of being a graduate student	361	3.60	4.09	3.30	3.71	3.45	3.85	3.49	3.63	3.40	3.34	3.50	3.90	3.86	3.67	3.67	3.56	0.69	0.03

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	BCB	CHEM	COSC	EARS	EEES	ENGS	MALS	MATH	MICR	MCB	MSB	PHYS	PEMM	PBS	QBS	ProbF	eta2
Q12_11	Respects other professionals, regardless of race, gender, religion, etc.	361	4.39	4.77 j	4.41	4.68 j	3.91	4.50	4.41 j	4.33	4.60	4.55 j	3.50 acfi	4.60	4.36	4.33	4.35	4.07	0.00	0.09
Q12_12	Helps me find funding for my graduate work if applicable	354	3.89	4.19	3.96 g	4.27 g	4.27 g	4.42 g	4.23 g	3.00 bcdefl	3.70	3.86	3.38	3.50	4.07 g	3.70	3.62	3.74	<.0001	0.15
	Q13. Have you received assistance or support on each of the following? If so, how helpful was the assistance or support? (1=Not at all helpful, ... 4=Very helpful)																			
Q13_1	Standards for academic or professional writing in my field	242	3.22	3.22	3.33	3.54	2.89	3.38	3.03	3.17	3.71	3.14	2.83	3.50	3.57	3.15	2.89	3.05	0.06	0.10
Q13_2	Avoiding plagiarism and other violations of the standards of academic integrity	238	3.24	3.20	3.47	3.47	2.86	3.20	3.17	3.28	3.00	2.95	3.27	3.25	3.50	3.27	3.18	3.17	0.56	0.05
Q13_3	Understanding the professional and research ethics in my field	270	3.26	3.24	3.41	3.29	3.00	3.33	3.24	3.07	3.44	3.05	3.43	3.20	3.27	3.67	3.15	3.10	0.52	0.05
Q13_4	Writing grant or fellowship proposals	210	3.17	3.35	3.16	3.53	2.67	3.58	2.91	3.00	2.50	3.14	3.00	3.50	3.17	3.47	3.17	2.94	0.10	0.10
Q13_5	Preparing articles for publication	205	3.28	3.00	3.29	3.75 i	3.50	3.60	3.20	3.08	3.60	2.95 c	3.00	3.50	3.56	3.22	3.36	3.00	0.03	0.12
Q13_6	Effective oral communication and presentations	254	3.32	3.05	3.33	3.71	3.33	3.56	3.34	3.29	3.33	3.08	3.33	3.43	3.40	3.23	3.17	3.05	0.08	0.09
Q13_7	Academic career planning	183	2.92	2.71	2.94	3.13	3.00	2.60	3.10	2.86	3.14	2.71	3.14	3.00	3.29	3.13	2.82	2.65	0.65	0.07
Q13_8	Non-academic career planning	159	2.73	2.54	2.92	3.17	2.00	2.38	2.96	2.77	2.50	2.44	2.50	3.33	2.67	3.00	2.33	2.44	0.32	0.10
	Q14. Please rate your program in the following areas: (1= Poor, 2=Fair, 3=Good, 4=Very good, 5=Excellent)																			
Q14_1	Quality of graduate curriculum	362	3.23	3.23	3.15	3.56 n	2.50	3.15	3.23 n	3.77 n	3.30	3.14	3.44	3.40	3.07	3.24	2.16 cfg	3.28	0.00	0.10

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	BCB	CHEM	COSC	EARS	EEES	ENGS	MALS	MATH	MICR	MCB	MSB	PHYS	PEMM	PBS	QBS	ProbF	eta2
Q14_2	Quality of graduate-level teaching by faculty	362	3.48	3.77 n	3.46	4.00 n	2.80	3.95 n	3.50 n	3.93 n	3.90	3.38	3.25	3.30	3.07	3.24	2.40 acefg	3.44	<.0001	0.12
Q14_3	Quality of academic advising and guidance	355	3.49	3.91	3.35	4.05	3.30	4.20	3.48	3.22	3.80	3.41	3.31	3.00	3.50	3.62	2.89	3.00	0.01	0.08
Q14_4	The opportunity to collaborate across disciplines	361	3.36	3.59	2.96	3.51	2.10 eg	3.90 dl	3.46	3.74 dl	3.30	3.48	3.25	3.20	2.29 eg	3.71	2.58	3.68	0.00	0.11
Q14_5	Developing me as a scholar	359	3.59	3.73	3.58	3.75	3.50	4.15	3.52	3.78	3.90	3.52	3.44	3.60	3.29	3.90	3.00	3.36	0.19	0.05
Q14_6	Developing me as a teacher	351	2.84	2.59 h	3.31 f	2.98	2.80	3.75 fi	2.28 beh	3.11	4.30 afikmn	2.52 eh	2.75	2.33 h	3.07	2.57 h	2.47 h	2.80	<.0001	0.14
Q14_7	Developing me as a communicator	360	3.45	3.45	3.38	3.88 n	3.10	3.75	3.35	3.66	3.60	3.59	3.13	3.60	3.00	3.76	2.63 c	3.24	0.03	0.07
	Q15. Rate the quality of courses offered to you. (1= Poor, 2=Fair, 3=Average, 4=Very good, 5=Excellent)																			
Q15_1	Depth of content in courses within your area of specialty	343	3.51	3.32	4.08 n	3.98 n	2.44	3.11	3.55 n	3.95 n	3.50	3.54 n	3.50	3.56	3.93 n	3.74 n	2.05 bcfgilmo	3.40 n	<.0001	0.15
Q15_2	Breadth of content in courses within your area of specialty	344	3.39	3.21	3.85 n	3.73 n	2.60	2.74 g	3.26	4.00 en	2.90	3.48 n	3.40	3.44	3.43	3.75 n	2.11 bcfgimo	3.56 n	<.0001	0.13
Q15_3	Depth of content in courses outside your area of specialty	330	3.71	3.58	4.00 n	3.84 n	3.70	4.11 n	3.82 n	4.05 n	4.10 n	3.56	3.29	4.00	4.00 n	3.88 n	2.50 bcefghlm	3.44	0.00	0.11
Q15_4	Breadth of content in courses outside your area of specialty	334	3.78	3.70	3.88 n	3.89 n	3.50	3.75	3.98 n	4.25 n	4.00	3.57	3.23	4.00	4.00	3.95 n	2.72 bcfgm	3.76	0.00	0.10
Q15_5	State-of-the-art course content	336	3.53	3.21	3.72 n	4.08 n	3.00	3.58 n	3.68 n	3.86 n	3.60	3.56 n	2.92	3.56	3.93 n	3.47	2.30 bcefgilo	3.48 n	<.0001	0.13
	Q16. If you completed a qualifying exam this past year, what was your experience? (1= Strongly disagree, .. 4=Strongly agree)																			
Q16_1	The conduct of exam was fair	112	3.54	4.00	3.25	3.56	.	3.50	3.63	3.83	3.50	3.75	3.67	3.50	3.17	3.67	3.29	3.56	0.69	0.09
Q16_2	The exam was useful in consolidating my knowledge	111	3.39	3.60	3.17	3.20	.	3.67	3.69	3.83	3.38	3.58	2.33	3.50	2.80	3.67	3.00	3.56	0.12	0.17

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	BCB	CHEM	COSC	EARS	EEES	ENGS	MALS	MATH	MICR	MCB	MSB	PHYS	PEMM	PBS	QBS	ProbF	eta2
Q16_3	The exam topics were relevant to my training	112	3.50	3.80	3.50	3.40	.	3.67	3.56	3.83	3.75	3.67	3.00	3.50	3.00	3.67	3.13	3.44	0.47	0.12
	17b. You checked your department or program provide pre-candidacy students with the following opportunities or resources, how effective was it? (1= Very ineffective, ... 5=Very effective)																			
Q17_2_1	A departmental/program orientation to help you understand the process of completing your graduate degree	257	3.72	3.77	3.04 g	4.00 e	3.71	2.69 cg	3.61	4.38 ben	4.00	3.79	4.00	3.56	3.70	4.07	2.85 g	4.07	<.0001	0.17
Q17_2_2	A written set of expectations about academic requirements and expected progress in your program	292	3.69	3.61	3.59	4.08 n	4.50	3.71	3.46	3.88	4.20	3.48	3.50	3.71	3.42	4.05	2.89 c	3.76	0.03	0.09
Q17_2_3	Organized exposure to faculty and their current research interests	244	3.86	4.00	3.48	4.12	4.00	4.06	3.18	4.14	3.71	4.00	4.31	4.00	3.80	4.06	3.47	4.10	0.15	0.08
Q17_2_4	Early research opportunities (e.g., laboratory rotations, research assistantships, faculty-advised research projects or papers)	206	4.26	4.67	3.87	4.54	4.25	4.67	4.05	4.43	4.25	4.11	4.08	4.50	4.56	4.67	3.83	3.94	0.16	0.09
Q17_2_5	A written assessment of your academic progress, other than course grades and qualifying exams, at least annually	136	3.71	3.67	3.76	4.14	4.00	4.00	3.68	4.00	4.00	4.00	3.00	4.00	3.25	3.00	3.00	3.00	0.23	0.13
Q17_2_6	A meeting with your Director of Graduate Studies and/or other faculty to assess your academic progress, at least annually	158	3.68	4.42 o	3.89	4.10 o	4.56 o	3.40	3.35	4.00	3.89	2.57	2.83	4.20	5.00	3.57	2.86	2.29 acd	0.00	0.23

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	BCB	CHEM	COSC	EARS	EEES	ENGS	MALS	MATH	MICR	MCB	MSB	PHYS	PEMM	PBS	QBS	ProbF	eta2
Q17_2_7	Work with/mentor undergraduate students in the department	173	3.82	3.00	3.95	4.20	4.29	4.44	3.74	4.11	4.33	3.31	2.33	3.00	3.71	3.60	3.80	3.50	0.03	0.15
Q17_2_8	Colloquia/seminars/workshops on inclusivity	207	3.53	3.46	3.56	4.00	3.50	3.88	3.44	4.06	3.89	2.95	3.44	3.80	4.75	3.67	2.89	2.95	0.01	0.14
Q17_2_9	Colloquia/seminars/workshops on professional development	203	3.75	3.92	3.60	4.08	2.83	4.08	3.57	4.18	4.17	3.55	3.70	4.00	4.00	3.86	3.91	3.43	0.24	0.09
	Q19. Rate the extent to which you agree or disagree with the following statements about this most recent teaching appointment. (1= Strongly disagree, ... 5=Strongly agree)																			
Q19_1	I understood the goals of the course	238	4.34	4.40	4.46 j	4.45 j	4.22	4.63 j	4.32	4.08	4.44	4.30	3.00 bcelo	4.00	4.62 j	3.33	4.00	4.65 j	0.01	0.13
Q19_2	I understood what the faculty expected of me	238	4.32	4.47	4.46	4.39	4.56	4.58 j	4.36	4.08	4.11	4.30	3.00 eo	4.25	4.46	3.33	3.94	4.59 j	0.02	0.11
Q19_3	This teaching appointment was related to my program of study	236	4.01	3.27 lo	4.38	4.15	4.00	3.74	4.00	3.77	4.11	3.74	3.33	3.63	4.69 a	2.67	4.06	4.59 a	0.01	0.13
Q19_4	I received helpful feedback about my teaching from the course instructor	236	3.70	3.80	3.88	3.73	3.78	3.68	3.63	3.77	3.89	3.87	3.33	3.75	3.54	3.67	3.56	3.71	1.00	0.01
	Q24. To what extent do you agree or disagree with the following statement? My program is preparing me adequately for my current career goals. (1= Strongly disagree, ... 5=Strongly agree)	351	3.68	3.68	3.62	3.68	3.11	3.75	3.98	3.71	3.90	3.62	3.69	4.00	3.92	4.15	3.37	3.13	0.10	0.06
	Q25. How likely are you to stay in your program until you achieve your ultimate degree	348	4.66	4.86	4.50	4.59	4.33	4.75	4.84	4.68	4.60	4.59	4.20	4.89	4.69	4.75	4.68	4.65	0.54	0.04

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	BCB	CHEM	COSC	EARS	EEES	ENGS	MALS	MATH	MICR	MCB	MSB	PHYS	PEMM	PBS	QBS	ProbF	eta2
	objective? (1=Very unlikely, ... 5= Very likely)																			
	Q26. If you could start all over again... (1=Definitely not, 2=Probably not, 3=Maybe, 4=Probably, 5=Definitely)																			
Q26_1	Would you choose to pursue a PhD or Master's?	349	4.40	4.10	4.42	4.59	4.22	4.50	4.32	4.38	4.40	4.21	4.31	4.22	4.54	4.58	4.67	4.46	0.85	0.03
Q26_2	Would you choose the same field of study?	351	4.27	3.86	4.00	4.37	4.00	4.60	4.21	4.10	4.40	4.24	4.56	4.56	4.54	4.35	4.53	4.42	0.30	0.05
Q26_3	Would you choose to come to Dartmouth?	350	3.77	4.10	3.68	3.90	3.67	4.15	3.83	4.00	3.80	3.38	3.88	3.89	3.54	3.85	3.26	3.46	0.41	0.04
	Q27. Would you recommend Dartmouth to someone considering your field of study? (1=Definitely not, 2=Probably not, 3=Maybe, 4=Probably, 5=Definitely)	349	3.75	3.86	3.65	3.90	3.67	3.68	3.83	4.10	4.10	3.72	3.75	4.00	3.31	3.90	3.26	3.33	0.35	0.05
		422		27	34	44	13	23	54	55	11	33	20	12	16	22	24	34		

Notes: Significance tests based on Analysis of Variance (ANVOVA) with Tukey post-hoc tests. Lower case letter by average indicates that, for a given row, the cell mean is significantly different (at least *p < .05) from the corresponding mean in column denoted by the letter. Effect Size η^2 is the percentage of variance explained by Major/Program. Effect Size $\eta^2 = \text{Between-Groups Sum of Squares} / \text{Total Sum of Squares}$. $\eta^2 = .01 \sim$ small; $\eta^2 = .06 \sim$ medium, $\eta^2 = .14 \sim$ large.

Guarini 2021 Survey Results

By Race/Ethnicity

Variable	Question	N	Overall Average	White	Minority	International	ProbF	η ²
	Q2. Overall, how satisfied are you with your graduate education? <i>(1=Very dissatisfied, ... 5=Very satisfied)</i>	443	3.78	3.87	3.66	3.72	0.11	0.01
	Q3. Please rate each of the following: <i>(1=Poor, 2=Fair, 3=Good, 4=Very good, 5=Excellent)</i>							
Q3_1	Your academic experience at Dartmouth	456	3.72	3.76	3.51	3.76	0.16	0.01
Q3_2	Your student life experience at Dartmouth	452	2.97	3.01	2.72	3.04	0.10	0.01
Q3_3	Your overall experience at Dartmouth	451	3.44	3.51	3.23	3.46	0.10	0.01
	Q4. Please rate the quality of the following support and services provided by Dartmouth: <i>(1= Poor, 2=Fair, 3=Good, 4=Very good, 5=Excellent)</i>							
Q4_1	Financial support provided by Dartmouth	359	3.37	3.46 b	2.83 ac	3.50 b	0.00	0.04
Q4_2	Health insurance coverage provided by Dartmouth	348	3.19	3.18	2.71 c	3.41 b	0.00	0.03
Q4_3	Information technology resources	343	3.90	3.91	3.55 c	4.02 b	0.01	0.03
Q4_4	Laboratory, clinical, studio, or other physical facilities	336	3.97	3.98	3.80	4.02	0.38	0.01
Q4_5	Your personal workspace (e.g., desk or office)	354	3.49	3.40	3.31	3.69	0.06	0.02
Q4_6	Guarini School professional development offerings	257	3.23	3.28	2.98	3.28	0.30	0.01
Q4_7	Psychological counseling services	194	3.09	2.88 c	2.82	3.43 a	0.02	0.04
Q4_8	Campus health care services	339	3.78	3.99 b	3.32 ac	3.74 b	0.00	0.05
Q4_9	Programs and services for international students	160	3.24	3.00	2.85	3.29	0.40	0.01
Q4_10	Programs and resources of the writing center or program (RWIT)	122	3.68	3.59	3.65	3.75	0.75	0.00
Q4_11	Programs and resources of the teaching center or program (DCAL)	210	3.86	3.89	3.69	3.89	0.58	0.01
Q4_12	Parental support	113	3.31	3.27	3.40	3.32	0.96	0.00
Q4_13	Housing support	271	2.25	1.95 c	2.04 c	2.57 ab	0.00	0.05
Q4_14	Power dynamics support	205	2.72	2.45 c	2.24 c	3.22 ab	<.0001	0.09
	Q5. Using a scale of 1–5, please rate the department or program climate on the following dimensions. <i>(1 = Negative ... 5 = Positive)</i>							
Q5_1	friendly: hostile*	409	4.25	4.31 b	3.83 ac	4.36 b	0.00	0.04
Q5_2	positive for persons with disabilities: negative for persons with disabilities*	401	3.48	3.33 c	3.22 c	3.83 ab	<.0001	0.06

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	White	Minority	International	ProbF	η ²
Q5_3	positive for people who identify as lesbian, gay, bisexual, queer or transgender: negative for people who identify as lesbian, gay, bisexual, queer or transgender*	402	3.80	3.82 b	3.27 ac	4.03 b	<.0001	0.07
Q5_4	positive for people of spiritual/religious backgrounds: negative for people of spiritual/religious backgrounds*	402	3.63	3.59	3.44 c	3.78 b	0.04	0.02
Q5_5	positive for People of Color: negative for People of Color*	406	3.48	3.42 bc	3.01 ac	3.81 ab	<.0001	0.06
Q5_6	positive for non-native English speakers: negative for non-native English speakers*	402	3.63	3.55 c	3.30 c	3.90 ab	<.0001	0.05
Q5_7	welcoming: not welcoming*	414	4.13	4.24 b	3.69 ac	4.18 b	<.0001	0.05
Q5_8	homogeneous: diverse	412	2.91	2.80 c	2.56 c	3.26 ab	<.0001	0.05
Q5_9	disrespectful: respectful	414	4.00	4.09 b	3.55 ac	4.11 b	0.00	0.04
Q5_10	collegial: contentious*	412	3.96	4.07 b	3.61 ac	3.96 b	0.00	0.03
Q5_11	non-sexist: sexist*	411	3.64	3.59 bc	3.23 ac	3.92 ab	<.0001	0.05
Q5_12	collaborative: individualistic*	413	3.73	3.68	3.44 c	3.94 b	0.01	0.02
Q5_13	cooperative: competitive*	412	3.92	4.00 b	3.58 ac	3.99 b	0.01	0.02
Q5_14	not supportive: supportive	415	3.89	3.95 b	3.46 ac	4.02 b	0.00	0.03
Q5_15	rigid: flexible	413	3.66	3.72	3.44	3.70	0.13	0.01
Q5_16	threatening: protective	413	3.70	3.72	3.41 c	3.82 b	0.01	0.02
Q5_17	encouraging: discouraging*	414	3.98	3.96	3.75 c	4.11 b	0.04	0.02
Q5_18	inclusive: exclusionary*	412	3.76	3.77 b	3.41 ac	3.94 b	0.00	0.03
Q5_21	positive for people who are non-US citizens: negative for people who are non-US citizens*	406	3.69	3.75 b	3.36 ac	3.77 b	0.01	0.02
Q5_22	positive for people with mental health struggles: negative for people with mental health struggles*	409	3.33	3.26	3.16	3.52	0.05	0.01
Q5_23	positive for people with non-traditional education/career trajectories: negative for people with non-traditional education/career trajectories*	409	3.56	3.55	3.19 c	3.78 b	0.00	0.03
	Q6. Rate the extent to which you agree or disagree with the following statements. (1= Strongly disagree, ... 5=Strongly agree)							
Q6_1	My peers value my research/scholarship	396	4.08	4.09	3.86 c	4.17 b	0.04	0.02

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	White	Minority	International	ProbF	η ²
Q6_2	I have to work harder than some of my peers to be perceived as a legitimate scholar	384	2.97	2.76 bc	3.20 a	3.16 a	0.00	0.03
Q6_3	My own relationships and interactions with faculty are positive	410	4.29	4.26	4.06 c	4.44 b	0.01	0.02
Q6_4	I have the resources I need to succeed	405	3.88	3.87	3.77	3.95	0.46	0.00
Q6_5	My program is responsive to student concerns	397	3.50	3.44	3.18 c	3.74 b	0.00	0.03
Q6_6	Financial support for students in my program is distributed fairly	326	3.80	3.82 b	3.38 ac	3.95 b	0.00	0.03
Q6_7	My program's procedures are fair and equitable to all	386	3.75	3.71	3.42 c	3.98 b	0.00	0.03
Q6_8	I am comfortable voicing my feelings and opinions in front of others in my program	408	3.64	3.68	3.52	3.65	0.63	0.00
	Q12. For each of the following statements, indicate the extent to which it describes your <u>primary advisor</u>. (1 = Strongly disagree, ... 5 = Strongly agree)							
Q12_1	Discusses my research with me on a regular basis	378	4.20	4.23	3.95	4.29	0.09	0.01
Q12_2	Gives me constructive feedback on my work	377	4.13	4.11	4.02	4.21	0.40	0.00
Q12_3	Clearly states expectations for my academic progress	380	3.67	3.65	3.44	3.80	0.10	0.01
Q12_4	Has reasonable expectations for my academic progress	379	4.08	4.06	3.97	4.18	0.32	0.01
Q12_5	Promotes my professional development	377	3.99	3.98	3.82	4.11	0.16	0.01
Q12_6	Shares considerable experience and/or training	377	4.06	4.05	3.77 c	4.22 b	0.02	0.02
Q12_7	Expects me to work so many hours that it is hard to have a personal life	379	2.02	1.93	1.89	2.21	0.06	0.01
Q12_8	Has made me feel valued	379	4.00	4.02	3.86	4.05	0.50	0.00
Q12_9	Sees me as a source of labor to advance career	379	2.17	2.11	2.15	2.25	0.62	0.00
Q12_10	Encourage my interests outside of being a graduate student	378	3.62	3.59	3.65	3.66	0.84	0.00
Q12_11	Respects other professionals, regardless of race, gender, religion, etc.	378	4.42	4.45	4.22	4.49	0.11	0.01
Q12_12	Helps me find funding for my graduate work if applicable	371	3.89	3.87	3.69	4.02	0.12	0.01
	Q13. Have you received assistance or support on each of the following? If so, how helpful was the assistance or support? (1=Not at all helpful, ... 4=Very helpful)							
Q13_1	Standards for academic or professional writing in my field	254	3.24	3.29	3.05	3.26	0.23	0.01

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	White	Minority	International	ProbF	η2
Q13_2	Avoiding plagiarism and other violations of the standards of academic integrity	246	3.26	3.22	3.19	3.32	0.53	0.01
Q13_3	Understanding the professional and research ethics in my field	285	3.26	3.20	3.18	3.37	0.10	0.02
Q13_4	Writing grant or fellowship proposals	218	3.18	3.28	2.95	3.16	0.08	0.02
Q13_5	Preparing articles for publication	215	3.29	3.39	3.00	3.25	0.07	0.03
Q13_6	Effective oral communication and presentations	267	3.34	3.43	3.18	3.31	0.11	0.02
Q13_7	Academic career planning	198	2.96	3.02	2.74	3.00	0.17	0.02
Q13_8	Non-academic career planning	171	2.77	2.69	2.79	2.85	0.63	0.01
	Q14. Please rate your program in the following areas: (1= Poor, 2=Fair, 3=Good, 4=Very good, 5=Excellent)							
Q14_1	Quality of graduate curriculum	379	3.26	3.29	2.95 c	3.37 b	0.05	0.02
Q14_2	Quality of graduate-level teaching by faculty	379	3.51	3.50	3.29	3.65	0.13	0.01
Q14_3	Quality of academic advising and guidance	370	3.51	3.52	3.22	3.65	0.08	0.01
Q14_4	The opportunity to collaborate across disciplines	378	3.38	3.41	3.15	3.46	0.26	0.01
Q14_5	Developing me as a scholar	375	3.59	3.74 b	3.25 a	3.56	0.01	0.03
Q14_6	Developing me as a teacher	368	2.84	2.79	2.62	3.05	0.05	0.02
Q14_7	Developing me as a communicator	377	3.45	3.50 b	3.08 ac	3.56 b	0.02	0.02
	Q15. Rate the quality of courses offered to you. (1= Poor, 2=Fair, 3=Average, 4=Very good, 5=Excellent)							
Q15_1	Depth of content in courses within your area of specialty	360	3.53	3.50	3.11 c	3.80 b	0.00	0.03
Q15_2	Breadth of content in courses within your area of specialty	360	3.43	3.28 c	3.10 c	3.82 ab	0.00	0.05
Q15_3	Depth of content in courses outside your area of specialty	345	3.73	3.73	3.47	3.86	0.10	0.01
Q15_4	Breadth of content in courses outside your area of specialty	349	3.81	3.78	3.61	3.95	0.14	0.01
Q15_5	State-of-the-art course content	351	3.55	3.55	3.32	3.66	0.21	0.01
	Q16. If you completed a qualifying exam this past year, what was your experience? (1= Strongly disagree, .. 4=Strongly agree)							
Q16_1	The conduct of exam was fair	115	3.55	3.41	3.63	3.62	0.28	0.02
Q16_2	The exam was useful in consolidating my knowledge	114	3.39	3.30	3.53	3.40	0.59	0.01
Q16_3	The exam topics were relevant to my training	115	3.50	3.39	3.59	3.54	0.44	0.01

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	White	Minority	International	ProbF	η ²
	17b. You checked your department or program provide pre-candidacy students with the following opportunities or resources, how effective was it? (1= Very ineffective, ... 5=Very effective)							
Q17_2_1	A departmental/program orientation to help you understand the process of completing your graduate degree	264	3.71	3.62	3.51	3.91	0.10	0.02
Q17_2_2	A written set of expectations about academic requirements and expected progress in your program	304	3.69	3.69	3.35 c	3.87 b	0.04	0.02
Q17_2_3	Organized exposure to faculty and their current research interests	253	3.85	3.79	3.55 c	4.07 b	0.04	0.03
Q17_2_4	Early research opportunities (e.g., laboratory rotations, research assistantships, faculty-advised research projects or papers)	216	4.27	4.34	4.05	4.29	0.30	0.01
Q17_2_5	A written assessment of your academic progress, other than course grades and qualifying exams, at least annually	145	3.75	3.70	3.76	3.79	0.92	0.00
Q17_2_6	A meeting with your Director of Graduate Studies and/or other faculty to assess your academic progress, at least annually	166	3.72	3.55	3.88	3.87	0.26	0.02
Q17_2_7	Work with/mentor undergraduate students in the department	181	3.84	3.88	3.69	3.85	0.71	0.00
Q17_2_8	Colloquia/seminars/workshops on inclusivity	215	3.55	3.62 b	3.03 ac	3.68 b	0.01	0.04
Q17_2_9	Colloquia/seminars/workshops on professional development	213	3.76	3.75	3.54	3.86	0.34	0.01
	Q19. Rate the extent to which you agree or disagree with the following statements about this most recent teaching appointment. (1= Strongly disagree, ... 5=Strongly agree)							
Q19_1	I understood the goals of the course	251	4.35	4.40	4.08	4.40	0.06	0.02
Q19_2	I understood what the faculty expected of me	251	4.34	4.34	4.23	4.39	0.57	0.00
Q19_3	This teaching appointment was related to my program of study	248	4.03	3.95	4.03	4.15	0.43	0.01
Q19_4	I received helpful feedback about my teaching from the course instructor	249	3.70	3.64	3.65	3.81	0.58	0.00
	Q24. To what extent do you agree or disagree with the following statement? My program is preparing me adequately for my current career goals. (1= Strongly disagree, ... 5=Strongly agree)	368	3.70	3.86 bc	3.50 a	3.57 a	0.01	0.02
	Q25. How likely are you to stay in your program until you achieve your ultimate degree objective? (1=Very unlikely, ... 5= Very likely)	365	4.66	4.77 c	4.69	4.47 a	0.01	0.03
	Q26. If you could start all over again... (1=Definitely not, 2=Probably not, 3=Maybe, 4=Probably, 5=Definitely)							

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	White	Minority	International	ProbF	η^2
Q26_1	Would you choose to pursue a PhD or Master's?	366	4.40	4.46	4.28	4.38	0.38	0.01
Q26_2	Would you choose the same field of study?	368	4.29	4.44 bc	4.08 a	4.17 a	0.01	0.03
Q26_3	Would you choose to come to Dartmouth?	367	3.79	3.97 b	3.37 a	3.76	0.00	0.03
	Q27. Would you recommend Dartmouth to someone considering your field of study? (1=Definitely not, 2=Probably not, 3=Maybe, 4=Probably, 5=Definitely)	367	3.77	3.81 b	3.34 ac	3.93 b	0.00	0.03
		457		221	76	160		

Notes: Significance tests based on Analysis of Variance (ANVOVA) with Tukey post-hoc tests. Lower case letter by average indicates that, for a given row, the cell mean is significantly different (at least $*p < .05$) from the corresponding mean in column denoted by the letter. Effect Size η^2 is the percentage of variance explained by Race/Ethnicity. Effect Size $\eta^2 = \text{Between-Groups Sum of Squares} / \text{Total Sum of Squares}$. $\eta^2 = .01 \sim \text{small}$; $\eta^2 = .06 \sim \text{medium}$, $\eta^2 = .14 \sim \text{large}$.

Guarini 2021 Survey Results

By Student Type

Variable	Question	N	Overall Average	Continuing	New	ProbF	η2
	Q2. Overall, how satisfied are you with your graduate education? <i>(1=Very dissatisfied, ... 5=Very satisfied)</i>	451	3.79	3.79	3.79	0.98	0.00
	Q3. Please rate each of the following: <i>(1=Poor, 2=Fair, 3=Good, 4=Very good, 5=Excellent)</i>						
Q3_1	Your academic experience at Dartmouth	466	3.71	3.67	3.82	0.16	0.00
Q3_2	Your student life experience at Dartmouth	462	2.96	3.08 b	2.66 a	0.00	0.03
Q3_3	Your overall experience at Dartmouth	461	3.44	3.45	3.43	0.80	0.00
	Q4. Please rate the quality of the following support and services provided by Dartmouth: <i>(1= Poor, 2=Fair, 3=Good, 4=Very good, 5=Excellent)</i>						
Q4_1	Financial support provided by Dartmouth	366	3.36	3.28	3.57	0.05	0.01
Q4_2	Health insurance coverage provided by Dartmouth	353	3.17	3.08 b	3.48 a	0.02	0.02
Q4_3	Information technology resources	350	3.91	3.89	4.00	0.36	0.00
Q4_4	Laboratory, clinical, studio, or other physical facilities	343	3.98	3.91 b	4.22 a	0.02	0.02
Q4_5	Your personal workspace (e.g., desk or office)	361	3.48	3.53	3.33	0.21	0.00
Q4_6	Guarini School professional development offerings	262	3.23	3.13 b	3.52 a	0.03	0.02
Q4_7	Psychological counseling services	198	3.08	3.03	3.29	0.27	0.01
Q4_8	Campus health care services	348	3.80	3.74 b	4.01 a	0.04	0.01
Q4_9	Programs and services for international students	160	3.24	3.13	3.50	0.09	0.02
Q4_10	Programs and resources of the writing center or program (RWIT)	125	3.69	3.63	3.89	0.25	0.01
Q4_11	Programs and resources of the teaching center or program (DCAL)	216	3.87	3.81 b	4.15 a	0.05	0.02
Q4_12	Parental support	114	3.30	3.06 b	3.85 a	0.01	0.06
Q4_13	Housing support	279	2.22	2.12 b	2.54 a	0.02	0.02
Q4_14	Power dynamics support	210	2.70	2.52 b	3.43 a	0.00	0.07
	Q5. Using a scale of 1–5, please rate the department or program climate on the following dimensions. <i>(1 = Negative ... 5 = Positive)</i>						
Q5_1	friendly: hostile*	418	4.23	4.15 b	4.45 a	0.00	0.02
Q5_2	positive for persons with disabilities: negative for persons with disabilities*	410	3.48	3.36 b	3.78 a	0.00	0.03

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	Continuing	New	ProbF	η^2
Q5_3	positive for people who identify as lesbian, gay, bisexual, queer or transgender: negative for people who identify as lesbian, gay, bisexual, queer or transgender*	411	3.80	3.73 b	3.97 a	0.03	0.01
Q5_4	positive for people of spiritual/religious backgrounds: negative for people of spiritual/religious backgrounds*	411	3.62	3.51 b	3.90 a	0.00	0.03
Q5_5	positive for People of Color: negative for People of Color*	415	3.48	3.37 b	3.76 a	0.00	0.02
Q5_6	positive for non-native English speakers: negative for non-native English speakers*	411	3.62	3.52 b	3.88 a	0.00	0.03
Q5_7	welcoming: not welcoming*	423	4.12	4.02 b	4.41 a	0.00	0.03
Q5_8	homogeneous: diverse	421	2.91	2.83 b	3.14 a	0.02	0.01
Q5_9	disrespectful: respectful	423	4.01	3.93 b	4.22 a	0.01	0.02
Q5_10	collegial: contentious*	421	3.95	3.87 b	4.16 a	0.01	0.02
Q5_11	non-sexist: sexist*	420	3.63	3.47 b	4.06 a	<.0001	0.06
Q5_12	collaborative: individualistic*	422	3.73	3.66 b	3.92 a	0.04	0.01
Q5_13	cooperative: competitive*	421	3.93	3.83 b	4.19 a	0.00	0.02
Q5_14	not supportive: supportive	424	3.89	3.81 b	4.10 a	0.01	0.01
Q5_15	rigid: flexible	422	3.66	3.65	3.68	0.79	0.00
Q5_16	threatening: protective	422	3.70	3.65	3.83	0.09	0.01
Q5_17	encouraging: discouraging*	423	3.98	3.87 b	4.27 a	0.00	0.03
Q5_18	inclusive: exclusionary*	421	3.76	3.68 b	3.97 a	0.01	0.02
Q5_21	positive for people who are non-US citizens: negative for people who are non-US citizens*	415	3.69	3.60 b	3.92 a	0.00	0.02
Q5_22	positive for people with mental health struggles: negative for people with mental health struggles*	418	3.31	3.17 b	3.69 a	<.0001	0.04
Q5_23	positive for people with non-traditional education/career trajectories: negative for people with non-traditional education/career trajectories*	418	3.56	3.45 b	3.83 a	0.00	0.02
	Q6. Rate the extent to which you agree or disagree with the following statements. (1= Strongly disagree, ... 5=Strongly agree)						
Q6_1	My peers value my research/scholarship	405	4.07	4.05	4.13	0.40	0.00
Q6_2	I have to work harder than some of my peers to be perceived as a legitimate scholar	393	2.96	3.00	2.86	0.30	0.00

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	Continuing	New	ProbF	η^2
Q6_3	My own relationships and interactions with faculty are positive	419	4.29	4.27	4.33	0.51	0.00
Q6_4	I have the resources I need to succeed	414	3.88	3.87	3.89	0.84	0.00
Q6_5	My program is responsive to student concerns	406	3.49	3.47	3.55	0.57	0.00
Q6_6	Financial support for students in my program is distributed fairly	333	3.80	3.80	3.80	0.97	0.00
Q6_7	My program's procedures are fair and equitable to all	392	3.75	3.68 b	3.94 a	0.04	0.01
Q6_8	I am comfortable voicing my feelings and opinions in front of others in my program	417	3.65	3.58 b	3.83 a	0.05	0.01
	Q12. For each of the following statements, indicate the extent to which it describes your <u>primary advisor</u>. (1 = Strongly disagree, ... 5 = Strongly agree)						
Q12_1	Discusses my research with me on a regular basis	385	4.20	4.28 b	3.99 a	0.02	0.01
Q12_2	Gives me constructive feedback on my work	384	4.13	4.18	4.00	0.13	0.01
Q12_3	Clearly states expectations for my academic progress	387	3.67	3.63	3.78	0.25	0.00
Q12_4	Has reasonable expectations for my academic progress	386	4.08	4.10	4.04	0.62	0.00
Q12_5	Promotes my professional development	384	4.01	4.04	3.90	0.23	0.00
Q12_6	Shares considerable experience and/or training	384	4.07	4.10	3.97	0.28	0.00
Q12_7	Expects me to work so many hours that it is hard to have a personal life	386	2.02	1.97	2.14	0.21	0.00
Q12_8	Has made me feel valued	386	4.00	3.99	4.04	0.67	0.00
Q12_9	Sees me as a source of labor to advance career	386	2.17	2.16	2.18	0.90	0.00
Q12_10	Encourage my interests outside of being a graduate student	385	3.62	3.59	3.73	0.31	0.00
Q12_11	Respects other professionals, regardless of race, gender, religion, etc.	385	4.42	4.49 b	4.23 a	0.01	0.02
Q12_12	Helps me find funding for my graduate work if applicable	378	3.90	3.95	3.76	0.11	0.01
	Q13. Have you received assistance or support on each of the following? If so, how helpful was the assistance or support? (1=Not at all helpful, ... 4=Very helpful)						
Q13_1	Standards for academic or professional writing in my field	260	3.24	3.24	3.27	0.77	0.00
Q13_2	Avoiding plagiarism and other violations of the standards of academic integrity	252	3.25	3.21	3.33	0.23	0.01
Q13_3	Understanding the professional and research ethics in my field	292	3.26	3.20 b	3.43 a	0.01	0.02

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	Continuing	New	ProbF	η^2
Q13_4	Writing grant or fellowship proposals	224	3.20	3.21	3.14	0.58	0.00
Q13_5	Preparing articles for publication	220	3.30	3.32	3.16	0.28	0.01
Q13_6	Effective oral communication and presentations	273	3.35	3.33	3.42	0.37	0.00
Q13_7	Academic career planning	201	2.97	2.93	3.06	0.32	0.01
Q13_8	Non-academic career planning	173	2.77	2.71	2.95	0.17	0.01
	Q14. Please rate your program in the following areas: (1= Poor, 2=Fair, 3=Good, 4=Very good, 5=Excellent)						
Q14_1	Quality of graduate curriculum	387	3.26	3.12 b	3.63 a	<.0001	0.04
Q14_2	Quality of graduate-level teaching by faculty	387	3.50	3.38 b	3.83 a	0.00	0.03
Q14_3	Quality of academic advising and guidance	378	3.51	3.45	3.68	0.12	0.01
Q14_4	The opportunity to collaborate across disciplines	386	3.37	3.26 b	3.64 a	0.01	0.02
Q14_5	Developing me as a scholar	383	3.60	3.51 b	3.83 a	0.01	0.02
Q14_6	Developing me as a teacher	376	2.85	2.80	3.00	0.16	0.01
Q14_7	Developing me as a communicator	385	3.45	3.41	3.58	0.18	0.00
	Q15. Rate the quality of courses offered to you. (1= Poor, 2=Fair, 3=Average, 4=Very good, 5=Excellent)						
Q15_1	Depth of content in courses within your area of specialty	367	3.53	3.42 b	3.82 a	0.01	0.02
Q15_2	Breadth of content in courses within your area of specialty	368	3.42	3.29 b	3.75 a	0.00	0.02
Q15_3	Depth of content in courses outside your area of specialty	352	3.74	3.67	3.92	0.06	0.01
Q15_4	Breadth of content in courses outside your area of specialty	357	3.81	3.74	3.98	0.07	0.01
Q15_5	State-of-the-art course content	359	3.54	3.48	3.70	0.12	0.01
	Q16. If you completed a qualifying exam this past year, what was your experience? (1= Strongly disagree, .. 4=Strongly agree)						
Q16_1	The conduct of exam was fair	118	3.55	3.52	3.75	0.20	0.01
Q16_2	The exam was useful in consolidating my knowledge	117	3.39	3.38	3.50	0.56	0.00
Q16_3	The exam topics were relevant to my training	118	3.50	3.49	3.56	0.69	0.00
	17b. You checked your department or program provide pre-candidacy students with the following opportunities or resources, how effective was it? (1= Very ineffective, ... 5=Very effective)						

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	Continuing	New	ProbF	η^2
Q17_2_1	A departmental/program orientation to help you understand the process of completing your graduate degree	271	3.72	3.66	3.86	0.21	0.01
Q17_2_2	A written set of expectations about academic requirements and expected progress in your program	311	3.70	3.61 b	3.98 a	0.01	0.02
Q17_2_3	Organized exposure to faculty and their current research interests	259	3.86	3.73 b	4.20 a	0.00	0.03
Q17_2_4	Early research opportunities (e.g., laboratory rotations, research assistantships, faculty-advised research projects or papers)	219	4.28	4.26	4.34	0.61	0.00
Q17_2_5	A written assessment of your academic progress, other than course grades and qualifying exams, at least annually	149	3.75	3.68	4.03	0.12	0.02
Q17_2_6	A meeting with your Director of Graduate Studies and/or other faculty to assess your academic progress, at least annually	170	3.74	3.68	3.90	0.35	0.01
Q17_2_7	Work with/mentor undergraduate students in the department	185	3.84	3.77	4.14	0.07	0.02
Q17_2_8	Colloquia/seminars/workshops on inclusivity	220	3.56	3.44 b	3.83 a	0.02	0.03
Q17_2_9	Colloquia/seminars/workshops on professional development	217	3.76	3.71	3.91	0.24	0.01
	Q19. Rate the extent to which you agree or disagree with the following statements about this most recent teaching appointment. (1= Strongly disagree, ... 5=Strongly agree)						
Q19_1	I understood the goals of the course	254	4.36	4.42 b	4.10 a	0.01	0.03
Q19_2	I understood what the faculty expected of me	254	4.35	4.40 b	4.12 a	0.03	0.02
Q19_3	This teaching appointment was related to my program of study	251	4.04	4.04	4.02	0.92	0.00
Q19_4	I received helpful feedback about my teaching from the course instructor	252	3.71	3.71	3.75	0.82	0.00
	Q24. To what extent do you agree or disagree with the following statement? My program is preparing me adequately for my current career goals. (1= Strongly disagree, ... 5=Strongly agree)	375	3.71	3.63 b	3.89 a	0.03	0.01
	Q25. How likely are you to stay in your program until you achieve your ultimate degree objective? (1=Very unlikely, ... 5= Very likely)	372	4.66	4.68	4.63	0.56	0.00
	Q26. If you could start all over again... (1=Definitely not, 2=Probably not, 3=Maybe, 4=Probably, 5=Definitely)						
Q26_1	Would you choose to pursue a PhD or Master's?	373	4.40	4.35	4.53	0.11	0.01

Guarini 2021 Survey Results

Variable	Question	N	Overall Average	Continuing	New	ProbF	η^2
Q26_2	Would you choose the same field of study?	375	4.28	4.22	4.44	0.05	0.01
Q26_3	Would you choose to come to Dartmouth?	374	3.79	3.68 b	4.08 a	0.00	0.02
	Q27. Would you recommend Dartmouth to someone considering your field of study? (1=Definitely not, 2=Probably not, 3=Maybe, 4=Probably, 5=Definitely)	374	3.77	3.66 b	4.04 a	0.00	0.02
	Frequency Count	467		336	131		

Notes: Significance tests based on Analysis of Variance (ANVOVA) with Tukey post-hoc tests. Lower case letter by average indicates that, for a given row, the cell mean is significantly different (at least $*p < .05$) from the corresponding mean in column denoted by the letter. Effect Size η^2 is the percentage of variance explained by Student Type. Effect Size $\eta^2 = \text{Between-Groups Sum of Squares} / \text{Total Sum of Squares}$. $\eta^2 = .01 \sim \text{small}$; $\eta^2 = .06 \sim \text{medium}$, $\eta^2 = .14 \sim \text{large}$.