# 2022 College of Natural Science Climate Study Graduate Student Results

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#### OVERVIEW AND METHODOLOGY

In the fall of 2022, Michigan State University's College of Natural Science invited all current graduate students to participate in a college-wide survey to better understand the current environment within the College, including workplace climate, diversity, inclusiveness, transparency, accountability, and civility.

The data collection instrument was developed by the College with assistance from the Office for Survey Research at Michigan State University and was based on a college-wide survey conducted in 2019.

The data collection instrument contained the following sections:

- Current Climate 31 questions, 19 asked for both the department/program and the college
- Diversity nine (9) questions, 4 asked for both the department/program and the college
- Welcoming and Belonging nine (9) questions asked for both the department/program and the college
- Learning Opportunities seven (7) questions.
- Innovation 11 questions, asked for both the department/program and the college.
- Mentoring eight (8) questions,
- College Strategic Priority I two (2) open-ended questions
- Values and Relationships 16 questions
- Annual Review six (6) questions
- Civility 25 questions
- RVSM Policies six (6) questions
- Bias Incidents 25 questions
- College Strategic Priority II two (2) open-ended questions
- Assessment of Current Climate 18 questions
- Demographics 14 questions
- Final Thoughts one (1) question

All responses to open-ended questions were reviewed by the Office for Survey Research and coded into thematic categories where appropriate.

The survey landing page contained an introduction explaining the purpose of the study and an informed consent statement

The climate survey was administered to all graduate students with the College as of fall 2022, using a web-based data collection platform. All responses to the survey were submitted anonymously. The database provided by the college contained student name and contact (email) information for 996 students.

Data collection was conducted between December 5, 2022, and. Reminder emails were sent on December 11 and December 20, 2022 and January 11 and January 24, 2023. During the data collection period, 311 students accessed the survey, with 194 students submitting completed surveys (63.3%). The average time to complete the survey was 33.38 minutes. The response rate for this study is 19.4%

# Population vs. Participation

For this study, all members of the College of Natural Science graduate student population, not a random sample of the population was used for data collection. Test of Significance, such as Chi-Square and t-test, are designed to test whether the differences seen between groups during analysis exists in the population and are not simply due to sampling error. Since there were no sample used, there can be no sampling error. Differences between groups seen

during this study's analysis exist in the population if the overrepresentation or underrepresentation of one group does not bias the results.

Table 1.1 presents a portion of the demographic characteristics that are available for most of the population as well as the respondents. The population information is from institutional data and the respondent data is based on self-reported responses in the survey. Information on the population was available for gender and race, and international status, but not for sexual orientation, disabilities, years at MSU and first-generation student status which were also used for analysis in this report.

For each category, there are cases with missing demographic information, so the comparison is not perfect. A negative value in the table for the difference means that the group was underrepresented and a positive value for difference means that the group was overrepresented (Table 1.1). Minor differences are not of concern, but there are a few differences that are larger, and potentially could bias the results if either 1) those that did not participate are different in some way from those that did or 2) an under- or overrepresented group is very different on key points from the other categories within that characteristic.

Table 1.1: Comparison of Population to Participation

		Percentage of Population	Percentage Within					
Characteristic	Group	Who Responded	Population	Respondents	Percentage Difference			
Degree	Master's	12.8%	13.6%	10.7%	-2.9%			
Degree	PhD	16.7%	86.4%	89.3%	2.9%			
Gender <sup>1</sup>	Female/Woman	15.9%	44.2%	54.2%	10.0%			
Gender-	Male/Man	10.6%	55.8%	45.8%	-10.0%			
	LatinX	12.8%	9.9%	9.8%	-0.1%			
Race/Ethnicity <sup>2</sup>	Underrepresented ethnicities/races	4.9%	25.5%	9.8%	-15.7%			
	White	16.1%	64.6%	80.4%	15.8%			
	Biological Sciences	21.5%	31.0%	39.5%	8.5%			
College Districts	Physical Sciences	14.9%	47.6%	42.0%	-5.6%			
	Mathematics	14.6%	21.4%	18.5%	-2.9%			
International	Yes	6.4%	28.1%	40.0%	11.9%			
Status <sup>3</sup>	No	9.6%	71.9%	60.0%	-11.9%			

Percentage of population who responded refers to the percentage of the population that responded to the survey for that specific group, i.e., 15.9% of all women in the graduate student population responded to the questionnaire. Percentage within the population refers to the percentage that specific group makes up within the population, i.e., 44.2% of the graduate student population is women. Percentage within the respondents refers to the percentage that specific group made up of all the respondents, i.e., 54.2% of the graduate student respondents who provided a gender identity were women. Percentage difference reports the difference between the percentage in the population and the percentage within the respondents. A negative number indicates underrepresentation, and a positive number represents overrepresentation, i.e., women are overrepresented compared to their percentage in the population. The larger the difference between these two numbers, the more likely the group that is overrepresented may impact the general findings if that group is different than the other groups within that variable.

The is a slight overrepresentation of PhD students compared to master's students.

For the self-reported gender variables, respondents were given options other than binary (woman/man). A total of 6.2% of the respondents gave a gender other than man and women. Unfortunately, due to concerns about possible identification of respondents, these cases were excluded from any analysis looking at gender identity. An additional 11.3% of the respondents did not provide an answer to the gender question. It is unclear if the non-binary gender cases and those cases missing gender data can entirely explain the differences seen between women and men population vs. respondent data. The potential impact, if any, is difficult to determine because of the missing data and the non-binary gender respondents.

The race/ethnicity variable only includes domestic students. The LatinX student population and respondent proportions are almost identical. Underrepresented race/ethnicity community is significantly underrepresented

<sup>&</sup>lt;sup>1</sup> Institutional data (population numbers) only include "female" and "male."

<sup>&</sup>lt;sup>2</sup> Institutional data do not include race/ethnicity for international students. Therefore, the percentages self-reported race/ethnicity above exclude international students.

<sup>&</sup>lt;sup>3</sup> The population numbers for international status are based on the "not specified" responses for race within the institutional data.

amongst the respondents compared to the proportion within the college's graduate student population. This may impact the general findings if those who are not LatinX or White have different experiences than those that are LatinX or White, which is probable.

Biological Sciences are overrepresented amongst the three college districts. The overrepresentation is slightly larger that is optimal, but not so large that it raises concerns about the overall reported results.

International students are overrepresented compared to their domestic counterparts.

# Construction of Demographic Variables

Below are descriptions of the demographic variables used in analysis. Most of the variables were collapsed to reduce the likelihood of possible identification of respondents.

# Gender Identity

The Gender Identify variable is a constructed variable created from the respondent's self-reported gender identity(ies). Text responses for the "Other" category for the gender identity question were reviewed and those whose response qualified for either woman or man were recoded into those categories. Gender Identity was initially collapsed into three categories – Man, Woman, and Other Gender Identity due to concerns with possible identification of respondents for those who did not identify as man or woman. Those who reported one or more of these gender identities - agender, gender non-conforming, genderqueer, non-binary, two-spirited or other - were assigned to the Other Gender Identity category. Those that weren't already placed in the Other Gender Identity category and stated that they were cisgender man or transgender man were coded as Man and those who identified as cisgender woman or transgender woman were coded as Woman. It should be noted that there is a relatively high percentage (20.6%) of non-response for this set of questions.

Due to the relatively small percentage of respondents (6.2%) who fell into the Other Gender Identity category, this category will not be included in the analysis for fear of potential respondent identification.

## Sexual Orientation

All those who reported a gender identify other than cisgender and those who reported any sexual orientation other than heterosexual were included in the LGBTQIA2S+ community. It is acknowledged that those who were included in the LGBTQIA2S+ category for this report may have very different experiences from other members of the LBGTQIA2S+ community but breaking the community into smaller groups increased the likelihood of potential identification. For 20.6 percent of the respondents, there was no sexual orientation reported.

# Race/Ethnicity

The self-reported race from the survey was recoded into three categories: LatinX, other Underrepresented (Black, indigenous, People of Color) and White. International students were excluded from the race variable. Only LatinX and White students had sufficient numbers to report as separate categories without concern of potential identification of the respondent. Those in the Underrepresented category include any other race other than White, those who are multi-racial, and/or any other ethnicities other than LatinX such as MENA (Middle Eastern/North African) ethnicities. It needs to be noted that different racial/ethnic groups within the combined Underrepresented group may have different experiences from each other. A total of 47.4 percent of the respondents were not included in this variable due to being international students (36.1%) or not providing their race (11.3%).

# Disability

The disability variable is a composite variable for the twelve forms of disability presented in the set of questions in the survey. Of those stating that they had at least one form of disability, 15.3% reported having two or more forms of disability. This prevented the collapsing of the forms of disability into discrete, mutually exclusive categories

since a respondent could fall into more than one category. The most reported form of disability was mental health/psychological condition with 73.1% of those that reported at least one disability selecting this category. A total of 25.8 percent of the students did not provide any disability information.

Again, we acknowledge that Individuals with different forms of disability may have different experiences within the college, as do those with multiple disabilities.

#### Years at MSU

The years at MSU variable was created using the self-reported year that the student stated they started at MSU. The years were collapsed into 1-2 years and more than two years with 9.8 percent of the cases having missing data.

#### Degree

Students were asked if they were in a Masters, PhD, or other program. The only "other" program reported by a student was a master's degree. A total of 8.8 percent of the students did not report a degree.

#### International Status

The student's international status was self-reported in the questionnaire with 9.8 percent of the students having missing data.

### College Districts

The respondent's department/program variable in the survey was combined into three districts – Biological, Physical, and Mathematics. This information was missing for 16.5 percent of the respondents.

# <u>Interpretation of Tables</u>

When comparing groups within demographic characteristics, minor differences between groups are to be expected and may only be due to non-response. In the following tables that look at differences between demographic characteristics using mean scores as the statistic, only differences between category mean scores of 0.1 or greater are underlined for emphasis for the group(s) that had the lower value. This is not to say that any difference of 0.1 or greater indicates an actual problem. It is just that differences smaller than 0.1 are more likely to be due to non-response or are unlikely to indicate a problem. For those tables that report percentages, five percent or greater differences were underlined for the group(s) that have the lower value. For those statements that were phrased in a negative form compared to the other statements in that set, the higher values were bolded and italicized since the larger mean score/percentage would be the group with potential problems.

Tables that show comparisons of different demographic characteristics groups may have different overall mean scores than those shown in the summary table for that question. This is due to non-response for some of the demographic variables which causes those cases to not be included in the demographic characteristic tables.

# **CLIMATE/RELATIONSHIPS**

# Within the College of Natural Science

Respondents were asked multiple sets of questions about the College of Natural Sciences. Sets of questions covered views of the climate in general as well as how specific groups were treated within the College of Natural Science. Some of these sets of questions were asked only about the college overall, and others were asked both about the college and about the respondent's individual department/program.

The first set of questions was a series of paired opposite adjectives on a seven-point scale that were asked specifically about the college. With a seven-point scale, any value above four is considered a positive score (positive adjective) and any value below four is considered negative (negative adjective). This also applies to the mean values for each set of paired adjectives. All the adjectives presented received a mean score over four with 83% having a mean score over five (Table 2.1a). Homophobic vs. Non-homophobic received the highest mean score (5.70), followed by Disrespectful vs. Respectful (5.50), Hostile vs. Friendly (5.46) and Racist vs. Non-racist (5.52). Though the mean scores were still in the positive range, the lowest mean scores were for Homogeneous vs. Diverse (4.80) and Individualistic vs. Collaborative (4.95).

Table 2.1a: Adjective Pairs Associated with College Climate

Table 2.1a: Adjective Pa	1113 73300	atca witi	i conege c	innacc						
For each pair of adjectives, select the point between them that reflects the extent to which you believe the adjectives describe the climate in the college based on your direct experiences.	T Negative Aspect	2	3	4	5	6	2 Positive Aspect	N	Mean	Std. Dev
Hostile vs. Friendly	0.5%	2.7%	5.4%	11.9%	24.9%	30.3%	24.3%	185	5.46	1.319
Racist vs. Non-racist	2.1%	3.7%	5.3%	13.8%	15.3%	30.2%	29.6%	189	5.46	1.521
Homogeneous vs. Diverse	3.2%	11.4%	14.1%	13.0%	15.7%	17.3%	25.4%	185	4.80	1.844
Disrespectful vs. Respectful	0.5%	3.7%	4.8%	13.9%	20.3%	26.2%	30.5%	187	5.50	1.412
Unwelcoming vs. Welcoming	1.6%	5.9%	3.8%	10.8%	23.1%	27.4%	27.4%	186	5.40	1.508
Sexist vs. Non-sexist	3.2%	5.3%	11.8%	9.6%	15.0%	26.7%	28.3%	187	5.21	1.712
Individualistic vs. Collaborative	4.3%	4.3%	10.8%	15.6%	24.7%	18.3%	22.0%	186	4.95	1.655
Competitive vs. Cooperative	3.2%	4.3%	8.6%	15.0%	26.2%	24.1%	18.7%	187	5.04	1.546
Homophobic vs. Non- homophobic	0.5%	1.6%	4.3%	15.7%	14.1%	26.5%	37.3%	185	5.70	1.357
Unsupportive vs. Supportive	2.7%	3.2%	6.5%	12.9%	23.1%	28.5%	23.1%	186	5.28	1.499
Ageist vs. Non-ageist	1.1%	2.2%	7.6%	22.7%	11.4%	25.4%	29.7%	185	5.36	1.490
Regressing vs. Improving	2.2%	2.7%	9.1%	15.6%	30.6%	20.4%	19.4%	186	5.09	1.446

The mean scores are based on a seven-point scale where 1 refers to completely the negative adjective (ex. Hostile) and 7 refers to completely the positive adjective (ex. Friendly). With the midpoint of the scale being 3.5, everything above it is considered more in the direction of the positive adjective and everything below it is considered more in the direction of the negative adjective. The closer to the endpoints (1 and 7) the closer it is to the end attribute (ex. hostile or friendly)

When comparing demographic groups' responses to the paired adjectives, differences are apparent. It should be noted that even for variables where there is a large difference between groups, the lowest mean score was still above four which suggests that though different groups may have different experiences, there was no group in general that didn't identify with the positive end of the adjective pair. Women, members of the LGBTQIA2S+ community, and those with disabilities reported lower mean scores for at least half of the adjective pairs. There was not a clear pattern across racial/ethnic groups. LatinX students reported lower scores for five of the adjective pairs, Underrepresented students reported lower mean scores for six of them and White students reported lower mean scores for all but one of the adjective pairs compared to the racial/ethnic group with the highest mean score for each adjective pair.

Table 2.1b: Adjective Pairs Associated with College Climate by Demographic Characteristics (Mean Scores)

		Gen Iden		Sex Orient		Ra	ce/Ethnic	ity	Disal	oility
For each pair of adjectives, select the point between them that reflects the extent to which you believe the adjectives describe the climate in the college based on your direct experiences.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
Hostile vs. Friendly	5.45	5.54	5.38	5.51	<u>5.16</u>	<u>5.10</u>	<u>5.10</u>	5.33	<u>5.07</u>	5.81
Racist vs. Non-racist	5.44	5.75	<u>5.18</u>	5.45	<u>5.14</u>	5.40	5.40	5.27	<u>4.86</u>	5.76
Homogeneous vs. Diverse	4.71	5.03	<u>4.45</u>	4.96	3.95	<u>3.50</u>	4.60	4.38	4.15	5.17
Disrespectful vs. Respectful	5.54	5.59	5.49	5.60	5.30	<u>5.40</u>	5.50	<u>5.18</u>	5.12	5.79
Unwelcoming vs. Welcoming	5.39	5.53	5.27	5.46	5.10	<u>5.30</u>	5.40	<u>5.29</u>	5.03	5.67
Sexist vs. Non-sexist	5.13	5.48	4.84	5.15	<u>4.95</u>	5.10	4.00	4.91	4.68	5.60
Individualistic vs. Collaborative	5.05	5.20	4.92	4.89	4.90	4.90	4.90	4.62	4.50	5.25
Competitive vs. Cooperative	5.04	5.05	5.04	5.06	4.98	5.20	<u>5.10</u>	<u>4.90</u>	5.00	5.10
Homophobic vs. Non- homophobic	5.63	5.83	<u>5.46</u>	5.73	5.28	<u>5.50</u>	5.80	<u>5.54</u>	<u>5.29</u>	5.87
Unsupportive vs. Supportive	5.31	5.29	5.33	5.31	<u>5.12</u>	5.30	5.20	5.02	<u>4.80</u>	5.60
Ageist vs. Non-ageist	5.34	5.46	<u>5.25</u>	5.42	4.93	5.30	<u>5.20</u>	<u>5.11</u>	5.08	5.58
Regressing vs. Improving	5.07	5.19	4.97	5.09	4.95	5.10	4.80	4.80	<u>4.76</u>	5.27

The mean scores are based on a seven-point scale where 1 refers to completely the negative adjective (ex. Hostile) and 7 refers to completely the positive adjective (ex. Friendly). With the midpoint of the scale being 4, everything above it is considered more in the direction of the positive adjective and everything below it is considered more in the direction of the negative adjective. The closer to the endpoints (1 and 7) the closer it is to the end attribute (ex. hostile or friendly).

When looking at student characteristics, there were clear differences between groups. Graduate students who had been at MSU for more than two years reported fewer positive responses for all the categories. Master's students gave fewer positive responses for one of the adjective pairs (regressing/improving) and doctoral students gave fewer positive responses for seven of the twelve adjectives. Domestic graduate students reported lower mean scores for all the adjective pairs.

Table 2.1c: Adjective Pairs Associated with College Climate by Student Characteristics (Mean Scores)

		Years a	at MSU	Deg	ree	International Status		
For each pair of adjectives, select the point between them that reflects the extent to which you believe the adjectives describe the climate in the college based on your direct experiences.	Overall	1-2 Years	More than 2	Masters	PhD	Yes	NO	
Hostile vs. Friendly	5.47	5.69	<u>5.16</u>	5.47	5.45	5.82	<u>5.27</u>	
Racist vs. Non-racist	5.45	5.75	5.04	6.05	<u>5.35</u>	5.72	<u>5.25</u>	
Homogeneous vs. Diverse	4.82	5.18	<u>4.36</u>	5.53	<u>4.68</u>	5.59	<u>4.30</u>	
Disrespectful vs. Respectful	5.53	5.80	<u>5.18</u>	5.47	5.51	6.06	<u>5.20</u>	
Unwelcoming vs. Welcoming	5.40	5.64	<u>5.08</u>	5.42	5.37	5.67	<u>5.27</u>	
Sexist vs. Non-sexist	5.19	5.55	4.72	6.21	<u>5.03</u>	5.81	4.84	
Individualistic vs. Collaborative	4.97	5.17	<u>4.70</u>	5.32	<u>4.90</u>	5.47	<u>4.66</u>	
Competitive vs. Cooperative	5.07	5.13	4.99	5.16	<u>5.04</u>	5.25	<u>4.95</u>	
Homophobic vs. Non-homophobic	5.70	5.85	<u>5.49</u>	6.21	<u>5.58</u>	5.88	<u>5.54</u>	
Unsupportive vs. Supportive	5.30	5.71	<u>4.75</u>	5.21	5.29	5.76	<u>5.06</u>	
Ageist vs. Non-ageist	5.38	5.47	<u>5.26</u>	5.79	5.29	5.80	<u>5.11</u>	
Regressing vs. Improving	5.08	5.32	4.77	4.89	5.09	5.58	4.81	

The mean scores are based on a seven-point scale where 1 refers to completely the negative adjective (ex. Hostile) and 7 refers to completely the positive adjective (ex. Friendly). With the midpoint of the scale being 4, everything above it is considered more in the direction of the positive adjective and everything below it is considered more in the direction of the negative adjective. The closer to the endpoints (1 and 7) the closer it is to the end attribute (ex. hostile or friendly).

Physical Sciences had the highest means scores for all but one of the adjective pairs (competitive/cooperative) (Table 2.1d). Biological Sciences had lower mean scores for eight of the twelve adjective pairs and Mathematics had lower mean scores for all the adjective pairs.

Table 2.1d: Adjective Pairs Associated with College Climate by College District (Mean Scores)

		College District					
For each pair of adjectives, select the point between them that reflects the extent to which you believe the adjectives describe the climate in the college based on your direct experiences.	Overall	Biological	Physical	Mathematics			
Hostile vs. Friendly	5.43	<u>5.36</u>	5.58	<u>5.27</u>			
Racist vs. Non-racist	5.40	<u>5.13</u>	5.69	<u>5.37</u>			
Homogeneous vs. Diverse	4.73	4.16	5.34	<u>4.63</u>			
Disrespectful vs. Respectful	5.47	<u>5.39</u>	5.67	<u>5.17</u>			
Unwelcoming vs. Welcoming	5.39	<u>5.38</u>	5.60	<u>4.97</u>			
Sexist vs. Non-sexist	5.12	5.11	5.20	<u>4.97</u>			
Individualistic vs. Collaborative	4.91	4.92	4.97	<u>4.72</u>			
Competitive vs. Cooperative	5.01	5.14	4.92	4.90			
Homophobic vs. Non-homophobic	5.66	5.61	5.82	<u>5.43</u>			
Unsupportive vs. Supportive	5.26	<u>5.25</u>	5.56	<u>4.63</u>			
Ageist vs. Non-ageist	5.31	<u>5.27</u>	5.42	<u>5.20</u>			
Regressing vs. Improving	5.07	5.11	5.18	4.73			

The mean scores are based on a seven-point scale where 1 refers to completely the negative adjective (ex. Hostile) and 7 refers to completely the positive adjective (ex. Friendly). With the midpoint of the scale being 4, everything above it is considered more in the direction of the positive adjective and everything below it is considered more in the direction of the negative adjective. The closer to the endpoints (1 and 7) the closer it is to the end attribute (ex. hostile or friendly).

Respondents were then asked a series of questions about the climate within the College itself and their department/program for specific groups. For the groups listed in Table 2.2a, at least 50% of the respondents said that the climate was at least somewhat positive within the college itself for each group other than for transgender individuals (43.1%) and non-Christians (46.6%). The climate was seen as best for men (70.5.2%) and Whites (76.6%) with over two-thirds of the respondents reporting the climate as being at least somewhat positive. In terms of a negative climate, non-native English speakers (19.0%), Internationals (15.6%), People of Color (14.9%) and women (11.0%) all had over ten percent of the respondents reporting very negative or somewhat negative responses.

Table 2.2a: Climate in College Towards Specific Groups

able 2:2a: emiliate in conege rowards								
How would you rate the climate within the College of Natural Science	Very Negative	Somewhat Negative	Neutral	Somewhat Positive	Very Positive			
as a whole for graduate students who are:	1	2	3	4	5	N	Mean	Std. Dev
Women	1.3%	9.7%	30.3%	23.2%	35.5%	155	3.82	1.066
Men	1.4%	0.7%	27.4%	16.4%	54.1%	146	4.21	.963
Transgender	2.3%	11.4%	43.2%	13.6%	29.5%	88	3.57	1.102
Gay, Lesbian, Bisexual	0.8%	5.7%	36.9%	23.0%	33.6%	122	3.83	.993
People of Color	3.0%	11.9%	26.7%	25.9%	32.6%	135	3.73	1.128
White	0.6%	0.6%	22.1%	13.6%	63.0%	154	4.38	.894
Immigrants	1.6%	8.1%	39.0%	20.3%	30.9%	123	3.71	1.046
International	1.4%	14.2%	24.8%	24.8%	34.8%	141	3.77	1.117
Non-native English speakers	2.2%	16.8%	29.9%	23.4%	27.7%	137	3.58	1.129
Christian Religious Affiliations	1.8%	4.4%	42.1%	14.9%	36.8%	114	3.81	1.047
Non-Christian Religious Affiliations	1.7%	5.1%	46.6%	16.1%	30.5%	118	3.69	1.019

In general, women, members of LBGTQIA2S+ community, and those with disabilities were more likely to report lower mean scores than their counterparts for at least half of the groups. Whites reported less favorable climate for ten of the eleven groups; Underrepresented students reported seven and LatinX reported less favorable climates for two groups.

Though there are differences amongst groups within the demographic characteristics, the ones that are of most interest are those where the demographic characteristic group of the respondent is related to the one listed in Table 2.2b (i.e., women for women). Women felt that women's climate was not as favorable compared to their men counterparts' responses. Those within the LBGTQIA2S+ community felt that the climate was not as positive for both transgender individuals and those who are gay/lesbian/bisexual than those reported by heterosexuals.

In terms of race/ethnicity, LatinX students rated the climate less favorable for internationals compared to Underrepresented students. Underrepresented students rate the climate less favorable for immigrants compared to LatinX students as well as non-native English speakers which had the only mean score below three.

Table 2.2b: Climate in College Towards Specific Groups by Demographic Characteristics (Mean Scores)

	Gend Identi					Ra	ce/Ethnic	Disability		
How would you rate the climate within the College of Natural Science as a whole for graduate students who are:	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	NO
Women	3.84	3.94	3.76	3.89	3.51	3.89	3.13	<u>3.75</u>	3.56	4.03
Men	4.37	4.30	4.44	4.34	4.26	4.22	4.50	4.47	4.40	4.30
Transgender	3.55	3.76	3.35	3.66	<u>3.00</u>	4.14	3.20	3.20	3.19	3.66
Gay, Lesbian, Bisexual	3.84	3.93	3.76	3.89	<u>3.54</u>	4.00	<u>3.60</u>	<u>3.70</u>	3.50	4.05
People of Color	3.80	4.00	3.61	3.91	3.24	3.75	3.67	3.42	3.30	3.94
White	4.49	4.40	4.56	4.49	4.39	4.78	4.71	<u>4.50</u>	4.54	<u>4.43</u>
Immigrants	3.71	3.88	3.55	3.83	3.20	3.67	<u>3.57</u>	<u>3.57</u>	3.43	3.89
International	3.74	3.91	3.60	3.88	<u>3.41</u>	<u>3.71</u>	3.88	<u>3.53</u>	3.38	4.00
Non-native English speakers	3.52	3.73	<u>3.36</u>	3.62	3.03	3.43	2.60	<u>3.27</u>	3.33	3.65
Christian Religious Affiliations	3.89	3.94	3.85	3.91	<u>3.71</u>	4.00	<u>3.67</u>	3.84	3.69	4.02
Non-Christian Religious Affiliations	3.68	3.84	<u>3.56</u>	3.76	<u>3.36</u>	4.00	3.80	<u>3.47</u>	<u>3.31</u>	3.92

In terms of graduate student characteristics, those who had been at MSU for more than two years thought that the climate was less favorable for all groups other than men and Whites compared to those who had been at MSU for 2 years or less (Table 2.2c). Master's students reported lower favorable responses three groups (Men, Whites, Christians) and doctoral students reported less favorable climates for six groups. Domestic graduate students reported lower mean scores for all but men and Whites.

Table 2.2c: Climate in College Towards Specific Groups by Student Characteristics (Mean Scores)

		Years a	at MSU	Deg	gree	International Status		
How would you rate the climate within the College of Natural Science as a whole for graduate students who are:	Overall	1-2 Years	More than 2	Masters	OHO	Yes	NO	
Women	3.85	4.01	<u>3.63</u>	3.94	3.82	4.07	<u>3.70</u>	
Men	4.30	4.31	4.28	4.00	4.33	4.14	4.40	
Transgender	3.57	3.75	3.34	3.91	3.49	3.93	3.38	
Gay, Lesbian, Bisexual	3.85	3.91	<u>3.76</u>	3.92	3.82	4.03	<u>3.71</u>	
People of Color	3.77	3.97	<u>3.50</u>	3.78	3.75	4.14	<u>3.49</u>	
White	4.45	4.45	4.46	<u>4.16</u>	4.48	4.33	4.53	
Immigrants	3.74	3.95	3.43	3.73	3.72	3.91	<u>3.58</u>	
International	3.79	4.08	3.41	4.06	<u>3.73</u>	4.07	3.58	
Non-native English speakers	3.58	3.75	3.38	3.81	3.52	3.91	3.25	
Christian Religious Affiliations	3.87	4.00	<u>3.66</u>	3.77	3.88	4.05	<u>3.78</u>	
Non-Christian Religious Affiliations	3.70	3.90	<u>3.44</u>	3.81	3.67	3.95	<u>3.56</u>	

Physical Sciences reported the most positive climates for all groups listed (Table2.2d). Mathematics reported less favorable climate mean scores for all groups listed. Biological Sciences reported less favor climates for six of the groups.

Table 2.2d: Climate in College Towards Specific Groups by College District (Mean Scores)

		c	ollege Distri	ct
How would you rate the climate within the College of Natural Science as a whole for graduate students who are:	Overall	Biological	Physical	Mathematics
Women	3.84	<u>3.72</u>	4.06	<u>3.69</u>
Men	4.30	4.33	4.41	4.04
Transgender	3.52	<u>3.37</u>	3.78	<u>3.47</u>
Gay, Lesbian, Bisexual	3.81	<u>3.68</u>	4.05	<u>3.64</u>
People of Color	3.75	<u>3.49</u>	4.19	<u>3.48</u>
White	4.46	4.55	4.47	<u>4.24</u>
Immigrants	3.72	3.48	4.03	<u>3.64</u>
International	3.76	3.52	4.07	<u>3.65</u>
Non-native English speakers	3.53	3.31	3.93	3.28
Christian Religious Affiliations	3.86	3.90	3.92	<u>3.67</u>
Non-Christian Religious Affiliations	3.67	3.66	3.84	<u>3.37</u>

In addition to the groups listed above, respondents were also asked about climate within the college itself for graduate students with various disabilities and roles outside of school (Table 2.3a). Respondents reported that the climate was at least somewhat positive for over 50% of the time for only two groups — those with physical disabilities and those who serviced/are serving in the military. Graduate students with mental health conditions received the highest percent of very negative or somewhat negative climate responses (30.1%) followed by those with learning disabilities (22.0%).

Table 2.3a: Climate in College Towards Specific Disabilities/Roles Outside of School

How would you rate the climate within the College of Natural Science	Very Negative	Somewhat Negative	Neutral	Somewhat Positive	Very Positive			
as a whole for graduate students who are or have:	1	2	3	4	5	N	Mean	Std. Dev
Mental Health Condition	7.5%	22.6%	20.3%	20.3%	29.3%	133	3.41	1.321
Physical Disability	8.8%	10.8%	24.5%	22.5%	33.3%	102	3.61	1.291
Learning Disability	7.6%	14.4%	29.7%	20.3%	28.0%	118	3.47	1.252
Parents/Guardians of Dependent Children	4.5%	14.8%	38.6%	19.3%	22.7%	88	3.41	1.131
Providing Care for Adults who are Disabled and/or Elderly	7.6%	9.1%	34.8%	15.2%	33.3%	66	3.58	1.253
Serviced/Serving in the Military	0.0%	3.2%	44.4%	19.0%	33.3%	63	3.83	.943

When evaluating the perceived climate for the same disabilities/roles across demographic characteristics, there are definite trends. Women, members of the LGBTQIA2S+ community, and those with disabilities all reported less favorable climates than their counterparts for all disabilities/roles. Underrepresented and White graduate students were more likely to report lower mean scores for all the disabilities and roles compared to LatinX students.

Table 2.3b: Climate in the College Towards Specific Disabilities/Roles Outside of School by Demographic Characteristics (Mean Scores)

		Gender Identity		Sexual Orientation		Rac	e/Ethnic	Disability		
How would you rate the climate within the College of Natural Science as a whole for graduate students who are or have:	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
Mental Health Condition	3.38	3.60	3.24	3.62	<u>2.79</u>	4.00	<u>2.57</u>	3.04	2.84	3.84
Physical Disability	3.59	3.90	<u>3.38</u>	3.76	2.88	4.33	3.00	3.10	3.12	3.87
Learning Disability	3.49	3.72	3.34	3.69	<u>2.81</u>	3.67	2.86	3.16	3.08	3.86
Parents/Guardians of Dependent Children	3.40	3.74	3.14	3.56	3.00	4.33	<u>2.75</u>	<u>3.06</u>	3.15	3.58
Providing Care for Adults who are Disabled and/or Elderly	3.56	3.88	<u>3.36</u>	3.75	<u>2.94</u>	3.50	3.20	<u>3.22</u>	3.38	3.79
Serviced/Serving in the Military	3.82	4.10	<u>3.58</u>	4.03	3.13	4.33	<u>3.40</u>	<u>3.54</u>	3.64	3.89

The mean scores are based on a five-point scale where 1 refers to a very negative climate and 5 refers to a very positive climate. With the midpoint of the scale being 3, everything above it is considered a positive climate and everything below it is considered a negative climate. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very negative climate or very positive climate).

Years at MSU also impacted how favorable graduate students perceived the climate for different disabilities and roles with those with more than two years reporting less favorable climates for all disabilities and roles (Table 2.3c). Doctoral students and domestic students reported that the climate was less positive for all disabilities and all roles.

Table 2.3c: Climate in the College Towards Specific Disabilities/Roles Outside of School by Student Characteristics (Mean Scores)

		Years a	at MSU	De	gree		ational atus
How would you rate the climate within the College of Natural Science as a whole for graduate students who are or have:	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No
Mental Health Condition	3.45	3.93	2.88	3.86	<u>3.36</u>	3.94	<u>3.09</u>
Physical Disability	3.63	3.92	<u>3.26</u>	4.18	<u>3.54</u>	4.11	3.18
Learning Disability	3.52	3.87	<u>3.12</u>	3.69	<u>3.47</u>	3.95	<u>3.20</u>
Parents/Guardians of Dependent Children	3.45	3.78	3.14	4.00	<u>3.35</u>	3.76	3.21
Providing Care for Adults who are Disabled and/or Elderly	3.66	3.97	3.17	4.30	<u>3.50</u>	4.14	<u>3.16</u>
Serviced/Serving in the Military	3.85	4.03	<u>3.60</u>	4.09	<u>3.80</u>	4.16	<u>3.65</u>

The mean scores are based on a five-point scale where 1 refers to a very negative climate and 5 refers to a very positive climate. With the midpoint of the scale being 3, everything above it is considered a positive climate and everything below it is considered a negative climate. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very negative climate or very positive climate).

Students in Biological Sciences and Mathematics reported less favorable climates for all the disabilities and roles compared to students in the Physical Sciences (Table 2.3d).

Table 2.3d: Climate in the College Towards Specific Disabilities/Roles Outside of School by College District (Mean Scores)

		College District					
How would you rate the climate within the College of Natural Science as a whole for graduate students who are or have:	Overall	Biological	Physical	Mathematics			
Mental Health Condition	3.41	3.00	3.82	<u>3.48</u>			
Physical Disability	3.55	3.00	4.03	<u>3.69</u>			
Learning Disability	3.49	3.18	3.91	<u>3.16</u>			
Parents/Guardians of Dependent Children	3.37	3.19	3.53	<u>3.42</u>			
Providing Care for Adults who are Disabled and/or Elderly	3.49	3.05	3.86	<u>3.62</u>			
Serviced/Serving in the Military	3.83	<u>3.65</u>	4.00	<u>3.78</u>			

In addition, respondents were asked about how welcoming the college and their individual department/programs were and their sense of belonging in each (Table 2.4a). For the statement "Faculty negatively prejudge me." which is stated in a negative, the level of disagreement is equivalent to the level of agreement for the other statements in the table and will be reported as "positive" in this writeup. For the college level, over 50% of the respondents stated that they at least somewhat agreed with all the statements. "I am treated equally compared to other graduate students received the highest percent of somewhat and strongly agree responses (76.3%) followed by "I feel safe (including physical, mental, and emotional safety)." (68.7%) and "I am treated as an individual rather than as a representative of a racial, ethnic, cultural, national origin, or gender group." (66.4%). The area with the highest percent of strongly to somewhat disagree responses was "People take time to welcome new students." (27.4%). "I feel a sense of belonging." (20.7%) also received a higher percentage of disagreement.

Table 2.4a: Attitudes about Welcoming and Belonging Within College

Please indicate to what extent you agree or disagree with each of the following statements related to	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
welcoming and belonging within the college.	1	2	3	4	5	N	Mean	Std. Dev
People take time to welcome new students.	9.4%	18.0%	18.0%	26.6%	28.1%	139	3.46	1.320
People work closely together.	6.2%	8.5%	23.3%	32.6%	29.5%	129	3.71	1.162
People create a sense of belonging for others.	6.6%	10.2%	23.4%	35.8%	24.1%	137	3.61	1.153
I am treated as an individual rather than as a representative of	5.8%	10.2%	17.5%	22.6%	43.8%	137	3.88	1.243

a racial, ethnic, cultural, national origin, or gender group.								
My personal identities are valued in the classroom.	6.3%	10.2%	24.2%	25.0%	34.4%	128	3.71	1.218
Faculty negatively prejudge me. (reverse coded) *	43.8%	22.6%	20.4%	8.8%	4.4%	137	2.07	1.180
I feel a sense of belonging.	6.9%	13.8%	23.4%	33.1%	22.8%	145	3.51	1.185
I am treated equally compared to other graduate students.	4.2%	9.1%	10.5%	33.6%	42.7%	143	4.01	1.132
I feel safe (including physical, mental, and emotional safety).	3.4%	9.5%	18.4%	23.8%	44.9%	147	3.97	1.152

In terms of demographic characteristic differences there were differences across the statements with women and those with disabilities being less likely to agree than their counterparts for all the statements (Table 2.4b). Members of the LGBTQIA2S+ community were less likely to agree with six of the nine statements. LatinX students were less likely to agree with four of the statements, Underrepresented respondents were less likely to agree with five statements and White students were less likely to agree with four statements.

<sup>\*</sup> The above does not hold true for "Faculty negatively prejudge me" which is reverse coded. For this statement, because it is phrased in a negative form, an agree response is unfavorable towards welcoming/belonging and a disagree response is favorable.

Table 2.4b: Attitudes about Welcoming and Belonging Within College by Demographic Characteristics (Mean Scores)

		Gen Iden			ual tation	Rac	e/Ethnic	ity	Disal	bility
Please indicate to what extent you agree or disagree with each of the following statements related to welcoming and belonging within the college.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
People take time to welcome new students.	3.39	3.61	3.23	3.38	3.33	3.10	3.25	3.22	2.91	3.77
People work closely together.	3.70	3.98	<u>3.50</u>	3.78	<u>3.46</u>	3.33	3.50	3.45	3.14	4.08
People create a sense of belonging for others.	3.54	3.89	3.28	3.56	3.51	3.33	3.14	3.57	2.92	4.03
I am treated as an individual rather than as a representative of a racial, ethnic, cultural, national origin, or gender group.	4.05	4.27	3.88	4.04	<u>3.85</u>	4.00	<u>3.25</u>	4.13	3.55	4.24
My personal identities are valued in the classroom.	3.80	4.00	<u>3.67</u>	3.88	3.39	4.00	<u>3.57</u>	<u>3.43</u>	<u>3.26</u>	4.03
Faculty negatively prejudge me. (reverse coded) *	1.93	1.70	2.10	1.93	2.24	2.00	2.33	2.12	2.42	1.64
I feel a sense of belonging.	3.50	3.84	3.20	3.51	<u>3.39</u>	3.33	3.29	3.35	2.98	3.85
I am treated equally compared to other graduate students.	4.13	4.31	<u>3.98</u>	4.09	3.92	4.11	4.14	4.02	3.73	4.25
I feel safe (including physical, mental, and emotional safety).	4.01	4.31	3.78	4.00	4.00	4.00	<u>3.71</u>	3.90	3.59	4.32

Graduate students who have been at MSU for more than two years were less likely to agree with all the statements (Table 2.4c). Doctoral students were also less likely to agree with most of the statements, as were domestic graduate students.

<sup>\*</sup> The above does not hold true for "Faculty negatively prejudge me" which is reverse coded. For this statement, because it is phrased in a negative form, an agree response is unfavorable towards welcoming/belonging and a disagree response is favorable.

Table 2.4c: Attitudes about Welcoming and Belonging Within College by Student Characteristics (Mean Scores)

		Years a	at MSU	Deg	Degree		nal Status
Please indicate to what extent you agree or disagree with each of the following statements related to welcoming and belonging within the college.	Overall	1-2 Years	More than 2	Masters	PhD	Yes	ON
People take time to welcome new students.	3.44	3.61	<u>3.21</u>	3.38	3.44	3.71	<u>3.25</u>
People work closely together.	3.73	4.06	<u>3.27</u>	4.22	<u>3.63</u>	4.18	3.44
People create a sense of belonging for others.	3.60	3.87	3.28	3.82	<u>3.56</u>	3.78	<u>3.51</u>
I am treated as an individual rather than as a representative of a racial, ethnic, cultural, national origin, or gender group.	3.91	4.00	<u>3.78</u>	4.38	<u>3.84</u>	3.94	3.96
My personal identities are valued in the classroom.	3.76	3.90	3.60	4.13	3.69	4.20	<u>3.51</u>
Faculty negatively prejudge me. (reverse coded) *	2.04	1.80	2.34	1.94	2.06	1.85	2.13
I feel a sense of belonging.	3.52	3.69	<u>3.31</u>	4.06	<u>3.43</u>	3.88	3.32
I am treated equally compared to other graduate students.	4.05	4.19	3.88	4.00	4.04	4.17	<u>4.04</u>
I feel safe (including physical, mental, and emotional safety).	3.98	4.17	<u>3.74</u>	3.94	3.99	4.20	<u>3.91</u>

Those in the Mathematics district were more likely to agree with all the statements about welcoming and belonging (Table 2.4d). Biological Sciences students were less likely to agree with five of the statements and those in the Physical Sciences were less likely to agree with six of the statements.

<sup>\*</sup> The above does not hold true for "Faculty negatively prejudge me" which is reverse coded. For this statement, because it is phrased in a negative form, an agree response is unfavorable towards welcoming/belonging and a disagree response is favorable.

Table 2.4d: Attitudes about Welcoming and Belonging Within College by College District (Mean Scores)

		Col	lege Dist	ege District		
Please indicate to what extent you agree or disagree with each of the following statements related to welcoming and belonging within the college.	Overall	Biological	Physical	Mathematics		
People take time to welcome new students.	3.44	3.43	3.20	3.95		
People work closely together.	3.73	<u>3.61</u>	3.23	4.08		
People create a sense of belonging for others.	3.60	3.54	3.27	3.93		
I am treated as an individual rather than as a representative of a racial, ethnic, cultural, national origin, or gender group.	3.91	3.88	3.93	3.86		
My personal identities are valued in the classroom.	3.76	3.66	3.63	3.74		
Faculty negatively prejudge me. (reverse coded) *	2.04	2.05	2.05	2.00		
I feel a sense of belonging.	3.52	3.50	3.44	3.70		
I am treated equally compared to other graduate students.	4.05	4.01	4.07	4.07		
I feel safe (including physical, mental, and emotional safety).	3.98	<u>3.96</u>	3.96	4.13		

# Within Department/Program

The departments/programs are reported in aggregate due to the small number of respondents for some of the departments/programs. It should be noted that the findings do not necessarily reflect any one major/program.

When responding about the climate within their department/program for specific groups, at least 50% of the respondents said that the climate was at least somewhat positive for that group (Table 2.5a). The climate was seen as best for men (73.7%) and Whites (74.8%). For international students (67.5%), women (67.2%), non-native English speakers (61.8%) and gay, lesbian, bisexual individuals (60.9%) at least 60% of the respondents stated that the climate was at least somewhat positive for them. In terms of a negative climate, People of Color (16.5%), non-native English speakers (16.1%) and international students (15.1%) received the highest reported percentages of very negative or somewhat negative responses.

<sup>\*</sup> The above does not hold true for "Faculty negatively prejudge me" which is reverse coded. For this statement, because it is phrased in a negative form, an agree response is unfavorable towards welcoming/belonging and a disagree response is favorable.

Table 2.5a: Climate in Department/Program Towards Specific Groups

How would you rate the climate	Very Negative	Somewhat Negative	Neutral	Somewhat Positive	Very Positive			
within your department/program for graduate students who are:	1	2	3	4	5	N	Mean	Std. Dev
Women	2.3%	11.3%	19.2%	26.0%	41.2%	177	3.93	1.123
Men	1.2%	4.2%	21.0%	17.4%	56.3%	167	4.23	1.000
Transgender	4.0%	8.0%	36.0%	15.0%	37.0%	100	3.73	1.162
Gay, Lesbian, Bisexual	0.7%	3.4%	34.9%	21.2%	39.7%	146	3.96	.975
People of Color	5.7%	10.8%	24.1%	25.3%	34.2%	158	3.72	1.206
White	0.6%	2.3%	22.3%	13.7%	61.1%	175	4.33	.936
Immigrants	0.7%	12.8%	27.7%	23.6%	35.1%	148	3.80	1.081
International	1.2%	13.9%	17.5%	21.1%	46.4%	166	3.98	1.144
Non-native English speakers	1.9%	14.2%	22.2%	27.8%	34.0%	162	3.78	1.120
Christian Religious Affiliations	0.8%	9.1%	37.9%	15.9%	36.4%	132	3.78	1.065
Non-Christian Religious Affiliations	1.5%	4.4%	41.6%	16.8%	35.8%	137	3.81	1.026

In general, women, members of the LGBTQIA2S+ community, Whites and those with disabilities rated the climate worse for most of the groups listed compared to their counterparts. Women felt that women's climate was not as favorable compared to their men counterparts' responses (Table 2.5b). Those within the LBGTQIA2S+ community felt that the climate was not as positive for both transgender individuals and those who are gay/lesbian/bisexual than those reported by heterosexuals. LatinX rated the climate less favorable for internationals and Underrepresented graduate students rated the climate less favorable for immigrants and non-native English speakers.

Table 2.5b: Climate in Department/Program Towards Specific Groups by Demographic Characteristics (Mean Scores)

		Gender Identity		Sexual Orientation		ce/Ethnic	Disability			
How would you rate the climate within your department/program for graduate students who are:	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	NO
Women	4.00	4.14	3.89	3.99	<u>3.78</u>	4.30	3.22	<u>3.86</u>	<u>3.71</u>	4.20
Men	4.40	<u>4.31</u>	4.49	4.30	4.40	4.30	4.63	4.45	4.41	<u>4.29</u>
Transgender	3.82	3.94	<u>3.73</u>	3.98	2.95	4.50	3.50	3.51	3.44	3.87
Gay, Lesbian, Bisexual	4.00	4.10	3.92	4.13	<u>3.63</u>	4.63	3.67	3.87	3.74	4.12
People of Color	3.77	3.95	<u>3.59</u>	3.88	3.25	3.67	3.70	<u>3.55</u>	3.36	3.99
White	4.42	4.29	4.53	4.39	4.43	4.50	4.56	4.41	4.36	4.44
Immigrants	3.83	4.05	<u>3.59</u>	3.88	<u>3.45</u>	3.88	<u>3.75</u>	3.82	3.74	3.85
International	3.97	4.14	3.82	4.05	<u>3.70</u>	3.89	4.00	3.86	3.82	4.11
Non-native English speakers	3.73	3.82	<u>3.65</u>	3.82	<u>3.35</u>	3.63	<u>3.14</u>	3.59	3.70	3.87
Christian Religious Affiliations	3.86	3.83	3.89	3.84	3.75	4.13	4.00	3.79	3.61	4.00
Non-Christian Religious Affiliations	3.80	3.85	<u>3.76</u>	3.90	<u>3.45</u>	4.00	4.00	3.70	<u>3.55</u>	4.02

In terms of student characteristics, those who had been at MSU for more than two years thought that the climate was less favorable for all groups other than men and Whites compared to those who had been at MSU for 2 years or less (Table 2.5c). Master's students rated the climate less favorable for five groups and doctoral students rated the climate less favorable for one group (internationals). Domestic graduate students reported lower mean scores for seven of the ten categories and international graduate student reported a lower mean score for men.

Table 2.5c: Climate in Department/Program Towards Specific Groups by Student Characteristics (Mean Scores)

		Years a	at MSU	Deg	ree	International Status		
How would you rate the climate within your department/program for graduate students who are:	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No	
Women	3.95	4.13	<u>3.73</u>	<u>3.81</u>	3.95	4.17	<u>3.84</u>	
Men	4.31	4.35	4.26	3.89	4.35	4.16	4.43	
Transgender	3.77	3.94	<u>3.57</u>	3.80	3.75	3.97	<u>3.65</u>	
Gay, Lesbian, Bisexual	3.99	4.08	<u>3.86</u>	<u>3.75</u>	3.99	4.00	3.94	
People of Color	3.77	3.99	<u>3.49</u>	3.72	3.75	4.05	<u>3.55</u>	
White	4.41	4.41	4.41	<u>4.00</u>	4.45	4.36	4.42	
Immigrants	3.82	4.03	<u>3.57</u>	3.73	3.81	3.80	3.84	
International	3.99	4.27	<u>3.63</u>	4.06	<u>3.96</u>	4.18	3.87	
Non-native English speakers	3.81	3.95	<u>3.62</u>	3.81	3.78	4.09	<u>3.54</u>	
Christian Religious Affiliations	3.84	3.96	3.67	<u>3.75</u>	3.85	3.93	3.80	
Non-Christian Religious Affiliations	3.85	3.97	<u>3.71</u>	3.81	3.85	3.98	3.77	

Mathematics students reported a less favorable climate for men, Whites, and Christians (Table 2.5d). Biological Science students reported less favorable climates for seven of the groups and Physical Science students reported a less favorable climate for all but immigrants.

Table 2.5d: Climate in Department/Program Towards Specific Groups by College District (Mean Scores)

		College District					
How would you rate the climate within your department/program for graduate students who are:	Overall	Biological	Physical	Mathematics			
Women	3.95	4.03	4.00	<u>3.63</u>			
Men	4.33	4.45	4.34	<u>4.07</u>			
Transgender	3.71	<u>3.58</u>	3.94	<u>3.50</u>			
Gay, Lesbian, Bisexual	3.96	<u>3.98</u>	4.14	<u>3.48</u>			
People of Color	3.73	3.49	4.10	<u>3.35</u>			
White	4.39	4.55	4.39	<u>4.07</u>			
Immigrants	3.85	<u>3.77</u>	3.91	3.83			
International	3.99	<u>3.77</u>	4.19	<u>3.92</u>			
Non-native English speakers	3.77	3.56	3.94	3.80			
Christian Religious Affiliations	3.83	3.98	3.77	<u>3.63</u>			
Non-Christian Religious Affiliations	3.83	<u>3.81</u>	3.96	<u>3.44</u>			

Respondents were also asked about climate within their department/program for graduate students with various disabilities and roles outside of school (Table 2.6a). Over 50 percent of the graduate students reported that the climate was at least somewhat positive for all groups, other than those with learning disabilities. All the disabilities had at least 20 percent of the graduate students report that the climate was somewhat to very negative within their department/program. The climate for graduate students with mental health conditions received the highest percent of very negative or somewhat negative climate responses (29.6%) followed by those with learning disabilities (26.5%) and physical disabilities (23.3%). In addition, parents/guardians of dependent children (20.2%) and those providing care to those who are disabled/elderly (19.1%) also received a relatively high percent of responses in the negative range.

Table 2.6a: Climate in Department/Program Towards Specific Disabilities/Roles Outside of School

How would you rate the climate	Very Negative	Somewhat Negative	Neutral	Somewhat Positive	Very Positive			
within your department/program for graduate students who are or have:	1	2	3	4	5	N	Mean	Std. Dev
Mental Health Condition	10.1%	19.5%	19.5%	20.8%	30.2%	159	3.42	1.361
Physical Disability	7.5%	15.8%	19.2%	22.5%	35.0%	120	3.62	1.310
Learning Disability	7.4%	19.1%	24.3%	22.1%	27.2%	136	3.43	1.274
Parents/Guardians of Dependent Children	3.7%	16.5%	26.6%	21.1%	32.1%	109	3.61	1.201
Providing Care for Adults who are Disabled and/or Elderly	2.4%	16.7%	27.4%	15.5%	38.1%	84	3.70	1.210
Serviced/Serving in the Military	1.3%	3.9%	42.1%	17.1%	35.5%	76	3.82	1.016

When evaluating the perceived climate for the same disabilities/roles across demographic characteristics, there are definite trends. Women, members of the LGBTQIA2S+ community, and those with disabilities all reported less favorable climates than their counterparts for all disabilities/roles other than for those who serviced/serving in the military. In terms of race, Underrepresented students reported less favorable climates for all disabilities and roles and Whites reported positive climates less often for all but those providing care for adults who are disabled/elderly.

Table 2.6b: Climate in the Department/Program Towards Specific Disabilities/Roles Outside of School by Demographic Characteristics (Mean Scores)

		Gender Identity		Sexual Orientation		Rac	e/Ethnic	Disability		
How would you rate the climate your department/program for graduate students who are or have:	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
Mental Health Condition	3.41	3.69	3.18	3.62	2.79	4.00	2.88	<u>3.15</u>	2.98	3.82
Physical Disability	3.60	3.83	3.40	3.73	2.93	3.75	3.33	<u>3.16</u>	3.24	3.81
Learning Disability	3.45	3.67	<u>3.27</u>	3.63	2.94	3.43	3.00	<u>3.20</u>	3.13	3.77
Parents/Guardians of Dependent Children	3.65	4.05	3.30	3.70	3.29	3.88	3.00	3.43	3.60	3.71
Providing Care for Adults who are Disabled and/or Elderly	3.68	3.93	<u>3.47</u>	3.76	3.17	3.50	3.20	3.41	<u>3.57</u>	3.86
Serviced/Serving in the Military	3.84	4.04	3.65	4.02	3.00	4.00	<u>3.50</u>	<u>3.70</u>	3.74	3.78

Those who had been at MSU for more than two years and domestic students all reported positive climates less often for all groups compared to their counterparts (Table 2.6c). Doctoral students reported less favorable climates for all disabilities and roles other than learning disabilities compared to master's students.

Table 2.6c: Climate in the Department/Program Towards Specific Disabilities/Roles Outside of School by Student Characteristics (Mean Scores)

		Years a	at MSU	Deg	gree	International Status	
How would you rate the climate within your department/program for graduate students who are or have:	Overall	1-2 Years	More than 2	Masters	QЧd	Yes	No
Mental Health Condition	3.45	3.83	3.00	3.47	3.42	3.83	3.19
Physical Disability	3.65	3.89	3.36	4.00	3.58	4.10	<u>3.23</u>
Learning Disability	3.46	3.76	3.09	3.50	3.45	3.86	<u>3.19</u>
Parents/Guardians of Dependent Children	3.66	3.92	3.39	4.00	<u>3.60</u>	3.93	<u>3.47</u>
Providing Care for Adults who are Disabled and/or Elderly	3.77	4.09	<u>3.31</u>	4.09	<u>3.70</u>	4.15	<u>3.36</u>
Serviced/Serving in the Military	3.84	4.05	3.53	4.09	3.79	3.97	<u>3.74</u>

Biological Sciences and Mathematics students reported less favorable all or almost all groups compared to those in the Physical Sciences (Table 2.6d).

Table 2.6d: Climate in the Department/Program Towards Specific Disabilities/Roles Outside of School by College District (Mean Scores)

		College District					
How would you rate the climate within your department/program for graduate students who are or have:	Overall	Biological	Physical	Mathematics			
Mental Health Condition	3.42	3.08	3.81	<u>3.16</u>			
Physical Disability	3.55	3.03	3.90	<u>3.65</u>			
Learning Disability	3.43	3.10	3.82	<u>3.05</u>			
Parents/Guardians of Dependent Children	3.60	<u>3.37</u>	3.74	3.69			
Providing Care for Adults who are Disabled and/or Elderly	3.68	<u>3.21</u>	4.00	<u>3.67</u>			
Serviced/Serving in the Military	3.82	<u>3.60</u>	3.97	<u>3.73</u>			

The mean scores are based on a five-point scale where 1 refers to a very negative climate and 5 refers to a very positive climate. With the midpoint of the scale being 3, everything above it is considered a positive climate and everything below it is considered a negative climate. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very negative climate or very positive climate).

In addition, respondents were asked about how welcoming their department/program was and their sense of belonging (Table 2.7a). Over 50% of the respondents agreed with all the statements, with six of the nine statements having over 70% of the graduate students --agreeing. The statements with the highest agreement were "I am treated equally compared to other undergraduate students" (78.2%) received the highest percent of somewhat and strongly agree responses followed by "I feel safe (including physical, mental, and emotional safety)." (75.7%), and "I am treated as an individual rather than as a representative of a racial, ethnic, cultural, national origin, or gender group." (75.4%). The areas with the highest percent of strongly to somewhat disagree responses were "People take time to welcome new students." (20.0%) and "My personal identities are valued in the classroom." (19.1%).

Table 2.7a: Attitudes about Welcoming and Belonging Within Department/Program

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Please indicate to what extent you agree or disagree with each of the following statements related to	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
welcoming and belonging within your department/ program.	1	2	3	4	5	N	Mean	Std. Dev
People take time to welcome new students.	6.1%	13.9%	6.7%	33.9%	39.4%	180	3.87	1.248
People work closely together.	6.5%	10.9%	12.0%	37.5%	33.2%	184	3.80	1.200
People create a sense of belonging for others.	4.4%	11.5%	14.8%	41.0%	28.4%	183	3.78	1.114
I am treated as an individual rather than as a representative of a racial, ethnic, cultural, national origin, or gender group.	3.4%	10.6%	10.6%	26.8%	48.6%	179	4.07	1.149
My personal identities are valued in the classroom.	6.7%	12.4%	23.6%	27.0%	30.3%	178	3.62	1.226
Faculty negatively prejudge me. (reverse coding) *	43.0%	26.3%	16.8%	8.9%	5.0%	179	2.07	1.188
I feel a sense of belonging.	4.4%	13.1%	11.5%	38.8%	32.2%	183	3.81	1.152
I am treated equally compared to other graduate students.	6.0%	7.1%	8.7%	29.0%	49.2%	183	4.08	1.185
I feel safe (including physical, mental, and emotional safety).	4.9%	8.1%	11.4%	24.9%	50.8%	185	4.09	1.176

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, for most items, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable). The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

In terms of demographic characteristic differences there were differences across the statements with women and those with disabilities being less likely to agree than their counterparts for all the statements (Table 2.7b). Members of the LGBTQIA2S+ community were less likely to agree with five of the nine statements. Though race/ethnicity did appear to play a role in understanding welcoming and belonging, there is not a clear pattern.

<sup>\*</sup> The above does not hold true for "Faculty negatively prejudge me" which is reverse coded. For this statement, because it is phrased in a negative form, an agree response is unfavorable towards welcoming/belonging and a disagree response is favorable.

Table 2.7b: Attitudes about Welcoming and Belonging Within Department/Program by Demographic Characteristics (Mean Scores)

		Gender Identity			tation	Rad	ce/Ethnici	Disability		
Please indicate to what extent you agree or disagree with each of the following statements related to welcoming and belonging within your department/program.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	ON
People take time to welcome new students.	3.85	4.10	3.64	3.83	3.79	3.80	3.33	3.96	3.52	4.16
People work closely together.	3.84	3.97	3.74	3.85	<u>3.70</u>	<u>3.90</u>	4.33	3.71	3.41	4.05
People create a sense of belonging for others.	3.81	4.02	<u>3.63</u>	3.80	3.72	4.10	3.11	3.80	3.40	4.07
I am treated as an individual rather than as a representative of a racial, ethnic, cultural, national origin, or gender group.	4.23	4.41	4.08	4.22	4.12	4.00	3.44	4.38	3.93	4.37
My personal identities are valued in the classroom.	3.67	3.78	<u>3.58</u>	3.79	3.35	3.90	3.56	3.43	3.21	3.89
Faculty negatively prejudge me. (reverse coding) *	1.93	1.70	2.12	1.94	2.05	2.20	2.44	2.08	2.39	1.57
I feel a sense of belonging.	3.87	4.15	3.62	3.81	3.86	4.50	3.33	<u>3.78</u>	3.50	4.08
I am treated equally compared to other graduate students.	4.20	4.33	4.09	4.18	4.05	4.10	4.00	4.08	<u>3.75</u>	4.42
I feel safe (including physical, mental, and emotional safety).	4.12	4.38	3.89	4.13	4.14	4.00	<u>3.67</u>	4.09	<u>3.78</u>	4.46

Students who have been at MSU for more than two years were less likely to agree to all but one statement (Table 2.7c). Master's students reported lower mean scores in people taking time to welcome new students, people create a sense of belonging, being treated equally and feeling safe. Doctoral students reported lower mean scores in people working closely together, being treated as an individual, and having their identity valued. They also reported a higher mean score for feeling faculty were negatively prejudiced again them. Domestic students were less likely to agree with six of the statements and international students were less likely to agree with two.

<sup>\*</sup>The above does not hold true for "Faculty negatively prejudge me" which is reverse coded. For this statement, because it is phrased in a negative form, an agree response is unfavorable towards welcoming/belonging and a disagree response is favorable.

Table 2.7c: Attitudes about Welcoming and Belonging Within Department/Program by Student Characteristics (Mean Scores)

		Years at MSU		Deg	ree	International Status	
Please indicate to what extent you agree or disagree with each of the following statements related to welcoming and belonging within your department/program.	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No
People take time to welcome new students.	3.86	3.96	<u>3.75</u>	<u>3.59</u>	3.88	3.81	3.91
People work closely together.	3.84	4.09	<u>3.51</u>	4.33	<u>3.76</u>	3.96	<u>3.76</u>
People create a sense of belonging for others.	3.79	3.97	<u>3.55</u>	<u>3.56</u>	3.79	3.83	3.77
I am treated as an individual rather than as a representative of a racial, ethnic, cultural, national origin, or gender group.	4.10	4.11	4.07	4.24	4.07	<u>4.04</u>	4.18
My personal identities are valued in the classroom.	3.65	3.79	3.48	3.94	3.61	3.99	3.44
Faculty negatively prejudge me. (reverse coded) *	2.04	1.81	2.34	1.94	2.07	1.79	2.16
I feel a sense of belonging.	3.84	4.02	<u>3.60</u>	3.89	3.82	3.93	<u>3.80</u>
I am treated equally compared to other graduate students.	4.12	4.23	<u>3.96</u>	<u>3.83</u>	4.13	4.29	<u>4.05</u>
I feel safe (including physical, mental, and emotional safety).	4.10	4.23	<u>3.92</u>	<u>3.89</u>	4.12	4.30	<u>4.03</u>

Biological Science graduate students reported lower mean scores for five items compared to those in the Physical Sciences (Table 2.7d). Those in Mathematics reported lower mean scores for all items compared to those in the Physical Sciences.

<sup>\*</sup> The above does not hold true for "Faculty negatively prejudge me" which is reverse coded. For this statement, because it is phrased in a negative form, an agree response is unfavorable towards welcoming/belonging and a disagree response is favorable.

Table 2.7d: Attitudes about Welcoming and Belonging Within Department/Program by College District (Mean Scores)

	College District							
Please indicate to what extent you agree or disagree with each of the following statements related to welcoming and belonging within your department/program.	Overall	Biological	Physical	Mathematics				
People take time to welcome new students.	3.88	<u>3.57</u>	4.20	<u>3.83</u>				
People work closely together.	3.75	3.44	4.10	<u>3.59</u>				
People create a sense of belonging for others.	3.74	<u>3.51</u>	4.03	<u>3.59</u>				
I am treated as an individual rather than as a representative of a racial, ethnic, cultural, national origin, or gender group.	4.07	4.08	4.12	3.93				
My personal identities are valued in the classroom.	3.58	3.60	3.69	<u>3.31</u>				
Faculty negatively prejudge me. (reverse coded) *	2.07	2.05	2.02	2.25				
I feel a sense of belonging.	3.83	3.81	3.93	<u>3.62</u>				
I am treated equally compared to other graduate students.	4.08	4.15	4.19	3.66				
I feel safe (including physical, mental, and emotional safety).	4.08	<u>3.95</u>	4.32	<u>3.76</u>				

Respondents were also asked about their values and relationships within their department/program (Table 2.8a). These questions were not asked about the college at large. For all 16 statements, over half of the respondents said that they at least somewhat agreed with the statements with half of the statements having over 75% of the respondents at least somewhat agreeing. "I am treated with respect by other students." (91.4%) had the highest level of agreement with "I am treated with respect by program/college staff." (87.3%), "I am treated with respect by advisor" (86.4%), and "I am treated with respect by faculty." (85.7%) receiving the highest levels of agreement. In terms of higher levels of disagreement, there were five statements that had over 20% of the respondents report at least somewhat disagree. The statements with the highest level of disagreement were "My department/program operates in a clear and transparent manner." (34.1%), "Faculty/leadership provide an explanation for major decisions." (27.3%), and "People care about my general satisfaction in my program." (23.0%).

Table 2.8a: Values and Relationships Within Department/Program

Please indicate to what extent you agree or disagree with the following statements concerning values and	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
relationships in your department/program.	1	2	3	4	5	N	Mean	Std. Dev
My department/program operates in a clear and transparent manner.	17.9%	16.2%	12.7%	26.0%	27.2%	173	3.28	1.469

<sup>\*</sup> The above does not hold true for "Faculty negatively prejudge me" which is reverse coded. For this statement, because it is phrased in a negative form, an agree response is unfavorable towards welcoming/belonging and a disagree response is favorable.

Instructors value my contributions in the classroom.	1.2%	4.2%	12.5%	31.5%	50.6%	168	4.26	.917
Other students value my contributions in the classroom.	0.6%	5.4%	13.7%	35.1%	45.2%	168	4.19	.909
People care about my general satisfaction in my program.	9.2%	13.8%	15.5%	30.5%	31.0%	174	3.60	1.303
I can voice my opinions openly.	5.7%	9.8%	12.6%	37.9%	33.9%	174	3.84	1.165
People listen to me even when my views are dissimilar.	4.2%	11.5%	17.0%	38.2%	29.1%	165	3.76	1.120
Faculty care about my personal well-being.	8.0%	4.6%	10.3%	38.9%	38.3%	175	3.95	1.181
Advisors care about my personal wellbeing.	5.9%	7.1%	4.7%	25.4%	56.8%	169	4.20	1.183
My department/program clearly communicates program goals, changes, and important milestones.	12.8%	9.9%	13.4%	30.2%	33.7%	172	3.62	1.373
Faculty/leadership make major decisions with input from graduate students.	11.5%	10.9%	17.8%	29.3%	30.5%	174	3.56	1.332
Faculty/leadership provide an explanation for major decisions.	11.0%	16.3%	14.5%	32.0%	26.2%	172	3.46	1.331
I am treated with respect by faculty.	3.4%	5.1%	5.7%	37.1%	48.6%	175	4.22	1.007
I am treated with respect by my advisors.	6.5%	4.1%	3.0%	19.5%	66.9%	169	4.36	1.152
I am treated with respect by other students.	1.1%	2.9%	4.6%	27.4%	64.0%	175	4.50	.809
I am treated with respect by program/college staff.	2.9%	5.2%	4.6%	24.3%	63.0%	173	4.39	.998
I have access to leadership when I have concerns/ problems.	6.5%	8.8%	10.6%	34.7%	39.4%	170	3.92	1.199

Table 2.8b reports the demographic characteristic breakdown for these statements. Women reported lower levels of agreement than their men counterparts for eleven of the 16 statements, as did those in the LGBTQIA2S+ community. LatinX students had lower levels of agreement on four of the 16 statements, Underrepresented students were less likely to report higher levels of agreement for eleven of the statements and White respondents were less likely to agree for ten of the statements. Those with disabilities reported lower levels of agreement for all but one of the statements compared to those without disabilities.

Table 2.8b: Values and Relationships Within the Department/Program by Demographic Characteristics (Mean Scores)

Scoresy		Gender	Identity		xual itation	Rad	ce/Ethnici	ity	Disability	
Please indicate to what extent you agree or disagree with the following statements concerning values and relationships in your department/program.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
My department/program operates in a clear and transparent manner.	3.26	3.57	2.99	3.48	2.63	3.70	2.89	2.81	2.72	3.67
Instructors value my contributions in the classroom.	4.31	4.42	4.22	4.34	4.05	4.20	3.56	4.25	4.00	4.44
Other students value my contributions in the classroom.	4.20	4.27	4.15	4.15	4.13	4.10	4.00	4.29	4.13	4.20
People care about my general satisfaction in my program.	3.66	3.79	<u>3.54</u>	3.71	<u>3.40</u>	3.70	3.33	3.45	<u>3.16</u>	3.87
I can voice my opinions openly.	3.88	4.00	<u>3.77</u>	3.89	<u>3.71</u>	4.10	4.00	<u>3.60</u>	<u>3.72</u>	3.99
People listen to me even when my views are dissimilar.	3.80	3.87	<u>3.75</u>	3.87	3.53	3.89	3.88	<u>3.55</u>	3.41	4.06
Faculty care about my personal wellbeing.	3.96	4.29	3.68	4.10	3.64	3.90	3.33	3.85	<u>3.56</u>	4.26
Advisors care about my personal wellbeing.	4.26	4.26	4.26	4.22	4.20	<u>3.56</u>	3.89	4.23	3.80	4.52
My department/program clearly communicates program goals, changes, and important milestones.	3.62	3.94	3.36	3.81	<u>2.95</u>	3.50	3.44	3.38	3.07	3.93
Faculty/leadership make major decisions with input from graduate students.	3.55	3.78	<u>3.36</u>	3.65	<u>3.45</u>	3.60	<u>3.44</u>	3.28	3.23	3.85
Faculty/leadership provide an explanation for major decisions.	3.41	3.52	3.31	3.57	3.05	3.56	3.44	3.13	2.98	3.73
I am treated with respect by faculty.	4.26	4.41	4.12	4.37	3.83	4.40	3.89	<u>4.11</u>	3.88	4.46
I am treated with respect by my advisors.	4.44	4.43	4.46	4.42	<u>4.25</u>	4.00	4.33	4.34	<u>3.96</u>	4.73
I am treated with respect by other students.	4.55	4.52	4.58	4.51	4.48	3.90	4.56	4.64	4.28	4.64
I am treated with respect by program/college staff.	4.45	4.51	4.40	4.45	4.22	4.40	4.44	4.25	4.30	4.41
I have access to leadership when I have concerns/ problems.	3.95	4.07	<u>3.86</u>	3.99	<u>3.71</u>	4.30	<u>4.00</u>	3.73	3.59	4.16

When looking at student characteristics, those who had been at MSU for more than two years reported lower levels of agreement for all but three of the 16 of the statements (Table 2.8c). Master's students were less likely to

agree with twelve of the statement compared to doctoral students. Domestic students were less likely to agree than their counterparts for all but two of the statements.

Table 2.8c: Values and Relationships Within the Department/Program by Student Characteristics (Mean Scores)

		Years a	at MSU	Deg	ree		ational atus
Please indicate to what extent you agree or disagree with the following statements concerning values and relationships in your department/program.	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No
My department/program operates in a clear and transparent manner.	3.27	3.66	2.77	3.12	3.26	3.88	<u>2.90</u>
Instructors value my contributions in the classroom.	4.27	4.35	4.14	<u>4.17</u>	4.28	4.47	<u>4.16</u>
Other students value my contributions in the classroom.	4.19	4.21	4.17	4.06	4.20	4.17	4.22
People care about my general satisfaction in my program.	3.61	3.91	3.22	<u>3.50</u>	3.62	3.94	<u>3.46</u>
I can voice my opinions openly.	3.84	4.02	3.60	<u>3.72</u>	3.86	4.18	<u>3.69</u>
People listen to me even when my views are dissimilar.	3.76	3.93	3.54	<u>3.41</u>	3.80	4.03	<u>3.63</u>
Faculty care about my personal well-being.	3.94	4.18	<u>3.63</u>	3.83	3.95	4.26	<u>3.79</u>
Advisors care about my personal well-being.	4.20	4.34	4.03	<u>3.44</u>	4.29	4.39	<u>4.13</u>
My department/program clearly communicates program goals, changes, and important milestones.	3.62	3.91	3.25	3.59	3.61	4.10	3.37
Faculty/leadership make major decisions with input from graduate students.	3.58	3.84	3.25	3.41	3.59	4.02	3.34
Faculty/leadership provide an explanation for major decisions.	3.44	3.79	3.00	3.47	3.44	3.92	3.17
I am treated with respect by faculty.	4.23	4.49	3.89	4.22	4.23	4.45	4.12
I am treated with respect by my advisors.	4.38	4.51	4.22	<u>3.76</u>	4.45	4.56	4.28
I am treated with respect by other students.	4.52	4.56	4.48	4.56	4.52	4.52	4.56
I am treated with respect by program/college staff.	4.40	4.44	4.36	3.94	4.46	4.61	4.30
I have access to leadership when I have concerns/ problems.	3.91	4.06	<u>3.72</u>	3.78	3.92	4.13	3.82

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable). The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

Physical Sciences students only had one category (treated with respect by other students) in which they reported a lower level of agreement compared to the highest mean level of agreement. Biological Sciences students reported lower levels of agreement for nine of the statements and Mathematics reported lower levels of agreement for all but one statement (other students value my contributions in the classroom).

Table 2.8d: Values and Relationships Within the Department/Program by College District (Mean Scores)

		Coll	ege Disti	ricts
Please indicate to what extent you agree or disagree with the following statements concerning values and relationships in your department/program.	Overall	Biological	Physical	Mathematics
My department/program operates in a clear and transparent manner.	3.21	<u>2.92</u>	3.70	<u>2.76</u>
Instructors value my contributions in the classroom.	4.26	4.26	4.37	4.00
Other students value my contributions in the classroom.	4.15	4.19	4.13	4.14
People care about my general satisfaction in my program.	3.62	<u>3.50</u>	3.89	3.28
I can voice my opinions openly.	3.85	3.97	3.91	<u>3.45</u>
People listen to me even when my views are dissimilar.	3.75	3.79	3.85	<u>3.46</u>
Faculty care about my personal well-being.	3.92	<u>3.85</u>	4.19	3.48
Advisors care about my personal well-being.	4.20	4.15	4.48	3.64
My department/program clearly communicates program goals, changes, and important milestones.	3.60	3.27	4.13	3.14
Faculty/leadership make major decisions with input from graduate students.	3.57	3.49	3.84	3.14
Faculty/leadership provide an explanation for major decisions.	3.42	3.08	3.95	2.97
I am treated with respect by faculty.	4.23	4.19	4.44	3.86
I am treated with respect by my advisors.	4.35	<u>4.31</u>	4.70	<u>3.58</u>
I am treated with respect by other students.	4.52	4.60	4.48	<u>4.45</u>
I am treated with respect by program/college staff.	4.42	4.44	4.44	<u>4.34</u>
I have access to leadership when I have concerns/ problems.	3.87	3.82	4.07	<u>3.57</u>

## DIVERSITY WITHIN THE COLLEGE/DEPARTMENT/PROGRAM

Respondents were asked a series of questions about faculty and student diversity within the college (Table 2.9a). The first two statements had a little more than 50 percent of the respondents at least somewhat agreeing with the statements. Of more concern is that over one-third of the respondents disagreed with two of the statement – "Within the college, I am satisfied with the level of faculty diversity." (36.9%) and "There are enough faculty I identify with." (36.6%) The last two statements referred to the level of diversity of women faculty and faculty of color and were asked in a negative form (too few). The relatively high percentage of graduate students that agreed with the statements suggests a potential problem with 61.8% of the students stating that there were too few faculty of color and 48.4% agreeing that there were too few women faculty members.

Table 2.9a: Faculty Diversity Within the College

Now we would like you to think about the faculty in the College of Natural Science. Please indicate	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
the extent to which you agree or disagree with each of the following statements.	1	2	3	4	5	N	Mean	Std. Dev
The college has demonstrated a commitment to hiring diverse faculty.	6.5%	14.7%	26.6%	31.0%	21.2%	184	3.46	1.168
There are enough faculty I identify with.	19.4%	17.2%	11.3%	28.5%	23.7%	186	3.20	1.466
Within the college, I am satisfied with the level of faculty diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	18.2%	18.7%	19.3%	26.2%	17.6%	187	3.06	1.374
There are too few faculty of color. (reverse coded) *	8.1%	5.9%	24.2%	30.1%	31.7%	186	3.72	1.203
There are too few women faculty. (reverse coded) *	7.0%	12.4%	32.3%	24.7%	23.7%	186	3.46	1.181

Women, members of the LGBTQIA2S+ community, LatinX students and those with disabilities were less likely to agree with all three of the first statements (Table 2.9b). Underrepresented students were less likely to agree that the college had demonstrated a commitment and that there were enough faculty that they identified with. White students were less likely to agree that they were satisfied with the level of diversity within the college. In terms of the last two statements, women, members of the LGBTQIA2S+ community, LatinX students and students with disabilities were more likely to agree with them. White students were also more likely to agree that there were too few faculty of color.

<sup>\*</sup> The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

Table 2.9b: Faculty Diversity Within the College by Demographic Characteristics (Mean Scores)

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		Gender Identity		Sexual Orientation		Ra	ce/Ethnic	Disability		
Now we would like you to think about the faculty in the College of Natural Science. Please indicate the extent to which you agree or disagree with each of the following statements.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
The college has demonstrated a commitment to hiring diverse faculty.	3.45	3.67	3.28	3.63	3.07	2.70	2.60	3.44	3.27	3.65
There are enough faculty I identify with.	3.26	3.75	2.83	3.42	2.84	<u>1.80</u>	2.70	3.51	2.83	3.66
Within the college, I am satisfied with the level of faculty diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	3.02	3.43	<u>2.68</u>	3.24	<u>2.53</u>	2.40	3.20	<u>2.80</u>	<u>2.59</u>	3.48
There are too few faculty of color. (reverse coded) *	3.77	3.53	3.97	3.55	4.19	4.10	3.90	4.05	4.07	3.50
There are too few women faculty. (reverse coded) *	3.52	3.31	3.69	3.45	3.60	4.20	3.60	3.67	3.59	3.29

Students who were at MSU for more than two years were less likely to agree that the first three statements (Table 2.9c). They were also more likely to agree that there were too few faculty of color and women faculty members.

Doctoral students were less likely to agree with the first three statements as well as more likely to agree that there were too few faculty of color and women faculty members.

Those who were not international students were less likely to agree that the college had demonstrated a commitment to hire diverse faculty and that they were satisfied with the level of diversity within the college's faculty. They were also more likely to agree that there are too few faculty of color and women faculty members.

<sup>\*</sup> The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

Table 2.9c: Faculty Diversity Within the College by Student Characteristics (Mean Scores)

		Years at M		De	Degree		ational tus
Now we would like you to think about the faculty in the College of Natural Science. Please indicate the extent to which you agree or disagree with each of the following statements.	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No
The college has demonstrated a commitment to hiring diverse faculty.	3.49	3.77	3.12	4.00	3.41	3.81	<u>3.28</u>
There are enough faculty I identify with.	3.23	3.36	<u>3.05</u>	3.53	<u>3.17</u>	3.23	3.25
Within the college, I am satisfied with the level of faculty diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	3.09	3.46	2.60	4.11	<u>2.96</u>	3.59	<u>2.79</u>
There are too few faculty of color. (reverse coded) *	3.70	3.45	4.03	3.11	3.78	3.20	4.04
There are too few women faculty. (reverse coded) *	3.44	3.30	3.63	3.11	3.49	3.03	3.73

Biological Sciences and Mathematics students were less likely to agree that the college had demonstrated a commitment to hiring diverse faculty (Table 2.9d). Biological Sciences students were also less likely to agree that they were satisfied with the level of diversity within the college and were more likely to agree that there were too few faculty of color. Physical Sciences students were more likely to agree that there were too few women faculty members.

<sup>\*</sup> The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

Table 2.9d: Faculty Diversity Within the College by College District (Mean Scores)

		College Districts				
Now we would like you to think about the faculty in the College of Natural Science. Please indicate the extent to which you agree or disagree with each of the following statements.	Overall	Biological	Physical	Mathematics		
The college has demonstrated a commitment to hiring diverse faculty.	3.46	3.21	3.79	3.23		
There are enough faculty I identify with.	3.25	3.21	3.28	3.27		
Within the college, I am satisfied with the level of faculty diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	3.01	<u>2.55</u>	3.32	3.27		
There are too few faculty of color. (reverse coded) *	3.74	4.13	3.50	3.47		
There are too few women faculty. (reverse coded) *	3.48	3.44	3.57	3.37		

Students were then presented four of the above statements but related to the diversity of the graduate student population within the college (Table 2.10a). Over 50 percent of the students agreed that the college was committed to recruiting students from diverse backgrounds (55.0%), but one-third of the students disagreed that they were satisfied with the level of graduate student diversity (33.5%). In terms of the actual diversity within the graduate student population, 47.6% agreed that there were too few graduate students of color. There appears to be less concern with the proportion of women graduate students with only 22.8% of the students agreed that there were too few women graduate students.

<sup>\*</sup> The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

Table 2.10a: Graduate Student Diversity Within the College

	Strongly Disagree	Somewhat Disagree	her Agree Disagree	Somewhat Agree	Strongly Agree			
Now we would like you to think about graduate students in the College of Natural Science. Please	ν Ω	Soi	Neither nor Dis	Soi	Stror			
indicate the extent to which you agree or disagree with each of the following statements.	1	2	3	4	5	N	Mean	Std. Dev
Has demonstrated a commitment to recruiting students from diverse backgrounds.	6.7%	11.7%	26.7%	30.8%	24.2%	120	3.54	1.173
I am satisfied with the level of graduate student diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	13.7%	19.8%	17.6%	21.4%	27.5%	131	3.29	1.411
There are too few graduate students of color. (reverse coded) *	7.8%	19.5%	25.0%	24.2%	23.4%	128	3.36	1.253
There are too few women graduate students. (reverse coded) *	17.9%	27.6%	31.7%	12.2%	10.6%	123	2.70	1.207

Women, members of the LGBTQIA2S+ community, LatinX students and students with disabilities were less likely to agree with the first two statements as they related to the graduate students in the college (Table 2.10b). White students were also less likely to agree that they were satisfied with the level of diversity of graduate students. Women, members of the LGBTQIA2S+ community, LatinX students, White students and students with disabilities were more likely to agree that there were too few graduate students of color and women graduate students within the college.

<sup>\*</sup> The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

Table 2.10b: Graduate Student Diversity Within the College by Demographic Characteristics (Mean Scores)

		Gender	Identity		kual Itation	Ra	ce/Ethnic	ity	Disal	oility
Now we would like you to think about graduate students in the College of Natural Science. Please indicate the extent to which you agree or disagree with each of the following statements.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
Has demonstrated a commitment to recruiting students from diverse backgrounds.	3.61	3.80	3.47	3.77	3.07	3.17	3.25	3.40	3.49	3.77
I am satisfied with the level of graduate student diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	3.30	3.49	<u>3.15</u>	3.43	<u>2.94</u>	2.14	3.38	<u>3.05</u>	<u>2.77</u>	3.67
There are too few graduate students of color. (reverse coded) *	3.40	3.08	3.63	3.27	3.75	3.83	3.29	3.78	3.73	3.20
There are too few women graduate students. (reverse coded) *	2.76	2.90	2.65	2.66	2.90	3.50	2.43	3.04	2.97	2.58

Students who had been at MSU for more than two years, doctoral students and domestic students were less likely to agree that the college was committed to recruiting a diverse student population and were less satisfied with the level of diversity amongst the student population (Table 2.10c). Those who were at MSU for more than two years, and domestic students were also more likely to agree that were too few women graduate students and graduate students of color. Doctoral students were more likely to agree that there were too few graduate students of color and master's students were likely to agree that there were too few women graduate students.

<sup>\*</sup> The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

Table 2.10c: Graduate Student Diversity Within the College by Student Characteristics (Mean Scores)

		Years a	at MSU	Deg	ree	Interna Sta	ational tus
Now we would like you to think about graduate students in the College of Natural Science. Please indicate the extent to which you agree or disagree with each of the following statements.	Overall	1-2 Years	More than 2	Masters	OHO	Yes	No
Has demonstrated a commitment to recruiting students from diverse backgrounds.	3.61	3.83	3.34	4.00	<u>3.53</u>	3.85	3.40
I am satisfied with the level of graduate student diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	3.32	3.64	2.95	3.88	3.22	3.80	2.99
There are too few graduate students of color.  (reverse coding) *	3.36	3.19	3.54	2.87	3.44	2.89	3.74
There are too few women graduate students.  (reverse coding) *	2.71	2.60	2.84	2.88	2.71	2.33	2.99

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for the first three statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

\* The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

Biological Sciences and Mathematics students were less likely to agree that the college demonstrated that they were committed to recruiting a diversity student body, that they were satisfied with the level of graduate student diversity within the college and were more likely to agree that there were too few graduate students of color (Table 2.10d). Physical Sciences students were more likely to agree that there were too few women graduate students.

Table 2.10d: Graduate Student Diversity Within the College by College District (Mean Scores)

		Co	ollege Dist	rict
Now we would like you to think about graduate students in the College of Natural Science. Please indicate the extent to which you agree or disagree with each of the following statements.	Overall	Biological	Physical	Mathematics
Has demonstrated a commitment to recruiting students from diverse backgrounds.	3.52	3.30	3.81	<u>3.56</u>
I am satisfied with the level of graduate student diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	3.25	<u>2.65</u>	3.90	<u>3.45</u>
There are too few graduate students of color. (reverse coding) *	3.43	3.93	2.86	3.14
There are too few women graduate students. (reverse coding) *	2.69	2.40	2.94	3.00

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for the first three statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

<sup>\*</sup> The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

Students were presented with the same four statements as they related to the diversity of the student population within their department/program (Table 2.11a). Graduate students seemed more positive about their departments/programs than with the college in general with 65.1% agreeing that their department/program "Has demonstrated a commitment to recruiting students from diverse backgrounds." and 54.8% agreed that they were satisfied with the diversity of graduate students within their department/program. Almost one-third disagreed that they were satisfied (32.8%). This level of dissatisfaction is also demonstrated with 48.9% agreeing that there were too few graduate students of color in their department/program and 28.1% agreeing that there were too few women.

Table 2.11a: Graduate Student Diversity Within Department/Program

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
Now we would like you to think about graduate students in your department/program. Please	<b>0</b> , L	Sc	Neit	S	Stro			
indicate the extent to which you agree or disagree with each of the following statements.	1	2	3	4	5	N	Mean	Std. Dev
Has demonstrated a commitment to recruiting students from diverse backgrounds.	7.7%	13.0%	14.2%	32.0%	33.1%	169	3.70	1.267
I am satisfied with the level of graduate student diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	15.3%	17.5%	12.4%	29.4%	25.4%	177	3.32	1.416
There are too few graduate students of color. (reverse coding) *	9.9%	23.3%	18.0%	23.3%	25.6%	172	3.31	1.340
There are too few women graduate students.  (reverse coding) *	18.4%	28.7%	24.7%	17.8%	10.3%	174	2.73	1.245

Women, members of the LGBTQIA2S+ community, White students and students with disabilities were less likely to agree with the first two statements (Table 2.11b). Underrepresented students were less likely to agree that their department/program had demonstrated a commitment to recruiting students from diverse backgrounds and LatinX students were less likely to be satisfied the level of graduate student diversity within their department/program. Women, members of the LGBTQIA2S+ community, LatinX and Underrepresented students, and students with disabilities were more likely to agree that there were too few graduate students of color within their department/program. Men, members of the LGBTQIA2S+ community, Underrepresented and Whites students, and students with disabilities were more likely to agree that there were too few women graduate students.

<sup>\*</sup> The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

Table 2.11b: Graduate Student Diversity Within Department/Program by Demographic Characteristics (Mean Scores)

	Gender Identity		Identity	Sexual Orientation		Race/Ethnicity			Disability	
Now we would like you to think about graduate students in your department/program. Please indicate the extent to which you agree or disagree with each of the following statements.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
Has demonstrated a commitment to recruiting students from diverse backgrounds.	3.78	4.05	<u>3.56</u>	4.11	3.00	4.10	3.44	<u>3.54</u>	3.49	4.04
I am satisfied with the level of graduate student diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	3.35	3.60	3.12	3.50	<u>2.90</u>	2.80	3.22	3.07	2.86	3.69
There are too few graduate students of color. (reverse coding) *	3.37	3.08	3.60	3.22	3.76	3.90	3.56	3.62	3.63	3.06
There are too few women graduate students. (reverse coding) *	2.75	2.97	2.57	2.68	2.90	2.70	3.00	2.93	2.80	2.59

Students who had been at MSU for more than two years and those that were not international students were less likely to agree that their department/program was committed to recruiting a diverse student population and were less satisfied with the level of diversity amongst the student population (Table 2.11c). Doctoral students were also less likely to agree that their department/program had demonstrated a commitment to recruit diverse graduate students. Those who had been at MSU for two or more years, doctoral students and students with disabilities were more likely to agree that there were too few graduate students of color. Master's students and students with disabilities were also more likely to agree that there were too few women graduate students.

<sup>\*</sup> The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

Table 2.11c: Graduate Student Diversity Within Department/Program by Student Characteristics (Mean Scores)

		Years a	at MSU	Deg	ree	Interna Sta	ational tus
Now we would like you to think about graduate students in your department/program. Please indicate the extent to which you agree or disagree with each of the following statements.	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No
Has demonstrated a commitment to recruiting students from diverse backgrounds.	3.76	3.98	3.49	3.86	3.74	3.98	<u>3.59</u>
I am satisfied with the level of graduate student diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	3.36	3.62	3.04	3.83	3.30	3.84	<u>3.05</u>
There are too few graduate students of color.  (reverse coding) *	3.30	3.08	3.56	2.82	3.37	2.82	3.64
There are too few women graduate students.  (reverse coding) *	2.73	2.71	2.77	3.29	2.68	2.48	2.89

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for the first three statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

\* The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

Those in the Biological Sciences and Mathematics were less likely to agree that their department/program was committed to recruiting graduate students from diverse backgrounds and were also less likely to be satisfied with the level of diversity in their department (Table 2.11d). They were also more likely to agree that there were two few graduate students of color within their department/program. Physical Sciences and Mathematics students were more likely to agree that there were too few women graduate students in their department/program.

Table 2.11d: Graduate Student Diversity Within Department/Program by College District (Mean Scores)

		Co	llege Dist	ricts
Now we would like you to think about graduate students in your department/program. Please indicate the extent to which you agree or disagree with each of the following statements.	Overall	Biological	Physical	Mathematics
Has demonstrated a commitment to recruiting students from diverse backgrounds.	3.71	3.47	4.11	3.30
I am satisfied with the level of graduate student diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	3.29	<u>2.81</u>	3.84	<u>3.14</u>
There are too few graduate students of color. (reverse coding) *	3.38	3.90	2.97	3.14
There are too few women graduate students. (reverse coding) *	2.71	2.16	2.95	3.43

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for the first three statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

<sup>\*</sup> The last two statements are reverse coded which means that an agree statement is unfavorable in terms of faculty diversity and a disagree statement is favorable.

## LEARNING OPPORTUNITIES

Students were asked several questions about access to learning opportunities within the college (Table 2.12a). More than two-thirds of the graduate students agreed with each of the seven statements. The statements with the highest level of agreement were "I am supported to participate in learning and educational opportunities that could advance my career goals." (79.6%), "I have equal access to resources to support professional learning." (78.0%) and "I have access to informal and formal mentoring opportunities." (76.7%). Only one had over 20 percent of the students disagreeing with the statements – "I have mentoring relationships available to me that are relevant to my career goals." (20.6%). "I have faculty role models." (16.7%), "Compared to other students, I have similar opportunities for success" (15.2%), and "I have learning opportunities available to me that are relevant to my career goals" (15.1%) all had at least 15 percent of the respondents disagree with the statement.

Table 2.12a: Learning Opportunities Within the College

Please indicate to what extent you agree or	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
disagree with each of the following statements as they relate to learning opportunities within your	1	2	3	4	Str			Std.
major/program.	- 1	2	3	*	•	N	Mean	Dev
I have learning opportunities available to me that are relevant to my career goals.	4.3%	10.8%	9.7%	33.0%	42.2%	185	3.98	1.161
I have equal access to resources to support professional learning.	3.8%	5.4%	12.9%	33.9%	44.1%	186	4.09	1.059
I am supported to participate in learning and educational opportunities that could advance my career goals.	5.4%	6.5%	8.6%	34.4%	45.2%	186	4.08	1.132
I have access to informal and formal mentoring opportunities.	4.9%	9.2%	9.2%	29.7%	47.0%	185	4.05	1.172
I have mentoring relationships available to me that are relevant to my career goals.	7.6%	13.0%	10.8%	25.4%	43.2%	185	3.84	1.313
Compared to other students, I have similar opportunities for success.	3.8%	11.4%	12.4%	28.6%	43.8%	185	3.97	1.168
I have faculty role models.	7.0%	9.7%	12.4%	25.9%	44.9%	185	3.92	1.264

Women were less likely to agree on having learning opportunities relevant to career goals, equal access to resources and to mentoring opportunities relevant to their career and that they had similar opportunities for success compared to other students. Men were less likely to agree that they had faculty role models (Table 2.12b). Members of the LGBTQIA2S+ community were less likely to agree that they had learning opportunities relevant to their career goals, support to participate in opportunities to advance their career goals, having informal/formal mentoring opportunities, and having mentoring relationships available to them compared to their counterparts. LatinX and Underrepresented students and students with disabilities were less likely to agree with all the statements related to access to learning opportunities.

Table 2.12b: Learning Opportunities Within the College by Demographic Characteristics (Mean Scores)

		Gender	Identity		kual Itation	Ra	ce/Ethnic	ity	Disal	bility
Please indicate to what extent you agree or disagree with each of the following statements as they relate to learning opportunities within your major/program.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
I have learning opportunities available to me that are relevant to my career goals.	3.99	4.09	3.91	4.03	3.81	3.10	3.80	4.00	3.58	4.29
I have equal access to resources to support professional learning.	4.06	4.14	4.00	4.07	4.14	3.80	3.90	4.13	3.93	4.33
I am supported to participate in learning and educational opportunities that could advance my career goals.	4.11	4.15	4.08	4.18	<u>3.95</u>	3.40	3.80	4.12	3.83	4.31
I have access to informal and formal mentoring opportunities.	4.09	4.08	4.09	4.12	3.88	3.70	3.80	4.07	3.75	4.32
I have mentoring relationships available to me that are relevant to my career goals.	3.92	3.97	3.88	3.95	<u>3.70</u>	3.30	<u>3.30</u>	3.93	3.53	4.15
Compared to other students, I have similar opportunities for success.	4.06	4.14	3.99	3.98	4.05	3.50	<u>3.90</u>	4.13	3.80	4.22
I have faculty role models.	3.97	3.88	4.05	3.90	3.95	3.90	3.33	4.09	3.66	4.24

Students who had been at MSU for more than two years were less likely to agree that they had learning opportunities related to their career goals, had equal access to resources to support professional learning, had access to informal and formal mentoring opportunities, and had similar opportunities for success compared to other students (Table 2.12c). Master's students were less likely to agree that they were supported to participate in learning /education opportunities to advance their career goals, having access to informal/formal mentoring opportunities, having mentoring relationships available to them relevant to their career goals, to have equal access to opportunities for success and to having faculty role models. International students were less likely to have learning opportunities related to their career goals, equal access to resources, supported to participate in opportunities that could advance their career, access to informal/formal mentoring opportunities, and having mentoring relationships available relevant to their career goals.

Table 2.12c: Learning Opportunities Within the College by Student Characteristics (Mean Scores)

		Years a	at MSU	De	gree	Internatio	nal Status
Please indicate to what extent you agree or disagree with each of the following statements as they relate to learning opportunities within your major/program.	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No
I have learning opportunities available to me that are relevant to my career goals.	3.98	4.22	3.65	3.95	3.98	4.14	3.89
I have equal access to resources to support professional learning.	4.10	4.20	3.97	4.11	4.10	4.20	<u>4.06</u>
I am supported to participate in learning and educational opportunities that could advance my career goals.	4.09	4.19	<u>3.95</u>	<u>3.79</u>	4.12	4.24	4.00
I have access to informal and formal mentoring opportunities.	4.05	4.22	3.82	3.68	4.08	4.19	<u>4.01</u>
I have mentoring relationships available to me that are relevant to my career goals.	3.85	4.07	<u>3.55</u>	3.47	3.90	4.04	<u>3.78</u>
Compared to other students, I have similar opportunities for success.	3.99	4.07	3.88	3.74	4.01	3.97	4.04
I have faculty role models.	3.93	4.12	<u>3.67</u>	<u>3.63</u>	3.94	3.93	3.96

Students in the Biological Sciences and in Mathematics were less likely to agree with all the learning opportunities compared to those in the Physical Sciences (Table 2.12d).

Table 2.12d: Learning Opportunities Within the College by College District (Mean Scores)

		College District					
Please indicate to what extent you agree or disagree with each of the following statements as they relate to learning opportunities within your major/program.	Overall	Biological	Physical	Mathematics			
I have learning opportunities available to me that are relevant to my career goals.	3.96	3.78	4.33	3.53			
I have equal access to resources to support professional learning.	4.06	<u>3.94</u>	4.31	<u>3.73</u>			
I am supported to participate in learning and educational opportunities that could advance my career goals.	4.07	4.05	4.31	3.57			
I have access to informal and formal mentoring opportunities.	4.02	4.00	4.31	<u>3.40</u>			
I have mentoring relationships available to me that are relevant to my career goals.	3.85	3.67	4.30	3.23			
Compared to other students, I have similar opportunities for success.	3.99	<u>3.95</u>	4.22	<u>3.53</u>			
I have faculty role models.	3.91	3.95	4.01	<u>3.57</u>			

## INNOVATION SUPPORT

Respondents were asked about innovation opportunities and support within the college (Table 2.13a). All but three statements had over 60 percent agreement and four had over 75 percent agreement- "People here have interest and curiosity about new ideas and projects." (86.0%), "Faculty encourage collaboration across disciplines." (79.1%), "Faculty recognizes innovation." (77.6%) and "I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands." (77.5%). The statement "There is resistance to doing or trying something new." was phrased negatively and therefore the agreement categories are equivalent to the disagreement categories for the other statements. The statement with the highest level of "disagreement" is "There is resistance to doing or trying something new." (38.8%) followed by "Our announced visions and strategies inspire me." (23.1%), "We have an outward focus on impact, purpose, and solutions that helps to drive innovation." (15.7%) and "Faculty engage graduate students in work that extends beyond the status quo." (15.7%).

Table 2.13a: Innovation Support Within the College

able 2.13a. Illiovation Support With		-0-						
Please indicate to what extent you agree or disagree with each of the	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
following statements as they relate to innovation within the college.	1	2	3	4	5	N	Mean	Std. Dev
Our announced visions and strategies inspire me.	8.5%	14.6%	30.0%	26.2%	20.8%	130	3.36	1.207
We have an outward focus on impact, purpose, and solutions that helps to drive innovation.	6.3%	9.4%	23.4%	39.1%	21.9%	128	3.61	1.117
I have sufficient discretion and freedom to use some of my time to explore new ideas and ways of doing things.	3.4%	8.6%	22.4%	28.4%	37.1%	116	3.87	1.115
I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands.	2.9%	8.8%	10.8%	25.5%	52.0%	102	4.15	1.112
Faculty support me in taking initiative and risks with new ventures or approaches in my work.	4.5%	6.3%	20.7%	29.7%	38.7%	111	3.92	1.121
There is resistance to doing or trying something new. (reverse coding) *	14.0%	24.8%	25.6%	22.5%	13.2%	129	2.96	1.253
Faculty recognizes innovation.	0.9%	5.2%	16.4%	44.0%	33.6%	116	4.04	.888
Faculty reward innovation.	6.2%	6.2%	26.5%	35.4%	25.7%	113	3.68	1.112
Faculty encourage collaboration across disciplines.	2.5%	7.5%	10.8%	30.8%	48.3%	120	4.15	1.050
Faculty engage graduate students in work that extends beyond the status quo.	4.6%	11.1%	25.0%	38.9%	20.4%	108	3.59	1.077
People here have interest and curiosity about new ideas and projects.	0.8%	3.9%	9.3%	40.3%	45.7%	129	4.26	.843

Women were less likely to agree with all but two of the statements (Table 2.13b). Members of the LGBTQIA2S+ community were less likely to agree with all but two of the statements compared to heterosexuals. LatinX students were less likely to agree with five of the statements and Underrepresented students were less likely to agree with nine of the statements and White students were less likely to agree with six of the statements. Students with disabilities were less likely to agree with all the statements.

<sup>\*</sup> The statement "There is resistance to doing or trying something new" is reverse coded which means that an agree statement is unfavorable in terms of innovation support and a disagree statement is favorable.

Table 2.13b: Innovation Support Within the College by Demographic Characteristics (Mean Scores)

		Gender	Identity		xual Itation	Rad	ce/Ethnici	ty	Disa	bility
Please indicate to what extent you agree or disagree with each of the following statements as they relate to innovation within the College	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
Our announced visions and strategies inspire me.	3.31	3.50	<u>3.16</u>	3.42	3.12	2.63	2.43	3.07	2.72	3.66
We have an outward focus on impact, purpose, and solutions that helps to drive innovation.	3.54	3.66	3.44	3.63	3.36	3.14	2.75	3.47	3.05	3.87
I have sufficient discretion and freedom to use some of my time to explore new ideas and ways of doing things.	3.92	3.95	3.91	3.89	<u>3.75</u>	<u>3.75</u>	4.13	3.87	3.71	4.00
I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands.	4.17	4.13	4.20	4.13	<u>3.95</u>	3.60	4.29	4.12	3.56	4.43
Faculty support me in taking initiative and risks with new ventures or approaches in my work.	3.94	4.13	<u>3.79</u>	3.96	<u>3.76</u>	4.29	3.29	3.70	3.50	4.28
There is resistance to doing or trying something new. (reverse coding) *	2.82	2.56	3.04	2.85	2.88	2.50	3.00	2.90	2.92	2.71
Faculty recognizes innovation.	4.05	4.32	3.87	4.12	<u>3.86</u>	4.00	<u>3.67</u>	<u>3.94</u>	3.83	4.24
Faculty reward innovation.	3.66	4.00	3.41	3.69	3.41	3.29	3.00	3.58	3.37	3.92
Faculty encourage collaboration across disciplines.	4.19	4.41	4.02	4.13	4.07	4.17	3.57	4.07	3.86	4.32
Faculty engage graduate students in work that extends beyond the status quo.	3.62	3.89	<u>3.39</u>	3.63	3.12	3.57	<u>3.33</u>	3.52	<u>3.15</u>	3.74
People here have interest and curiosity about new ideas and projects.	4.27	4.44	4.14	4.34	<u>4.03</u>	4.25	<u>3.57</u>	4.20	4.20	4.30

In terms of student characteristics, students who had been at MSU for more than two years were less likely to agree with all but one of the eleven statements (Table 2.13c). Master's students were less likely to agree that they could have conversations with their advisor about longer-term career goals and that faculty supported them in taking initiatives and risks. Doctoral students were less likely to agree with six of the statements. Domestic students were less likely to agree with all but two of the statements.

<sup>\*</sup> The statement "There is resistance to doing or trying something new" is reverse coded which means that an agree statement is unfavorable in terms of innovation support and a disagree statement is favorable.

Table 2.13c: Innovation Support Within the College by Student Characteristics (Mean Scores)

Table 2.13c: Innovation Support Within the C	conege by c	readent Cr		ico (ivicali	2001 037	Intown	ntional .
		Years a	at MSU	Deg	gree		ational tus
Please indicate to what extent you agree or disagree with each of the following statements as they relate to innovation within the college.	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No
Our announced visions and strategies inspire me.	3.36	3.68	2.94	3.71	3.31	3.96	2.99
We have an outward focus on impact, purpose, and solutions that helps to drive innovation.	3.60	3.90	<u>3.16</u>	3.94	<u>3.55</u>	4.07	<u>3.35</u>
I have sufficient discretion and freedom to use some of my time to explore new ideas and ways of doing things.	3.88	3.98	3.73	3.83	3.88	3.90	3.90
I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands.	4.14	4.25	<u>3.97</u>	<u>3.75</u>	4.21	4.24	4.07
Faculty support me in taking initiative and risks with new ventures or approaches in my work.	3.95	4.11	3.72	3.81	3.97	4.31	<u>3.73</u>
There is resistance to doing or trying something new. (reverse coding) *	2.93	2.89	2.98	3.12	2.89	2.93	2.88
Faculty recognizes innovation.	4.06	4.34	<u>3.62</u>	4.20	4.05	4.36	<u>3.91</u>
Faculty reward innovation.	3.68	3.94	<u>3.29</u>	4.21	<u>3.62</u>	4.00	<u>3.51</u>
Faculty encourage collaboration across disciplines.	4.19	4.24	4.11	4.18	4.20	4.43	4.04
Faculty engage graduate students in work that extends beyond the status quo.	3.59	3.75	<u>3.36</u>	3.56	3.60	3.77	<u>3.51</u>
People here have interest and curiosity about new ideas and projects.	4.27	4.39	4.08	4.38	4.26	4.50	4.14

Biological Science and Mathematics students were less likely to agree with all the statements compared to those in the Physical Sciences (Table 2.13d).

<sup>\*</sup> The statement "There is resistance to doing or trying something new" is reverse coded which means that an agree statement is unfavorable in terms of innovation support and a disagree statement is favorable.

Table 2.13d: Innovation Support Within the College by College District (Mean Scores)

		Co	llege Distri	cts
Please indicate to what extent you agree or disagree with each of the following statements as they relate to innovation within the college.	Overall	Biological	Physical	Mathematics
Our announced visions and strategies inspire me.	3.33	<u>3.06</u>	3.78	3.19
We have an outward focus on impact, purpose, and solutions that helps to drive innovation.	3.59	3.20	4.08	3.68
I have sufficient discretion and freedom to use some of my time to explore new ideas and ways of doing things.	3.83	3.87	4.00	3.50
I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands.	4.20	4.20	4.52	3.42
Faculty support me in taking initiative and risks with new ventures or approaches in my work.	3.95	3.91	4.34	3.29
There is resistance to doing or trying something new. (reverse coding) *	2.87	2.87	2.68	3.18
Faculty recognizes innovation.	4.02	<u>3.86</u>	4.29	<u>3.94</u>
Faculty reward innovation.	3.61	3.23	4.21	<u>3.53</u>
Faculty encourage collaboration across disciplines.	4.20	4.10	4.46	4.00
Faculty engage graduate students in work that extends beyond the status quo.	3.57	3.25	4.10	<u>3.56</u>
People here have interest and curiosity about new ideas and projects.	4.26	<u>4.25</u>	4.38	4.10

Respondents were also about innovation opportunities and support within their individual department/program (Table 2.14a). All but two statement had over 50 percent agreement Both "People here have interest and curiosity about new ideas and projects." (87.8%) and "I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands." (84.4%) had over 80 percent agreement. In addition, "Faculty recognizes innovation." (78.1%) and "Faculty encourage collaboration across disciplines." (77.7%) had over 75 percent agreement. The statement "There is resistance to doing or trying something new." was phrased negatively and therefore the agreement categories are equivalent to the disagreement categories for the other statements. The statement with the highest level of "disagreement" is "There is resistance to doing or trying something new" (34.6%) followed by "Our announced visions and strategies inspire me." (26.4%) and "We have an outward focus on impact, purpose, and solutions that helps to drive innovation." (21.0%).

Table 2.14a: Innovation Support Within Department/Program

Please indicate to what extent you agree or disagree with each of the following statements as they relate to innovation within your department/program.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	N	Mean	Std. Dev
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<sup>\*</sup> The statement "There is resistance to doing or trying something new" is reverse coded which means that an agree statement is unfavorable in terms of innovation support and a disagree statement is favorable.

	1							1
	1	2	3	4	5			
Our announced visions and strategies inspire me.	9.3%	16.8%	27.3%	29.2%	17.4%	161	3.29	1.206
We have an outward focus on impact, purpose, and solutions that helps to drive innovation.	7.4%	13.6%	22.8%	32.1%	24.1%	162	3.52	1.207
I have sufficient discretion and freedom to use some of my time to explore new ideas and ways of doing things.	7.5%	7.5%	13.3%	30.6%	41.0%	173	3.90	1.233
I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands.	5.4%	6.0%	4.2%	26.9%	57.5%	167	4.25	1.134
Faculty support me in taking initiative and risks with new ventures or approaches in my work.	4.7%	7.6%	15.3%	32.4%	40.0%	170	3.95	1.135
There is resistance to doing or trying something new. (reverse coding) *	14.6%	30.4%	20.5%	21.1%	13.5%	171	2.88	1.278
Faculty recognizes innovation.	2.4%	8.5%	10.9%	44.8%	33.3%	165	3.98	1.003
Faculty reward innovation.	6.7%	9.8%	20.2%	35.6%	27.6%	163	3.67	1.175
Faculty encourage collaboration across disciplines.	4.1%	9.4%	8.8%	25.9%	51.8%	170	4.12	1.161
Faculty engage graduate students in work that extends beyond the status quo.	5.6%	13.7%	18.6%	39.1%	23.0%	161	3.60	1.147
People here have interest and curiosity about new ideas and projects.	1.2%	3.5%	7.6%	34.9%	52.9%	172	4.35	.855

Women were less likely to agree with five of the statements and men were less likely to agree with one - sufficient discretion/freedom to use some of time to explore new ideas and ways of doing things (Table 2.14b). Members of the LGBTQIA2S+ community were less likely to agree with five of the eleven statements, with heterosexuals being less likely to agree with one – can have conversations with advisor about longer-term goals. LatinX students were less likely to agree with seven of the statements related to their department/program. Underrepresented students were less likely to agree with five of the statements and White students were less likely to agree with five of the statements. Students with disabilities were less likely to agree with all the statements.

<sup>\*</sup> The statement "There is resistance to doing or trying something new" is reverse coded which means that an agree statement is unfavorable in terms of innovation support and a disagree statement is favorable.

Table 2.14b: Innovation Support Within Department/Program by Demographic Characteristics (Mean Scores)

		Gen Iden			kual Itation	Ra	ce/Ethnic	ity	Disal	bility
Please indicate to what extent you agree or disagree with each of the following statements as they relate to innovation within your department/program.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
Our announced visions and strategies inspire me.	3.25	3.32	3.18	3.30	3.11	2.60	2.50	3.03	2.83	3.49
We have an outward focus on impact, purpose, and solutions that helps to drive innovation.	3.49	3.61	3.38	3.63	<u>3.19</u>	3.11	2.89	3.34	3.00	3.77
I have sufficient discretion and freedom to use some of my time to explore new ideas and ways of doing things.	3.96	3.89	4.03	3.92	4.00	3.50	4.11	<u>3.86</u>	<u>3.71</u>	4.09
I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands.	4.29	4.27	4.31	4.23	4.39	3.80	4.89	<u>4.31</u>	<u>4.11</u>	4.44
Faculty support me in taking initiative and risks with new ventures or approaches in my work.	3.97	3.92	4.01	3.97	4.00	4.00	<u>3.56</u>	<u>3.79</u>	<u>3.78</u>	4.22
There is resistance to doing or trying something new. (reverse coding) *	2.75	2.61	2.87	2.76	2.69	2.56	2.89	2.82	2.86	2.62
Faculty recognizes innovation.	4.02	4.05	3.99	4.05	4.00	<u>3.70</u>	3.89	3.95	3.77	4.16
Faculty reward innovation.	3.65	3.82	3.51	3.77	<u>3.46</u>	3.30	3.44	3.51	3.41	3.95
Faculty encourage collaboration across disciplines.	4.18	4.23	4.14	4.15	4.15	4.30	4.22	4.00	3.72	4.30
Faculty engage graduate students in work that extends beyond the status quo.	3.65	3.79	<u>3.52</u>	3.66	<u>3.43</u>	3.00	3.67	3.61	3.21	3.81
People here have interest and curiosity about new ideas and projects.	4.45	4.46	4.45	4.43	<u>4.29</u>	4.50	<u>4.22</u>	4.42	4.29	4.46

In terms of student characteristics, students who had been at MSU for more than two years were less likely to agree with all the statements (Table 2.14c). Master's students were less likely to agree with seven of the statement and doctoral students were less likely to agree with three. Domestic students were less likely to agree with eight of the eleven statements.

<sup>\*</sup> The statement "There is resistance to doing or trying something new" is reverse coded which means that an agree statement is unfavorable in terms of innovation support and a disagree statement is favorable.

Table 2.14c: Innovation Support Within Department/Program by Student Characteristics (Mean Scores)

		Years a	at MSU	Deg	ree		ational tus
Please indicate to what extent you agree or disagree with each of the following statements as they relate to innovation within your department/program.	Overall	1-2 Years	More than 2	Masters	ОНО	Yes	No
Our announced visions and strategies inspire me.	3.30	3.66	2.84	3.65	<u>3.25</u>	3.89	2.92
We have an outward focus on impact, purpose, and solutions that helps to drive innovation.	3.51	3.80	3.14	3.65	<u>3.50</u>	3.95	3.27
I have sufficient discretion and freedom to use some of my time to explore new ideas and ways of doing things.	3.90	3.99	3.78	3.44	3.95	4.12	3.82
I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands.	4.25	4.37	4.11	3.65	4.32	4.29	4.26
Faculty support me in taking initiative and risks with new ventures or approaches in my work.	3.98	4.09	3.83	3.35	4.04	4.39	3.77
There is resistance to doing or trying something new. (reverse coding) *	2.86	2.79	2.95	3.12	2.82	2.79	2.85
Faculty recognizes innovation.	4.00	4.17	<u>3.79</u>	<u>3.80</u>	4.03	4.27	<u>3.89</u>
Faculty reward innovation.	3.68	3.90	<u>3.42</u>	3.93	<u>3.67</u>	4.13	<u>3.46</u>
Faculty encourage collaboration across disciplines.	4.14	4.30	<u>3.93</u>	<u>3.94</u>	4.16	4.31	4.04
Faculty engage graduate students in work that extends beyond the status quo.	3.61	3.81	<u>3.37</u>	<u>3.47</u>	3.64	3.80	<u>3.54</u>
People here have interest and curiosity about new ideas and projects.	4.37	4.53	4.18	4.41	4.37	4.43	4.38

Those in the Biological Sciences were less likely to agree with eight of the statements and those in Mathematics were less likely to agree with all the statements compared to Physical Sciences students who were more likely to agree to all of them compared to the other two groups (Table 2.14d).

<sup>\*</sup> The statement "There is resistance to doing or trying something new" is reverse coded which means that an agree statement is unfavorable in terms of innovation support and a disagree statement is favorable.

Table 2.14d: Innovation Support Within Department/Program by College District (Mean Scores)

		Co	ollege Dist	rict
Please indicate to what extent you agree or disagree with each of the following statements as they relate to innovation within your department/program.	Overall	Biological	Physical	Mathematics
Our announced visions and strategies inspire me.	3.22	3.03	3.53	2.92
We have an outward focus on impact, purpose, and solutions that helps to drive innovation.	3.48	3.19	3.97	3.00
I have sufficient discretion and freedom to use some of my time to explore new ideas and ways of doing things.	3.85	3.86	4.02	3.44
I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands.	4.28	4.34	4.35	3.91
Faculty support me in taking initiative and risks with new ventures or approaches in my work.	3.95	4.03	4.10	3.38
There is resistance to doing or trying something new. (reverse coding) *	2.84	2.83	2.67	3.26
Faculty recognizes innovation.	3.95	3.93	4.19	<u>3.39</u>
Faculty reward innovation.	3.61	3.28	4.02	3.38
Faculty encourage collaboration across disciplines.	4.11	4.24	4.26	3.40
Faculty engage graduate students in work that extends beyond the status quo.	3.58	3.37	3.88	3.30
People here have interest and curiosity about new ideas and projects.	4.35	4.37	4.48	4.00

## **MENTORING**

Students were asked two sets of questions about mentorship within their department/program. First, they were asked about mentorship as related to four areas of resources/services that could be offered (Table 2.15a). Each area listed had at least 60 percent of the graduate students agreeing with the statement. "Communicating my research" (82.2%) had the highest level of agreement followed by "Career opportunities and pathways" (71.2%). Though there were relatively high levels of agreement, three of the four statements had over 20 percent of the graduate students disagreeing with the statement with "Professional networking" (26.2%) having over 25 percent disagreeing.

Table 2.15a: Mentoring Resources Within Department/Program

Please indicate to what extent you agree or disagree with each of the following statements as they relate to	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
mentorship within your								Std.
Department/Program.	1	2	3	4	5	N	Mean	Dev

<sup>\*</sup> The statement "There is resistance to doing or trying something new" is reverse coded which means that an agree statement is unfavorable in terms of innovation support and a disagree statement is favorable.

Communicating my research	6.9%	7.4%	3.4%	25.1%	57.1%	175	4.18	1.223
Career opportunities and pathways	11.3%	11.3%	6.2%	32.2%	39.0%	177	3.76	1.369
Career preparation	11.9%	11.3%	8.5%	29.4%	39.0%	177	3.72	1.389
Professional Networking	13.1%	13.1%	10.8%	27.8%	35.2%	176	3.59	1.415

The level of offering resources by mentor(s) appeared to differ by both demographic characteristics and student characteristics. Women were less likely to agree with "career opportunities and pathways" and "career preparation." Men were less likely to agree with the statement "communicating my research" (Table 2.15b). Members of the LGBTQIA2S+ community were less likely to agree with "communicating my research" and "professional networking". LatinX students were less likely to agree with all the statements. Underrepresented students were less likely to agree with two and White students were less likely to agree with the other two. Students with disabilities were less likely to agree about having career opportunities and pathways, and career preparation resources being shared with them than those without disabilities.

Table 2.15b: Mentoring Resources Within Department/Program by Demographic Characteristics (Mean Scores)

		Gender Identity		Sexual Orientation		Race/Ethnicity			Disability	
Please indicate to what extent you agree or disagree with each of the following statements as they relate to mentorship within your Department/Program.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
Communicating my research	4.30	4.18	4.40	4.29	4.08	4.10	4.40	4.22	4.02	4.28
Career opportunities and pathways	3.85	3.92	<u>3.79</u>	3.79	3.78	3.50	3.10	3.86	3.58	4.01
Career preparation	3.81	3.89	<u>3.75</u>	3.77	3.85	3.50	<u>3.50</u>	3.94	3.56	3.99
Professional Networking	3.62	3.65	3.60	3.65	<u>3.39</u>	3.30	3.60	3.49	3.18	3.82

Students who had been at MSU for more than two years and master's students were less likely to agree with all four statements (Table 2.15c). Domestic students were less likely to agree with "career opportunities and pathways" and "professional networking" than their counterparts.

Table 2.15c: Academic Advising Resources Within Department/Program by Student Characteristics (Mean Scores)

		Years a	t MSU	Deg	ree		ational tus
Please indicate to what extent you agree or disagree with each of the following statements as they relate to mentorship within your Department/Program.	Overall	1-2 Years	More than 2	Masters	ОНО	Yes	No
Communicating my research	4.18	4.25	4.09	3.00	4.33	4.19	4.22
Career opportunities and pathways	3.77	4.02	<u>3.45</u>	3.12	3.85	3.92	<u>3.72</u>
Career preparation	3.76	4.06	3.38	<u>3.41</u>	3.82	3.78	3.81
Professional Networking	3.58	3.87	3.22	3.06	3.63	3.81	3.49

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for the statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

Mathematics graduate students were less likely to agree with all four statements compared to those in the Physical Sciences (Table 2.15d). Those in the Biological Sciences were less likely to agree with three of them.

Table 2.15d: Academic Advising Resources Within Department/Program by College District (Mean Scores)

		College Districts			
Please indicate to what extent you agree or disagree with each of the following statements as they relate to mentorship within your Department/Program.	Overall	Biological	Physical	Mathematics	
Communicating my research	4.18	4.35	4.43	3.12	
Career opportunities and pathways	3.79	<u>3.71</u>	4.09	3.29	
Career preparation	3.81	<u>3.79</u>	4.00	<u>3.43</u>	
Professional Networking	3.61	3.48	3.91	3.19	

Students were then asked to evaluate their mentor(s) (Table 2.16a). Over three-quarters of students found their mentor(s) helpful (79.7%), met regularly with their mentor(s) (77.8%) and were paired with a mentor soon after joining their program (77.3%). The area with the highest levels of disagreement was about their satisfaction with their mentor(s) (19.1% disagreed), still 72.6% did agree that they were satisfied with their mentor(s).

Table 2.16a: Mentor(s) Evaluation Within Department/Program

Please indicate to what extent you agree or disagree with each of the	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
following statements as they relate to advising within your major/program.	1	2	3	4	5	N	Mean	Std. Dev
My mentor(s) has/have been helpful.	5.2%	5.8%	9.3%	22.7%	57.0%	172	4.20	1.154
I meet regularly with my mentor(s).	5.3%	7.0%	9.9%	24.6%	53.2%	171	4.13	1.173
I am satisfied with my mentor(s).	8.1%	11.0%	8.1%	20.9%	51.7%	172	3.97	1.335
I was paired with a mentor(s) soon after entering my program.	11.0%	4.9%	6.7%	23.3%	54.0%	163	4.04	1.344

Men were less likely to agree with any of the statements about their mentor(s) compared to women (Table 2.16b). Members of the LGBTQIA2S+ community were less likely to agree that they were satisfied with their mentor(s). LatinX students were the less likely to agree with all but one of the statements – "I meet regularly with my mentor(s)." Underrepresented students were less likely to agree with all the statements and White students were less likely to agree that they met regular with their mentor(s). Students with disabilities were less likely with all the statements.

Table 2.16b: Mentor(s) Evaluation Within Department/Program by Demographic Characteristics (Mean Scores)

		Gender Identity		Sexual Orientation		Race/Ethnicity			Disability	
Please indicate to what extent you agree or disagree with each of the following statements as they relate to advising within your major/program.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
My mentor(s) has/have been helpful.	4.24	4.08	4.37	4.18	4.15	3.70	3.80	4.23	3.95	4.43
I meet regularly with my mentor(s).	4.16	4.02	4.28	4.14	4.05	4.44	<u>3.80</u>	4.18	3.89	4.25
I am satisfied with my mentor(s).	4.04	3.85	4.19	4.02	3.88	3.50	3.60	4.04	3.65	4.28
I was paired with a mentor(s) soon after entering my program.	4.13	3.96	4.27	4.09	4.13	<u>3.50</u>	<u>3.89</u>	4.34	4.00	4.14

Students who had been at MSU for more than two years were less likely to agree that their mentor(s) had been helpful, being satisfied with their mentor(s), and being connected with a mentor upon entering their program than those who had been at MSU for less time (Table 2.16c). Master's students were less likely to agree with all the statements. Domestic students were less likely to find their mentor to be helpful and to be satisfied with their mentor(s). International students were less likely to agree that they had been paired with a mentor soon after entering their program.

Table 2.16c: Mentor(s) Evaluation Within the Major/Program by Student Characteristics (Mean Scores)

		Years at MSU		Degree		International Status	
Please indicate to what extent you agree or disagree with each of the following statements as they relate to advising within your major/program.	Overall	1-2 Years	More than 2	Masters	ОНО	Yes	NO
My mentor(s) has/have been helpful.	4.19	4.27	4.09	3.06	4.32	4.32	4.13
I meet regularly with my mentor(s).	4.12	4.14	4.08	<u>3.25</u>	4.22	4.10	4.14
I am satisfied with my mentor(s).	3.97	4.06	<u>3.84</u>	2.88	4.09	4.18	<u>3.90</u>
I was paired with a mentor(s) soon after entering my program.	4.07	4.18	3.93	3.29	4.16	<u>3.95</u>	4.19

Those in Mathematics were less likely to agree with any of the statements (Table 2.16d). Biological Sciences students were less likely to agree that their mentor(s) were helpful and that they were satisfied with their mentor(s). Physical Sciences students were less likely to agree that they were paired with a mentor soon after entering the program.

Table 2.16d: Mentor(s) Evaluation Within the Major/Program by College District (Mean Scores)

		College District			
Please indicate to what extent you agree or disagree with each of the following statements as they relate to advising within your major/program.		Biological	Physical	Mathematics	
My mentor(s) has/have been helpful.	4.22	4.27	4.41	3.68	
I meet regularly with my mentor(s).	4.15	4.31	4.24	<u>3.61</u>	
I am satisfied with my mentor(s).	3.97	3.89	4.28	3.44	
I was paired with a mentor(s) soon after entering my program.	4.12	4.28	4.13	<u>3.78</u>	

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for the statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

#### ANNUAL REVIEW

Students were presented with a series of statements associated with their annual review (Table 2.17a). Over 50 percent of the students agreed with all the statements. "I meet at least once a year with my guidance committee to review my progress in my program." (67.8%) and "I am comfortable asking my advisor and guidance committee questions about performance expectations." (65.6%), both received over 60 percent agreement. The two statements with the highest levels of disagreement were "I receive valuable performance feedback." (21.9%) and "The criteria used in my annual review are clear and transparent." (18.3%).

Table 2.17a: Annual Review

Please indicate to what extent you agree or disagree with each of the	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
following statements regarding your annual review.	1	2	3	4	5	N	Mean	Std. Dev
I meet at least once a year with my guidance committee to review my progress in my program.	4.8%	4.8%	22.6%	22.6%	45.2%	168	3.99	1.142
I am comfortable asking my advisor and guidance committee questions about performance expectations.	4.1%	12.4%	17.8%	32.5%	33.1%	169	3.78	1.157
The criteria used in my annual review are clear and transparent.	5.9%	12.4%	30.2%	26.6%	24.9%	169	3.52	1.165
My program follows an established annual review process.	4.1%	11.2%	24.9%	29.6%	30.2%	169	3.70	1.137
Performance discussions include a focus on my career goals and aspirations.	8.3%	7.1%	31.0%	26.2%	27.4%	168	3.57	1.202
I receive valuable performance feedback.	7.7%	14.2%	26.0%	19.5%	32.5%	169	3.55	1.286

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for the statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

Men were less likely to agree that they met at least once a year with their guidance committee, that they were comfortable asking advisor and guidance committee questions about performance expectations, and that they received valuable feedback than women (Table 2.17b). LatinX and Whites were less were less likely to that they met at least once a year with their guidance committee for review, that they were comfortable asking their advisor/committee about performance expectations, and that the criteria used in their annual review was clear and transparent. Underrepresented and Whites were less likely to agree that their program follows established annual review process and that they received valuable feedback. LatinX and Whites were less likely to agree that their discussion included a focus on career goals and aspirations. Those with disabilities were less likely to agree with all statements.

Table 2.17b: Annual Review by Demographic Characteristics (Mean Scores)

		Gen Iden		Sexi Orient		Ra	ce/Ethnic	ity	Disal	oility
Please indicate to what extent you agree or disagree with each of the following statements regarding your annual review.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
I meet at least once a year with my guidance committee to review my progress in my program.	4.08	3.87	4.25	3.95	3.95	4.00	4.56	4.00	<u>3.75</u>	4.08
I am comfortable asking my advisor and guidance committee questions about performance expectations.	3.81	3.70	3.90	3.84	3.66	3.80	4.11	3.62	<u>3.64</u>	3.95
The criteria used in my annual review are clear and transparent.	3.58	3.56	3.59	3.61	3.37	3.30	4.00	3.20	3.09	3.70
My program follows an established annual review process.	3.77	3.74	3.80	3.77	3.49	4.30	3.89	3.51	3.38	3.89
Performance discussions include a focus on my career goals and aspirations.	3.66	3.67	3.64	3.56	3.61	3.00	3.33	3.70	<u>3.36</u>	3.75
I receive valuable performance feedback.	3.65	3.48	3.80	3.63	3.37	3.87	<u>3.31</u>	3.66	3.09	3.79

Students who had been at MSU for more than two years were less likely to agree that their guidance committee meets at least once a year, that their program followed an established annual and that performance discussion included a focus on career goals and aspirations (Table 2.17c). Master's students were less likely to agree with all of the statements. Domestic students were less likely to agree with four of the six statements.

Table 2.17c: Annual Review by Student Characteristics (Mean Scores)

		Years at MSU			gree	International Status	
Please indicate to what extent you agree or disagree with each of the following statements regarding your annual review.	Overall	1-2 Years	More than 2	Masters	ОЧА	Yes	No
I meet at least once a year with my guidance committee to review my progress in my program.	3.98	3.84	4.14	3.12	4.08	3.87	4.06
I am comfortable asking my advisor and guidance committee questions about performance expectations.	3.78	3.75	3.81	<u>3.06</u>	3.86	4.05	<u>3.66</u>
The criteria used in my annual review are clear and transparent.	3.53	3.52	3.55	3.00	3.58	4.00	3.27
My program follows an established annual review process.	3.70	3.64	3.78	2.82	3.81	3.84	3.63
Performance discussions include a focus on my career goals and aspirations.	3.57	3.51	3.64	3.06	3.63	3.66	3.57
I receive valuable performance feedback.	3.54	3.62	3.44	2.65	3.63	3.79	3.41

Biological Sciences students were less likely to agree that they were comfortable asking their advisor/guidance committee questions about performance expectations, that the criteria for their review was clear and transparent, that discussions included focus on career goals/aspirations, and that they found the feedback valuable (Table 2.17d). Mathematics students were less likely to agree with any of the statements and Physical Sciences students were more likely to agree with all the statements compared to their counterparts.

Table 2.17d: Annual Review by College District (Mean Scores)

		Col	lege Distr	icts
Please indicate to what extent you agree or disagree with each of the following statements regarding your annual review.	Overall	Biological	Physical	Mathematics
I meet at least once a year with my guidance committee to review my progress in my program.	4.03	4.37	<u>3.95</u>	3.48
I am comfortable asking my advisor and guidance committee questions about performance expectations.	3.75	3.80	3.98	3.17
The criteria used in my annual review are clear and transparent.	3.50	<u>3.55</u>	3.68	3.00
My program follows an established annual review process.	3.71	3.78	3.85	3.24
Performance discussions include a focus on my career goals and aspirations.	3.58	3.65	3.75	3.07
I receive valuable performance feedback.	3.56	3.68	3.73	<u>2.93</u>

# SEXUAL MISCONDUCT, UNCIVIL BEHAVIOR AND BIAS INCIDENCES

It should be noted that not all students of the college participated in the survey and that not all incidences of sexual misconduct or bias incidences lead to formal reporting. No one should assume that an incident that they may be aware of was included in the data or in this report.

# **Sexual Misconduct**

The university has a zero-tolerance policy for relationship violence and sexual misconduct. This means theoretically that there should be zero agreement with the statements "I have experienced sexual harassment and/or relationship violence within my major/program/the college." and "Sexual harassment is a problem within my major/program/the college." Unfortunately, 6.4% of the graduate students stated that they had experienced some form of sexual misconduct within their department, program, or the college in general and 12.8% stated that it was a problem within their department/program/the college. On the positive side, when asked if they knew how to report sexual harassment and relationship violence, 83.7% of the graduate students agree that they did though 11.1% disagreed with the statement.

In terms of leaderships response, 58.2% of the respondents agreed that "College leaders take seriously reports of sexual harassment and/or relationship violence." but 18.1% disagreed with the statement. In addition, 60.5% agreed with "I am confident that my department/program/college leaders maintain confidentiality when handling reports related to RVSM.," though 15.2% disagreed. Though 69.9% of the students stated that "I can report incidences of sexual harassment and/or relationship violence without fear of retaliation.," there were still 13.3% of them that stated that they disagreed.

Table 2.18a: Relationship Violence and Sexual Misconduct Policies

This next set of questions is about	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
Relationship Violence and Sexual Misconduct (RSVM).	1	2	3	4	5	N	Mean	Std. Dev
I have experienced sexual harassment and/or relationship violence within my department/program/the college. (reverse coding) *	82.6%	5.2%	5.8%	3.5%	2.9%	172	1.39	.958
Sexual harassment is a problem within my department/program/the college. (reverse coding) *	44.8%	14.5%	27.9%	8.1%	4.7%	172	2.13	1.209
I know the steps to take if a person comes to me with a problem with sexual harassment and relationship violence.	3.5%	7.6%	5.2%	45.9%	37.8%	172	4.07	1.024
College leaders take seriously reports of sexual harassment and/or relationship violence.	10.5%	7.6%	23.8%	23.3%	34.9%	172	3.65	1.310
I am confident that my department/program/college leaders maintain confidentiality when handling reports related to RVSM.	7.6%	7.6%	24.4%	25.0%	35.5%	172	3.73	1.232
I can report incidences of sexual harassment and/or relationship violence without fear of retaliation.	6.4%	6.9%	16.8%	33.5%	36.4%	173	3.87	1.171

When looking at the means scores in Table 2.18b, those questions in which agreement with the statement is positive (last four statements in table), the difference in means scores are underlined for those mean score differences that are 0.1 or larger (less agreement) from the highest mean score. For those statements in which agreement with the statement is negative (first two statements in table), those with a mean score difference of 0.1 or larger from the smallest mean score are bolded and italicized.

Women, members of the LGBTQIA2S+ community, LatinX and Underrepresented students, and those with disabilities were more likely to agree with the statement about experiencing sexual misconduct. Members of the LGBTQIA2S+ community, Underrepresented students and those with disabilities were more likely to say that sexual harassment is a problem. In terms of knowledge how to report, men, members of the LGBTQIA2S+ community, Underrepresented students and those with disabilities reported less agreement with the statement. Members of the LGBTQIA2S+ community, Underrepresented students and those with disabilities reported lower levels of agreement about leadership taking reports seriously. LatinX and Underrepresented students and students with disabilities were less to agree that leadership would keep reports confidential. Women, members of the LGBTQIA2S+ community, LatinX and Underrepresented students, and those with disabilities were less likely to agree that they could report an incident without fear of retaliation. This is of concern since Women, members of

<sup>\*</sup> The first two statements are in a negative form where agreement with the statement is unfavorable (i.e. event has occurred, is a problem), and disagreement is favorable in terms of RVSM.

the LGBTQIA2S+ community, LatinX and Underrepresented students and those with disabilities are more likely to need to file reports.

Table 2.18b: Relationship Violence and Sexual Misconduct Policies by Demographic Characteristics (Mean Scores)

		Gender Identity		Sexual Orientation		Rad	ce/Ethnici	ty	Disability	
This next set of questions is about Relationship Violence and Sexual Misconduct (RSVM).	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
I have experienced sexual harassment and/or relationship violence within my department/program/the college. (reverse coding) *	1.23	1.17	1.29	1.26	1.45	1.30	1.56	1.19	1.39	1.18
Sexual harassment is a problem within my department/program/the college. (reverse coding) *	2.04	2.08	2.01	1.99	2.49	2.20	2.44	2.19	2.39	1.87
I know how to report sexual harassment and relationship violence.	4.11	4.00	4.21	4.08	3.90	4.20	4.11	4.22	3.93	4.18
College leaders take seriously reports of sexual harassment and relationship violence.	3.71	3.67	3.74	3.69	3.47	3.50	2.89	3.55	3.32	3.86
I am confident that my department/program/college leaders maintain confidentiality when handling reports related to RVSM.	3.75	3.70	3.79	3.69	3.72	3.60	<u>3.33</u>	3.78	3.60	3.94
I can report incidences of sexual harassment and/or relationship violence without fear of retaliation.	3.88	4.02	3.77	3.93	<u>3.74</u>	3.20	3.44	3.95	<u>3.60</u>	4.11

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for the statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

Students who had been at MSU for more than two years, and international students were more likely to agree that they had experienced sexual misconduct within their department/program/the college (Table 2.18c). Students who had been at MSU for more than two years, doctoral students and international students were more likely to agree that sexual harassment is a problem in their department/program/the college. Students who had been at MSU for two years or less, doctoral students and international students were less likely to agree that they knew how to report sexual harassment and relationship violence. Students that had been at MSU for longer than two years were less, doctoral students and domestic students were less likely to agree that leadership takes reports seriously as well as being confident that leadership would keep reports confidential. Those who had been at MSU for more than two years, doctoral students and domestic students were less likely to agree that there would be no retaliation if they reported an incident.

<sup>\*</sup>The first two statements are in a negative form where agreement with the statement is unfavorable (i.e. event has occurred, is a problem), and disagreement is favorable in terms of RVSM.

Table 2.18c: Relationship Violence and Sexual Misconduct Policies by Student Characteristics (Mean Scores)

		Years a	nt MSU	Deg	ree	Interna Sta	
This next set of questions is about Relationship Violence and Sexual Misconduct (RSVM).	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No
I have experienced sexual harassment and/or relationship violence within my department/program/the college. (reverse coding) *	1.37	1.30	1.46	1.33	1.39	1.54	1.23
Sexual harassment is a problem within my department/program/the college. (reverse coding) *	2.12	1.90	2.40	1.78	2.17	1.95	2.20
I know how to report sexual harassment and relationship violence.	4.10	<u>3.96</u>	4.28	4.33	<u>4.07</u>	3.89	4.23
College leaders take seriously reports of sexual harassment and relationship violence.	3.68	3.95	3.33	4.00	3.63	3.98	<u>3.51</u>
I am confident that my department/program/college leaders maintain confidentiality when handling reports related to RVSM.	3.76	3.98	<u>3.49</u>	4.12	<u>3.71</u>	3.86	<u>3.73</u>
I can report incidences of sexual harassment and/or relationship violence without fear of retaliation.	3.88	4.05	<u>3.65</u>	4.06	<u>3.85</u>	3.98	<u>3.84</u>

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for the statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree). The first two statements are in a negative form where agreement with the statement is unfavorable (i.e. event has occurred, is a problem), and disagreement is favorable in terms of RVSM.

Those in the Physical Sciences and in Mathematics were more likely to agree that they had experienced sexual harassment or relationship violence within their department/program/the college (Table 2.18d). Physical Sciences and Mathematics were more likely to state that it was a problem within their department/program/the college. Mathematics graduate students were less likely to know how to file a report compared to their counterparts. Those in the Biological sciences were less likely to agree that college leaders would take reports seriously, would maintain confidentiality and that they could file a report without fear of retaliation. Those in Mathematics were less likely to agree that the department/program/college leaders would maintain confidentiality and that they could file a report without fear of retaliation.

Table 2.18d: Relationship Violence and Sexual Misconduct Policies by College District (Mean Scores)

		Col	lege Distr	icts
This next set of questions is about Relationship Violence and Sexual Misconduct (RSVM).	Overall	Biological	Physical	Mathematics
I have experienced sexual harassment and/or relationship violence within my department/program/the college. (reverse coding) *	1.41	1.31	1.51	1.43
Sexual harassment is a problem within my department/program/the college. (reverse coding) *	2.14	2.02	2.27	2.13
I know how to report sexual harassment and relationship violence.	4.10	4.15	4.14	<u>3.90</u>
College leaders take seriously reports of sexual harassment and relationship violence.	3.63	3.55	3.67	3.73
I am confident that my department/program/college leaders maintain confidentiality when handling reports related to RVSM.	3.76	3.69	3.86	3.67
I can report incidences of sexual harassment and/or relationship violence without fear of retaliation.	3.83	<u>3.60</u>	4.06	3.83

The first two statements are in a negative form where agreement with the statement is unfavorable (i.e. event has occurred, is a problem), and disagreement is favorable in terms of RVSM.

## **Uncivil Behavior**

In addition to sexual misconduct, uncivil behavior can have a negative impact on the climate within a department/unit or the college at large. Four of the behaviors, had over 30 percent of the respondents stating that they had experienced them at least once – "Paid little attention to your statements or showed little interest in your opinion." (41.1%), "Inappropriately interrupted or "talked over" you while you were speaking." (39.1%), "Put you down or acted condescendingly to you." (37.9%) and "Devalued your work and efforts." (32.0%). In addition, 41.0% stated that a student or employee had "Exhibited any of the above behaviors toward others in front of you."

Table 2.19a: Uncivil Behavior Experienced Within College

Since becoming a student in the College of Natural Science, how often, if at all, have you been in a situation	Never	Once	2 or More Times			
where a NatSci student (graduate or undergraduate) or employee has	0	1	2	N	Mean	Std. Dev
Put you down or acted condescendingly to you.	62.1%	13.2%	24.7%	174	.63	.856
Made demeaning or derogatory remarks to or about you.	77.1%	10.9%	12.0%	175	.35	.685
Devalued your work and efforts.	68.0%	13.1%	18.9%	175	.51	.794
Inappropriately interrupted or "talked over" you while you were speaking.	60.9%	12.1%	27.0%	174	.66	.877

Ignored or excluded you during group activities in the classroom.	77.6%	9.8%	12.6%	174	.35	.695
Made negative statements or circulated negative rumors about you.	82.3%	9.7%	8.0%	175	.26	.594
Paid little attention to your statements or showed little interest in your opinion.	58.9%	16.0%	25.1%	175	.66	.855
Addressed you in unprofessional ways.	77.0%	6.9%	16.1%	174	.39	.750
Made unwanted attempts to draw you into a discussion about personal matters.	85.1%	6.9%	8.0%	175	.23	.582
Bullied you.	83.9%	5.2%	10.9%	174	.27	.646
Bullied others in front of you.	76.7%	9.9%	13.4%	172	.37	.709
Distrusted your description of your own personal experiences.	76.0%	10.3%	13.7%	175	.38	.716
Exhibited any of the above behaviors toward others in front of you.	59.0%	9.8%	31.2%	173	.72	.911

Responses for this series of uncivil behaviors were based on "0" for no incidences "1" for one incident, and "2" for two or more incidences. Mean scores range is from "0" for no incidences from any respondent to "2" for two or more incidences experienced by all respondents. Mean scores below 1 mean that the average respondents experienced less than one incident of that uncivil behavior. Mean scores between one and two mean that the average respondent experienced at least one incident.

When looking at the uncivil behaviors within the College by demographic characteristics, there are definite patterns of who is more likely to experience at least some of the uncivil behaviors (Table 2.19b). Women were more likely than men to experience all thirteen behaviors. Heterosexuals were more likely to experience three of the behaviors and members of the LBGTQIA2S+ community were more likely to experience four of the thirteen behaviors. LatinX students were more likely to experience eleven of the thirteen behaviors, Underrepresented students were more likely to experience ten and White students were more likely to experience one of the behaviors. Those with disabilities were more likely to experience all the behaviors compared to their counterparts.

Table 2.19b: Uncivil Behavior Experienced Within College by Demographic Characteristics (Percentage of Those with at Least one Incident)

		Gender	Identity	Sexual Or	ientation	Ra	ace/Ethnici	ty	Disability	
Since becoming a student in the College of Natural Science, how often, if at all, have you been in a situation where a NatSci student (graduate or undergraduate) or employee has	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
Put you down or acted condescendingly to you.	39.1%	23.4%	52.7%	34.9%	<u>43.9%</u>	60.0%	50.0%	41.8%	<u>55.2%</u>	24.4%
Made demeaning or derogatory remarks to or about you.	23.0%	17.2%	<u>28.0%</u>	21.7%	19.0%	<u>40.0%</u>	<u>40.0%</u>	21.3%	<u>36.2%</u>	13.3%
Devalued your work and efforts.	31.7%	25.0%	<u>37.3%</u>	31.1%	28.6%	40.0%	50.0%	32.5%	46.6%	19.3%
Inappropriately interrupted or "talked over" you while you were speaking.	40.6%	23.4%	<u>55.4%</u>	39.0%	45.2%	40.0%	40.0%	51.2%	<u>58.6%</u>	26.5%
Ignored or excluded you during group activities in the classroom.	22.3%	9.4%	33.3%	22.6%	19.0%	20.0%	40.0%	21.3%	<u>36.2%</u>	10.8%
Made negative statements or circulated negative rumors about you.	16.5%	12.5%	20.0%	17.9%	11.9%	30.0%	40.0%	16.3%	31.0%	7.2%
Paid little attention to your statements or showed little interest in your opinion.	41.0%	26.6%	<u>53.3%</u>	40.6%	42.9%	60.0%	50.0%	41.3%	62.1%	21.7%
Addressed you in unprofessional ways.	21.0%	12.5%	28.4%	18.9%	<u>26.8%</u>	40.0%	40.0%	22.8%	33.3%	13.3%
Made unwanted attempts to draw you into a discussion about personal matters.	11.5%	7.8%	<u>14.7%</u>	13.2%	14.3%	<u>40.0%</u>	20.0%	12.5%	20.7%	8.4%
Bullied you.	14.5%	7.8%	20.3%	14.2%	9.8%	30.0%	20.0%	15.2%	22.8%	6.0%
Bullied others in front of you.	24.6%	14.1%	33.8%	23.8%	17.5%	30.0%	40.0%	24.4%	32.1%	11.0%
Distrusted your description of your own personal experiences.	23.7%	17.2%	<u>29.3%</u>	22.6%	28.6%	50.0%	20.0%	<u>27.5%</u>	<u>36.2%</u>	10.8%
Exhibited any of the above behaviors toward others in front of you.	45.3%	32.8%	<u>56.2%</u>	39.6%	<u>52.5%</u>	60.0%	60.0%	50.0%	<u>62.5%</u>	24.1%

The percentages in the table are the percentages of respondents in that category that experienced that incident at least once. Comparisons within demographic variables (ex. gender identity) provide information on whether nor not a specific type of person (women vs. men) are more likely to experience the incident at least once. The groups underlined were ones that reported yes at least 5 percent more often than the group with the lowest percent of incidences.

In terms of student characteristics, students who had been at MSU for more than two years were more likely to experience all the thirteen behaviors (Table 2.19c). Doctoral students were more likely to experience ten of the thirteen behaviors compared to master's students. Those who were not international students reported being more likely to have experienced all the behaviors than their counterparts.

Table 2.19c: Uncivil Behavior Experienced Within College by Student Characteristics (Percentage of Those with at Least one Incident)

		Years a	at MSU	Deg	ree		ational tus
Since becoming a student in the College of Natural Science, how often, if at all, have you been in a situation where a NatSci student (graduate or undergraduate) or employee has	Overall	1-2 Years	More than 2	Masters	PhD	Yes	ON N
Put you down or acted condescendingly to you.	37.1%	22.9%	<u>56.3%</u>	33.3%	38.0%	23.4%	<u>45.1%</u>
Made demeaning or derogatory remarks to or about you.	22.6%	16.7%	30.6%	16.7%	23.2%	17.2%	25.2%
Devalued your work and efforts.	32.1%	22.9%	44.4%	22.2%	33.1%	23.4%	<u>35.9%</u>
Inappropriately interrupted or "talked over" you while you were speaking.	39.5%	25.3%	58.3%	16.7%	42.7%	22.2%	49.5%
Ignored or excluded you during group activities in the classroom.	22.8%	18.8%	28.2%	16.7%	23.3%	18.8%	24.3%
Made negative statements or circulated negative rumors about you.	17.9%	12.5%	<u>25.0%</u>	5.6%	19.2%	10.9%	20.4%
Paid little attention to your statements or showed little interest in your opinion.	41.1%	31.3%	<u>54.2%</u>	27.8%	42.4%	31.3%	<u>45.6%</u>
Addressed you in unprofessional ways.	22.8%	13.5%	<u>35.2%</u>	11.1%	24.0%	12.5%	<u>27.5%</u>
Made unwanted attempts to draw you into a discussion about personal matters.	14.3%	11.5%	18.1%	16.7%	14.6%	7.8%	<u>17.5%</u>
Bullied you.	15.0%	8.3%	23.9%	16.7%	15.3%	9.4%	<u>17.6%</u>
Bullied others in front of you.	23.0%	12.6%	<u>37.1%</u>	5.6%	25.0%	14.3%	<u>26.7%</u>
Distrusted your description of your own personal experiences.	23.8%	17.7%	31.9%	16.7%	25.2%	12.5%	30.1%
Exhibited any of the above behaviors toward others in front of you.	41.0%	31.6%	<u>53.5%</u>	22.2%	43.6%	21.9%	<u>52.5%</u>

The percentages in the table are the percentages of respondents in that category that experienced that incident at least once. Comparisons within student characteristic variables (ex. Years at MSU) provide information on whether nor not a specific type of person (1-2 years vs. more than 2 years) are more likely to experience the incident at least once.

Biological Sciences students were more likely to experience eleven of the thirteen behaviors and Mathematics students were more likely to experience nine of the behaviors (Table 2.19d). Physical Sciences student were only more likely to experience two of the behaviors – negative statements and drawn into unwanted personal discussions.

Table 2.19d: Uncivil Behavior Experienced Within College by College District (Percentage of Those with at Least one Incident)

		College District				
Since becoming a student in the College of Natural Science, how often, if at all, have you been in a situation where a NatSci student (graduate or undergraduate) or employee has	Overall	Biological	Physical	Mathematics		
Put you down or acted condescendingly to you.	38.5%	48.4%	28.1%	40.0%		
Made demeaning or derogatory remarks to or about you.	22.9%	25.4%	18.8%	<u>26.7%</u>		
Devalued your work and efforts.	33.8%	36.5%	25.0%	<u>46.7%</u>		
Inappropriately interrupted or "talked over" you while you were speaking.	41.0%	50.0%	32.8%	40.0%		
Ignored or excluded you during group activities in the classroom.	22.4%	23.8%	20.6%	23.3%		
Made negative statements or circulated negative rumors about you.	18.5%	20.6%	18.8%	13.3%		
Paid little attention to your statements or showed little interest in your opinion.	42.0%	46.0%	32.8%	<u>53.3%</u>		
Addressed you in unprofessional ways.	23.7%	<u>31.7%</u>	17.2%	20.7%		
Made unwanted attempts to draw you into a discussion about personal matters.	14.6%	20.6%	12.5%	6.7%		
Bullied you.	16.7%	<u>17.5%</u>	14.1%	<u>20.7%</u>		
Bullied others in front of you.	23.9%	<u>27.0%</u>	20.6%	<u>24.1%</u>		
Distrusted your description of your own personal experiences.	25.5%	23.8%	21.9%	<u>36.7%</u>		
Exhibited any of the above behaviors toward others in front of you.	42.6%	<u>47.6%</u>	34.9%	<u>48.3%</u>		

The percentages in the table are the percentages of respondents in that category that experienced that incident at least once. Comparisons within student characteristic variables (ex. Years at MSU) provide information on whether nor not a specific type of person (1-2 years vs. more than 2 years) are more likely to experience the incident at least once.

The sources of uncivil behavior are listed below (Table 2.20). Most of the uncivil behavior has come from faculty and academic staff (58.6%) followed by support staff (25.3%) and undergraduate student (20.2%). Other than for incidences related to academic advisors, the sources were more likely to have been involved in more than a single incident

Table 2.20: Uncivil Behavior Committed by Whom and Frequency

		Incid	ences
You indicated that you have experienced at least one incident of uncivil behavior.  Please indicate who was involved in the incident(s).	Percent of Cases	Once	2 or More Times
Unit chair or director	16.2%	46.7%	53.3%
College leader (dean, associate dean, program director)	7.1%	28.6%	71.4%
Faculty and/or academic staff	58.6%	39.3%	60.7%
Postdoctoral scholar	8.1%	42.9%	57.1%
Academic advisor	2.0%	50.0%	50.0%
Support staff	25.3%	36.0%	64.0%
Supervisor	9.1%	11.1%	88.9%
Co-worker	17.2%	26.7%	73.3%
Graduate student/Teaching assistant	18.2%	47.1%	52.9%
Undergraduate student	20.2%	10.0%	90.0%
Campus colleague (outside NatSci)	4.0%	25.0%	75.0%

The table only includes cases where there was at least one incident of uncivil behavior. The second column reports the percentage of various college roles involved. The third and fourth columns report, for the cases that had that role involved, the percentage of cases where it occurred once/multiple times.

# **Biased Incidences**

Different forms of bias incidences were presented to the respondents who were asked how often they had personally <u>experienced</u> the event within the College (Table 2.21). The further from 0 the mean score is the more often the incidences have occurred. All forms, other than power differentials had over 86% of the respondents stating that they had never experienced that form of bias. Power differentials in the learning environment was reported to have happened at least once by 26.5% of the respondents. If an incident occurred, it was to have happened more than once. Breakdown by demographic characteristics was not done due to the relatively low percent of reported incidences.

Table 2.21: Biased Incidences Experienced Within College

Since becoming a student in the College of Natural Science, how often, if at all, have you experienced an incident of bias/discrimination within	Never	Once	2 or More Times			
your major/program or within the College based on any of the following?	0	1	2	N	Mean	Std. Dev
Power differentials in the learning environment	73.5%	8.4%	18.1%	166	.45	.782
Older age	94.6%	1.8%	3.6%	167	.09	.393
Younger age	90.9%	3.7%	5.5%	164	.15	.486
Gender expression and identity	89.8%	3.6%	6.6%	167	.17	.522
Sexual orientation	98.2%	0.6%	1.2%	166	.03	.232
Race/ethnicity	86.2%	7.2%	6.6%	167	.20	.544
Country of origin	88.0%	3.6%	8.4%	167	.20	.576
Religious background	94.6%	1.8%	3.6%	166	.09	.394
A psychological or mental health issue	86.7%	4.8%	8.4%	166	.22	.584
A physical disability or health issue	94.6%	2.4%	3.0%	168	.08	.370
Other	88.9%	0.0%	11.1%	*	.22	.667

Responses for this series of experienced biased behaviors were based on "0" for no incidences "1" for one incident, and "2" for two or more incidences. Mean scores range is from "0" for no incidences from any respondent to "2" for two or more incidences experienced by all respondents. Mean scores below 1 mean that the average respondents experienced less than one incident of that biased behavior. Mean scores between one and two mean that the average respondent experienced at least one incident.

Respondents were then asked how often they had <u>witnessed</u> the same forms of bias within the College of Natural Science (Table 2.22). The further from 0 the mean score is the more often the incidences have occurred. Again, bias actions due to power differentials (37.4%) were the most reported form of bias and about three-quarters of those who witnessed it had witnessed it 2 or more times. Though the percentage of incidences witnessed for the other forms of bias were still relatively low, there was an increase in the biases being witnessed compared to those experienced. This may be due to multiple witnesses to the same event or due to underreporting of experiencing bias by respondents.

Table 2.22: Biased Incidences Witnessed Within College

Since becoming a student in the College of Natural Science, how often, if at all, have you witnessed an incident of bias/discrimination within	Never	Once	2 or More Times			
your major/program or within the College based on any of the following?	0	1	2	N	Mean	Std. Dev
Power differentials in the learning environment	62.6%	8.4%	29.0%	155	.66	.899
Older age	88.4%	8.4%	3.2%	155	.15	.438
Younger age	89.7%	5.2%	5.2%	155	.15	.485
Gender expression and identity	82.1%	9.0%	9.0%	156	.27	.615
Sexual orientation	94.8%	1.9%	3.2%	155	.08	.377
Race/ethnicity	71.6%	14.2%	14.2%	155	.43	.729
Country of origin	78.6%	6.5%	14.9%	154	.36	.730
Religious background	91.0%	5.8%	3.2%	155	.12	.416
A psychological or mental health issue	76.8%	5.8%	17.4%	155	.41	.770
A physical disability or health issue	85.8%	5.2%	9.0%	155	.23	.601
Other	87.5%	0.0%	12.5%	*	.25	.707

Responses for this series of witnessed biased behaviors were based on "0" for no incidences "1" for one incident, and "2" for two or more incidences. Mean scores range is from "0" for no incidences from any respondent to "2" for two or more incidences witnessed by all respondents. Mean scores below 1 mean that the average respondents witnessed less than one incident of that biased behavior. Mean scores between one and two mean that the average respondent witnessed at least one incident.

Faculty member(s) (64.3%) were the most reported as committing the biased action, followed by graduate student(s)/teaching assistants(s) (50.0%), and undergraduate students (25.0%) (Table 2.23).

Table 2.23: Experienced Biased Incidences Committed by Whom

You indicated that you personally experienced an incident of bias/discrimination. Please indicate who was involved.	Percent of Cases
Academic Advisor(s)	5.4%
Campus visitor(s)	8.9%
Dean / Associate Dean / Assistant Dean	1.8%
Department/Unit Head/Program Director	17.9%
Faculty member(s)	64.3%
Graduate student(s) / Teaching assistant(s)	50.0%
Postdoctoral scholar(s)	16.1%
Staff member(s)	10.7%
Undergraduate student(s)	25.0%
Other (please specify)	1.8%
The table only includes cases where there was at least one incident of bias experienced. The specific the presentage of various college roles involved. More than one role could have been	

The table only includes cases where there was at least one incident of bias experienced. The second column reports the percentage of various college roles involved. More than one role could have been selected by the respondent.

# **Bias Incident Reporting**

Only 60 percent of the students reported that they knew how to report bias incidents if they occur within the college with 30.5% stating that they at least somewhat disagreed with the statement (Table 2.24a). In terms of not fearing retaliation, 61.4% agreed with the statement, but 22.8% disagreed which implies that they would fear retaliation. Only 52.6% felt that leadership would take appropriate actions based on the claimant's desire and 28.7% disagreed with this statement. Only 58.4% of the students said that they were confident that leadership would keep the reports confidential with 24.0% disagreeing.

Table 2.24a: Bias Incident Reporting

Please indicate to what extent you agree or disagree with the following statements about reporting	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
bias/discrimination incidents in the College of Natural Science.	1	2	3	4	5	N	Mean	Std. Dev
I know how to report bias incidents if they occur within the College.	12.9%	17.6%	9.4%	34.7%	25.3%	170	3.42	1.375
I can report bias incidents I encounter without fear of retaliation	12.3%	10.5%	15.8%	32.2%	29.2%	171	3.56	1.338
If bias incidents are reported, I believe leaders will take appropriate actions to address them based on the claimant's desires.	11.7%	17.0%	18.7%	23.4%	29.2%	171	3.42	1.371
I am confident that college leaders maintain confidentiality when handling reports of bias, discrimination, or incivility.	11.7%	12.3%	17.5%	25.7%	32.7%	171	3.56	1.364

Given that there were those who stated that they feared retaliation or were concerned about how leadership handled it, it is important to see if those who have those concerns are within demographic groups that are more likely to need to report an incident – Women, members of the LGBTQIA2S+ community, LatinX and Underrepresented students, and those with disabilities (Table 2.24b). Women, members of the LGBTQIA2S+ community, LatinX and Underrepresented students, and those with disabilities reported lower levels of agreement when asked about reporting without fear of retaliation. These groups also reported lower agreement with belief in actions being taken being based on claimants' desires. Women, members of the LGBTQIA2S+ community, Underrepresented students, and those with disabilities reported lower levels of agreement in terms of confidence in that confidentiality would be maintained.

Table 2.24b: Bias Incident Reporting by Demographic Characteristics (Mean Scores)

		Gen Iden		Sex Orien	tual tation	Rad	Race/Ethnicity		Disability	
Please indicate to what extent you agree or disagree with the following statements about reporting bias/discrimination incidents in the College of Natural Science.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
I know how to report bias incidents if they occur within the College.	3.38	3.38	3.38	3.52	3.02	2.44	3.22	3.24	<u>2.75</u>	3.87
I can report bias incidents I encounter without fear of retaliation	3.54	3.75	<u>3.36</u>	3.69	3.19	2.78	<u>2.67</u>	3.42	2.95	3.99
If bias incidents are reported, I believe leaders will take appropriate actions to address them based on the claimant's desires.	3.40	3.71	3.12	3.58	2.98	<u>2.78</u>	<u>2.67</u>	3.15	<u>2.75</u>	3.88
I am confident that college leaders maintain confidentiality when handling reports of bias, discrimination, or incivility.	3.54	3.75	<u>3.36</u>	3.69	3.19	3.33	<u>2.89</u>	3.30	<u>2.89</u>	4.06

In terms of reporting without fearing retaliation, students who had been at MSU for more than two years, doctoral students and domestic students were less likely to agree with the statement (Table 2.24c). These same groups also were less likely to agree that they knew how to report bias incidents, less likely to believe leaders would take appropriate actions based on the claimant's desires and had lower levels of agreement in terms of confidence that leadership would maintain confidentiality.

Table 2.24c: Bias Incident Reporting by Student Characteristics (Mean Scores)

		Years a	Years at MSU   Degree		Degree		ational tus
Please indicate to what extent you agree or disagree with the following statements about reporting bias/discrimination incidents in the College of Natural Science.	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No
I know how to report bias incidents if they occur within the College.	3.41	3.59	3.18	3.83	3.37	3.87	3.18
I can report bias incidents I encounter without fear of retaliation	3.56	3.95	3.06	4.06	3.50	4.03	3.30
If bias incidents are reported, I believe leaders will take appropriate actions to address them based on the claimant's desires.	3.44	3.89	2.83	4.06	<u>3.35</u>	4.06	3.07
I am confident that college leaders maintain confidentiality when handling reports of bias, discrimination, or incivility.	3.58	3.96	3.07	4.06	<u>3.51</u>	4.13	3.26

Biological Sciences and Mathematics students were less likely to know how to report a bias incident, were less likely to feel that could report an incident without retaliation, less likely to believe that leadership would take appropriate action based on the claimant's desires and that leadership would maintain confidentiality compared to those in the Physical Sciences (Table 2.24d).

Table 2.24d: Bias Incident Reporting by College District (Mean Scores)

		Со	llege Distri	ct
Please indicate to what extent you agree or disagree with the following statements about reporting bias/discrimination incidents in the College of Natural Science.	Overall	Biological	Physical	Mathematics
I know how to report bias incidents if they occur within the College.	3.38	3.34	3.60	3.00
I can report bias incidents I encounter without fear of retaliation	3.53	3.27	3.90	3.27
If bias incidents are reported, I believe leaders will take appropriate actions to address them based on the claimant's desires.	3.40	<u>3.16</u>	3.67	<u>3.33</u>
I am confident that college leaders maintain confidentiality when handling reports of bias, discrimination, or incivility.	3.55	<u>3.37</u>	3.83	<u>3.33</u>

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for the statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very

Table 2.25 reports the level of reporting by respondents who knew of at least one incident of bias within the College. Only 8.2% of respondents reported all the incidents they knew of and an additional 8.2% reported at least one of the incidents they knew about. The fact that 83.5% of the respondents did not report is of great concern.

Table 2.25: Reported a Known Bias Incident

Thinking about the incident(s) of bias/discrimination you experienced or witnessed, did you report the incident(s)?	Percent of Cases			
Reported the incident or all incidents	8.2%			
Reported some of the incidents	8.2%			
Did not report the incident(s)	83.5%			
Table only includes those who stated that they experienced/witnessed a bias incident.				

For those that did not report some or all the incidents they knew, they were asked why they did not report it (Table 2.26). The most common reason reported was they were unsure if the incident violated university policy (69.3%), which is an indicator that additional training/educating may be needed. The other three categories – fear of retaliation (30.7%), concern with not being believed (21.3%), and lack of confidence in an appropriate action being taken (46.7%) all indicate that there is a lack of confidence in leadership's ability to deal appropriately with reporting by those who were either victims or witnesses.

Table 2.26: Why Didn't Report Known Bias Incident

What are the reasons why you decided not to report the incident(s)?	Percent of Cases			
I feared retaliation	30.7%			
I did not think I would be believed	21.3%			
I did not think appropriate action would be taken	46.7%			
I was unsure if the incident violated university policies	69.3%			
Other reason	24.0%			
Table only includes those who experienced/witnessed a bias incident and did not report it.				

For those incidents that were reported, most of the reporting was to their department/program supervisor/chair/director (61.5%), followed by graduate program director (46.2%) and supervisor (38.5%) (Table 2.27). Incidences could have been reported to more than one person/office.

Table 2.27: Who Incident Reported to

To which individual(s) or unit(s) did you report bias/discrimination incidents?	Percent of Cases
Office of Institutional Equity (OIE)	30.8%
Office for Civil Rights and Title IX Compliance (OCR)	15.4%
Ombudsperson Office	23.1%
My department/program supervisor/chair/director	61.5%
Dean, associate dean, assistant dean	30.8%

Graduate Program Director	46.2%
Supervisor	38.5%
Staff member	23.1%
Other	7.7%
Table only includes those who reported at least one bias incident. Respondents may have selected one of the categories.	ected more than

# OVERALL COMFORTABLENESS AND SATISFACTION WITH THE COLLEGE

Respondents were asked how comfortable they are with the climate within the college. Over two-thirds (68.4%) of the students stated that they were at least somewhat comfortable though 17.5% reported being at least somewhat uncomfortable (Table 2.28a).

Table 2.28a: Comfortable with the Climate in the College of Natural Science

	Very Uncomfortable	Somewhat Uncomfortable	Neither Comfortable nor Uncomfortable	Somewhat Comfortable	Very Comfortable			
	1	2	3	4	5	N	Mean	Std. Dev
Overall, how comfortable or uncomfortable are you with the climate in the College of Natural Science?	5.1%	12.4%	14.1%	39.0%	29.4%	177	3.75	1.156

The mean scores are based on a five-point scale where 1 refers to very comfortable with the climate and 5 refers to very comfortable with the climate. With the midpoint of the scale being 3, everything above it is considered comfortable and everything below uncomfortable with the climate. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very uncomfortable or very comfortable).

When looking at the level of comfort across the different demographic groups, Underrepresented students, White students, and those with disabilities reported being less comfortable than their counterparts (Table 2.28b). The respondents' gender identity and sexual orientation does not appear to impact their level of comfort in the college.

Table 2.28b: Comfortable with the Climate in the College of Natural Science by Demographic Characteristics (Mean Scores)

	Gender	Identity		xual Itation	Rad	ce/Ethnic	ity	Disa	bility
Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No

Overall, how comfortable or uncomfortable are you with the climate in the College of Natural Science?	3.78	3.82	3.75	3.77	3.74	3.90	3.50	3.78	<u>3.52</u>	4.04	
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The mean scores are based on a five-point scale where 1 refers to very comfortable with the climate and 5 refers to very comfortable with the climate. With the midpoint of the scale being 3, everything above it is considered comfortable and everything below uncomfortable with the climate. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very uncomfortable or very comfortable).

In terms of student characteristics, those who had been at MSU for more than two years, master's students and domestic students reported lower mean scores (less comfortable) for their level of comfort with the climate in the college. (Table 2.28c).

Table 2.28c: Comfortable with the Climate in the College of Natural Science by Student Characteristics (Mean Scores)

		Years	at MSU	Deg	ree	Internatio	nal Status
	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No
Overall, how comfortable or uncomfortable are you with the climate in the College of Natural Science?	3.77	3.91	3.59	<u>3.56</u>	3.79	3.84	<u>3.74</u>

The mean scores are based on a five-point scale where 1 refers to very comfortable with the climate and 5 refers to very comfortable with the climate. With the midpoint of the scale being 3, everything above it is considered comfortable and everything below uncomfortable with the climate. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very uncomfortable or very comfortable).

Biological Sciences students and Mathematics students were less likely to report being comfortable with the climate in the college compared to student in the Physical Sciences (Table 2.28d).

Table 2.28d: Comfortable with the Climate in the College of Natural Science by College District (Mean Scores)

		Co	ict	
	Overall	Biological	Physical	Mathematics
Overall, how comfortable or uncomfortable are you with the climate in the College of Natural Science?	3.76	3.69	3.98	3.43

The mean scores are based on a five-point scale where 1 refers to very comfortable with the climate and 5 refers to very comfortable with the climate. With the midpoint of the scale being 3, everything above it is considered comfortable and everything below uncomfortable with the climate. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very uncomfortable or very comfortable).

Respondents were then asked about their satisfaction as a student of the college (Table 2.29a). Seventy-two percent reported that they were at least somewhat satisfied with 13.1% reporting that they were very or somewhat dissatisfied.

Table 2.29a: Satisfaction as a Student in the College of Natural Science

	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied			
	1	2	3	4	5	N	Mean	Std. Dev
Overall, how satisfied or dissatisfied are you with your experience as a student in the College of Natural Science?	4.0%	9.1%	14.9%	39.4%	32.6%	175	3.87	1.091

The mean scores are based on a five-point scale where 1 refers to very dissatisfied with experience in college and 5 refers to very satisfied with experience in college. With the midpoint of the scale being 3, everything above it is considered satisfied, and everything below dissatisfied with experience in college. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very dissatisfied or very satisfied).

Though all the mean scores for each group were well above 3.0 (satisfied), women, members of the LGBTTQIA2S+ community, and those with disabilities reported lower satisfaction than their counterparts (Table 2.29b). Those without disabilities reported a much higher level of satisfaction than any of the other demographic groups. A student's level of satisfaction does not appear to differ across race/ethnic categories.

Table 2.29b: Satisfaction as a Student in the College of Natural Science by Demographic Characteristics (Mean Scores)

		Gen Iden		Sex Orien		Rad	ce/Ethnic	city	Disa	bility
	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
Overall, how satisfied or dissatisfied are you with your experience as a student in the College of Natural Science?	3.89	4.02	<u>3.79</u>	3.93	<u>3.67</u>	3.80	3.78	3.77	<u>3.55</u>	4.15

The mean scores are based on a five-point scale where 1 refers to very dissatisfied with experience in college and 5 refers to very satisfied with experience in college. With the midpoint of the scale being 3, everything above it is considered satisfied, and everything below dissatisfied with experience in college. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very dissatisfied or very satisfied).

In terms of student characteristics, those who had been at MSU for more than two years, master's students and domestic students reported a lower level of satisfaction even though it was still well above 3 (Table 2.29c).

Table 2.29c: Satisfaction as a Student in the College of Natural Science by Student Characteristics (Mean Scores)

		Years	at MSU	Deg	ree	Interna Sta	
	Overall	1-2 Years	More than 2	Masters	PhD	Yes	No
Overall, how satisfied or dissatisfied are you with your experience as a student in the College of Natural Science?	3.89	4.17	<u>3.53</u>	<u>3.67</u>	3.91	4.15	3.77

The mean scores are based on a five-point scale where 1 refers to very dissatisfied with experience in college and 5 refers to very satisfied with experience in college. With the midpoint of the scale being 3, everything above it is considered satisfied, and everything below dissatisfied with experience in college. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very dissatisfied or very satisfied).

Those in the Biological Sciences and Mathematics reported lower levels of satisfaction compared to those in the Physical Sciences (Table 2.29d).

Table 2.29d: Satisfaction as a Student in the College of Natural Science by College District (Mean Scores)

		Cc	ollege Distri	ict
	Overall	Biological	Physical	Mathematics
Overall, how satisfied or dissatisfied are you with your experience as a student in the College of Natural Science?	3.89	3.73	4.17	3.60

The mean scores are based on a five-point scale where 1 refers to very dissatisfied with experience in college and 5 refers to very satisfied with experience in college. With the midpoint of the scale being 3, everything above it is considered satisfied, and everything below dissatisfied with experience in college. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very dissatisfied or very satisfied).

Over two-thirds (68.4%) of the respondents stated that they were proud to be part of the College of Natural Sciences and 94.4% stated that they intended to stay within the College until they graduate (Table 2.30a). Zero respondents disagreed that they intended to stay at NatSci until graduation. When asked about whether they seriously considered leaving their program because of negative experiences, 21.1% stated that they did. The question asks specifically about their program and does not necessarily mean that they considering leaving the college in general.

Table 2.30a: Attitudes about Student Experiences Within the College of Natural Science

Please indicate to what extent you agree or disagree with the following statements about your experiences as	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
a student in the College of Natural								Std.
Science.	1	2	3	4	5	N	Mean	Dev

I am proud to be part of NatSci.	2.3%	6.2%	23.7%	35.0%	32.8%	177	3.90	1.006
I have seriously considered leaving my program in NatSci because of negative experiences. (reverse coding) *	61.1%	11.4%	6.3%	9.7%	11.4%	175	1.99	1.450
I intend to stay at NatSci until graduation.	0.0%	0.0%	5.6%	12.4%	82.0%	178	4.76	.542

\* The statement "I have seriously considered leaving my program in NatSci because of negative experiences" is reverse coded which means that agreement with the statement is unfavorable in terms of staying in the program and a disagree response is favorable.

Table 2.30b offers further insight into who may be more likely to consider leaving their current program and who are more satisfied with the College. For "I am proud to be part of NatSci." and "I intend to stay at NatSci for at least the next twelve months.," the higher the mean the better. LatinX students were more likely to be proud to be part of the College of Natural Science than Underrepresented or White students. Women, members of the LGBTQIA2S+ community, and those with disabilities were less likely to be proud to be part of NatSci. Members of the LGBTQIA2S+ community and other Underrepresented students were less likely to state that they planned on staying within the college until they graduate, though their mean scores were all well above 4.0.

Even though all the groups reported high agreement that they intend to stay at NatSci until graduation, it is still important to acknowledge which groups were more likely to seriously consider leaving the college due to negative experiences. For the statement "I have seriously considered leaving my program in NatSci because of negative experiences," a higher mean suggests greater likelihood of leaving their program. In terms of leaving their program, women, members of the LGBTQIA2S+ community, and Underrepresented students were more likely to state that they had thought of leaving due to negative experiences. Members of the LGBTQIA2S+ community, and Underrepresented students were also less likely to plan to stay until graduation.

Table 2.30b: Attitudes about Student Experiences Within the College of Natural Science by Demographic Characteristics (Mean Scores)

		Gender Identity		Sexual Orientation		Rad	ce/Ethnici	Disability		
Please indicate to what extent you agree or disagree with the following statements about your experiences as a student in the College of Natural Science.	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
I am proud to be part of NatSci.	3.90	4.02	3.80	3.98	<u>3.65</u>	3.90	<u>3.78</u>	3.70	3.53	4.14
I have seriously considered leaving my program in NatSci because of negative experiences. (reversed coding) *	1.89	1.71	2.05	1.77	2.36	2.00	2.70	2.05	2.38	1.52
I intend to stay at NatSci until graduation.	4.79	4.80	4.79	4.80	4.67	4.80	4.40	4.84	4.74	4.82

Students who had been at MSU for more than two years, those in the doctoral program and domestic students were less likely to be proud of the college (Table 2.30c). Those who had been at MSU for more than two years and domestics students were also more likely to seriously consider leaving their program due to negative experiences, along with master's students. Master's students were also less likely to plan to stay at NatSci until graduation.

Table 2.30c: Attitudes about Student Experiences Within the College of Natural Science by Student Characteristics (Mean Scores)

		Years a	at MSU	Deg	gree	Interna Sta	ational tus
Please indicate to what extent you agree or disagree with the following statements about your experiences as a student in the College of Natural Science.	Overall	1-2 Years	More than 2	Masters	ОЧА	Yes	N
I am proud to be part of NatSci.	3.92	4.21	<u>3.55</u>	4.17	3.88	4.25	<u>3.72</u>
I have seriously considered leaving my program in NatSci because of negative experiences. (reverse coding) *	1.96	1.62	2.42	2.39	1.92	1.65	2.12
I intend to stay at NatSci until graduation.	4.76	4.76	4.77	<u>4.56</u>	4.80	4.73	4.79

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for most statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

<sup>\*</sup> The statement "I have seriously considered leaving my program in NatSci because of negative experiences" is reverse coded which means that agreement with the statement is unfavorable in terms of staying in the program and a disagree response is favorable.

<sup>\*</sup> The statement "I have seriously considered leaving my program in NatSci because of negative experiences" is reverse coded which means that agreement with the statement is unfavorable in terms of staying in the program and a disagree response is favorable.

Those in the Biological Sciences and in Mathematics were less likely to say they were proud to be part of the college, more likely to have considered leaving the college due to negative experiences and less likely to plan to stay at NatSci until graduation compared to those in the Physical Sciences (Table 2.30d).

Table 2.30d: Attitudes about Student Experiences Within the College of Natural Science by College District (Mean Scores)

		College District				
Please indicate to what extent you agree or disagree with the following statements about your experiences as a student in the College of Natural Science.	Overall	Biological	Physical	Mathematics		
I am proud to be part of NatSci.	3.88	<u>3.75</u>	4.14	3.60		
I have seriously considered leaving my program in NatSci because of negative experiences. (reverse coding) *	1.99	2.02	1.69	2.60		
I intend to stay at NatSci until graduation.	4.78	4.80	4.86	<u>4.53</u>		

The mean scores are based on a five-point scale where 1 refers to strongly disagreeing with the statement and 5 refers to strongly agreeing with the statement. With the midpoint of the scale being 3, everything above it is considered agreeing (favorable) and everything below disagreeing (unfavorable) for most statements. The closer to the endpoints (1 and 5) the closer it is to the end attribute (very disagree or very agree).

\* The statement "I have seriously considered leaving my program in NatSci because of negative experiences" is reverse coded which means that agreement with the statement is unfavorable in terms of staying in the program and a disagree response is favorable.

# ASSESSMENT AND RECOMMENDATIONS BY RESPONDENTS

Finally, respondents were asked to assess the current situation of the college in terms of needed improvement/current strength in several areas (Table 2.31a). Areas with a mean score greater than three were seen as a strength and those with a mean score below three were areas identified as needing improvement. In terms of strengths, no area receiving extremely high levels of strength, but "Being innovative." (46.4%), "Demonstrating respectful communication." (44.9%), "Demonstrating professionalism and high ethical standards." (44.3%), and "Contributing to the greater good of all." (44.2%) all had at over 40 percent of the students select them as a strength. In terms of needing improvement, "Being a diverse community" (39.0%), "Demonstrating transparency and openness" (37.5%), "Being inclusive and promoting belonging" (34.8%) and "Demonstrating accountability and integrity." (33.4%) all had more than one-third of the respondents select no greater than "Needs Improvement."

Table 2.31a: Assessment and Recommendations

able 2.51a. Assessment and Recomm	ciraacionis							
For each area covered in this survey,	Needs Significant Improvement	Needs Improvement	Is Acceptable	Is a Significant Strength	Is Exemplary, Best Possible			
what is your assessment and recommendation to NatSci leaders?	1	2	3	4	5	N	Mean	Std. Dev
Being a welcoming, safe, and supportive community.	5.4%	18.1%	38.6%	30.1%	7.8%	166	3.17	.995
Being a diverse community.	15.0%	24.0%	26.3%	28.1%	6.6%	167	2.87	1.173
Being inclusive and promoting belonging.	10.2%	24.6%	31.1%	26.9%	7.2%	167	2.96	1.103
Empowering the best outcomes for all regardless of role, identity, or ability status.	9.0%	20.5%	31.9%	30.7%	7.8%	166	3.08	1.090
Being open to perspectives and ideas.	5.4%	12.0%	44.0%	25.9%	12.7%	166	3.28	1.014
Creating an environment of trust where ideas are freely shared and discussed.	5.5%	16.5%	38.4%	24.4%	15.2%	164	3.27	1.082
Being innovative.	4.2%	10.2%	39.2%	33.1%	13.3%	166	3.41	.985
Demonstrating transparency and openness.	13.9%	23.6%	32.1%	20.6%	9.7%	165	2.88	1.176
Demonstrating accountability and integrity.	15.2%	18.2%	30.9%	26.1%	9.7%	165	2.97	1.202
Demonstrating professionalism and high ethical standards.	7.3%	19.4%	29.1%	29.1%	15.2%	165	3.25	1.151
Demonstrating respectful communication.	6.7%	19.4%	29.1%	29.7%	15.2%	165	3.27	1.139
Contributing to the greater good of all.	6.7%	11.5%	37.6%	29.7%	14.5%	165	3.34	1.073

The mean scores are based on a five-point scale where 1 refers to the area "Needs significant improvement" and 5 refers to the area "Is Exemplary, Best Possible". With the midpoint of the scale being 3, everything above it is considered an area of significant strength or better, and everything below is an area needing at least some improvement. The closer to the endpoints (1 and 5) the closer it is to the end attribute (needs significant improvement or exemplary, best possible).

In terms of demographic characteristics, women were less likely to identify any of the areas as a strength with six of the mean scores below three (needs improvement) (Table 2.31b). Members of the LGBTQIA2S+ community reported lower means for all the categories and had seven mean scores below three. Underrepresented students reported lower mean scores for all areas and identified all but one of the areas as needing improvement (being innovative, 3.0). LatinX students reported lower mean scores for nine of the areas and had six areas identified as needing improvement. White students identified five areas as needing improvement and had lower mean scores for two areas. Those with disabilities reported lower mean scores for all the areas compared to those without disabilities and had nine responses in the range of needing improvement.

Table 2.31b: Assessment and Recommendations by Demographic Characteristics (Mean Scores)

		Gen Iden		Sex Orient		Race/Ethnicity			Disability	
For each area covered in this survey, what is your assessment and recommendation to NatSci leaders?	Overall	Man	Woman	Heterosexual	LGBTQIA2S+	LatinX	Underrepresented	White	Yes	No
Being a welcoming, safe, and supportive community.	3.22	3.55	2.93	3.34	2.82	2.89	2.89	3.08	2.85	3.45
Being a diverse community.	2.90	3.19	2.65	3.13	2.23	2.22	2.56	2.70	2.45	3.19
Being inclusive and promoting belonging.	3.03	3.33	<u>2.76</u>	3.14	<u>2.53</u>	3.00	2.67	2.82	2.56	3.30
Empowering the best outcomes for all regardless of role, identity, or ability status.	3.13	3.45	<u>2.86</u>	3.30	2.62	<u>2.78</u>	2.22	2.96	<u>2.65</u>	3.46
Being open to perspectives and ideas.	3.31	3.49	3.15	3.38	3.08	3.00	2.78	3.19	2.98	3.55
Creating an environment of trust where ideas are freely shared and discussed.	3.34	3.56	<u>3.14</u>	3.42	3.03	2.78	2.44	3.17	3.02	3.58
Being innovative.	3.49	3.71	3.31	3.55	3.23	<u>3.11</u>	3.00	3.49	3.28	3.64
Demonstrating transparency and openness.	2.97	3.27	2.71	3.13	2.38	2.33	2.22	2.76	<u>2.52</u>	3.25
Demonstrating accountability and integrity.	3.01	3.24	2.82	3.12	2.62	2.67	2.00	2.79	<u>2.43</u>	3.41
Demonstrating professionalism and high ethical standards.	3.36	3.65	<u>3.11</u>	3.41	3.00	3.67	2.22	3.10	2.93	3.63
Demonstrating respectful communication.	3.37	3.58	3.18	3.46	2.92	3.11	2.67	3.13	2.91	3.64
Contributing to the greater good of all.	3.45	3.70	3.23	3.50	3.05	3.11	<u>2.56</u>	3.26	3.06	3.69

The mean scores are based on a five-point scale where 1 refers to the area "Needs significant improvement" and 5 refers to the area "Is Exemplary, Best Possible". With the midpoint of the scale being 3, everything above it is considered an area of significant strength0 or better, and everything below is an area needing at least some improvement. The closer to the endpoints (1 and 5) the closer it is to the end attribute (needs significant improvement or exemplary, best possible).

In terms of student characteristics, students who had been at MSU for more than two years reported lower mean scores for all areas with six of the mean scores being below three (Table 2.31c). Doctoral students reported lower mean scores for all areas compared to master's students with four areas being identified as needing improvement. Domestic students reported lower means scores for all of the areas compared to their counterparts with five of the areas received a mean score less than three.

Table 2.31c: Assessment and Recommendations by Student Characteristics (Mean Scores)

		Years at MSU		Deg	ree	International Statu	
Since becoming a student in the College of Natural Science, how often, if at all, have you been in a situation where a NatSci student (graduate or undergraduate) or employee has	Overall	1-2 Years	More than 2	Masters	ОЧА	Yes	No
Being a welcoming, safe, and supportive community.	3.19	3.38	2.93	3.28	3.17	3.47	<u>3.03</u>
Being a diverse community.	2.90	3.17	2.53	3.39	2.83	3.34	<u>2.62</u>
Being inclusive and promoting belonging.	2.99	3.19	<u>2.71</u>	3.50	2.92	3.27	2.82
Empowering the best outcomes for all regardless of role, identity, or ability status.	3.10	3.30	2.84	3.39	<u>3.06</u>	3.55	<u>2.86</u>
Being open to perspectives and ideas.	3.31	3.45	3.13	3.61	<u>3.27</u>	3.64	<u>3.15</u>
Creating an environment of trust where ideas are freely shared and discussed.	3.30	3.51	3.04	3.56	3.27	3.77	<u>3.06</u>
Being innovative.	3.43	3.60	3.21	3.56	3.42	3.56	<u>3.39</u>
Demonstrating transparency and openness.	2.91	3.23	2.50	3.44	2.84	3.39	2.65
Demonstrating accountability and integrity.	3.00	3.29	<u>2.61</u>	3.44	<u>2.94</u>	3.48	<u>2.71</u>
Demonstrating professionalism and high ethical standards.	3.29	3.48	<u>3.04</u>	3.50	<u>3.26</u>	3.68	3.07
Demonstrating respectful communication.	3.31	3.54	3.00	3.56	<u>3.27</u>	3.68	<u>3.08</u>
Contributing to the greater good of all.	3.36	3.52	<u>3.16</u>	3.50	3.35	3.76	<u>3.16</u>

The mean scores are based on a five-point scale where 1 refers to the area "Needs significant improvement" and 5 refers to the area "Is Exemplary, Best Possible". With the midpoint of the scale being 3, everything above it is considered an area of significant strength or better, and everything below is an area needing at least some improvement. The closer to the endpoints (1 and 5) the closer it is to the end attribute (needs significant improvement or exemplary, best possible).

Biological Sciences students reported lower mean scores for all areas other than "Being open to perspectives and ideas" when compared to Physical Sciences and five areas were below the 3.0 threshold (Table 2.31d). Those in Mathematics reported lower mean scores for all areas compared to the Physical Sciences and seven areas were below 3.0. No areas had a mean score below 3.0 for those in the Physical Sciences.

Table 2.31d: Assessment and Recommendations by College District (Mean Scores)

		College District				
Since becoming a student in the College of Natural Science, how often, if at all, have you been in a situation where a NatSci student (graduate or undergraduate) or employee has	Overall	Biological	Physical	Mathematics		
Being a welcoming, safe, and supportive community.	3.18	3.02	3.44	2.97		
Being a diverse community.	2.87	<u>2.45</u>	3.26	2.93		
Being inclusive and promoting belonging.	2.96	2.69	3.26	2.90		
Empowering the best outcomes for all regardless of role, identity, or ability status.	3.08	2.85	3.31	3.07		
Being open to perspectives and ideas.	3.28	3.32	3.39	2.93		
Creating an environment of trust where ideas are freely shared and discussed.	3.26	3.16	3.50	2.97		
Being innovative.	3.41	<u>3.32</u>	3.62	<u>3.14</u>		
Demonstrating transparency and openness.	2.88	<u>2.65</u>	3.08	<u>2.93</u>		
Demonstrating accountability and integrity.	2.97	2.85	3.16	2.83		
Demonstrating professionalism and high ethical standards.	3.26	3.18	3.38	3.21		
Demonstrating respectful communication.	3.26	3.16	3.41	3.17		
Contributing to the greater good of all.	3.34	3.26	3.46	3.28		

The mean scores are based on a five-point scale where 1 refers to the area "Needs significant improvement" and 5 refers to the area "Is Exemplary, Best Possible". With the midpoint of the scale being 3, everything above it is considered an area of significant strength or better, and everything below is an area needing at least some improvement. The closer to the endpoints (1 and 5) the closer it is to the end attribute (needs significant improvement or exemplary, best possible).

# **SUMMARY**

Below is a summary of the findings for each section of the report.

#### Climate/Relationships

Adjective Pairs

Overall, the climate within the college received positive scores. When presented with negative-positive adjective pairs that described various aspects of climate, all the mean score responses were in the positive range. Though all mean scores were in the positive range, Women, members of the LGBTQIA2S+ community, LatinX students and those with disabilities reported lower mean scores for at least half of the adjective pairs. Whites reported lower mean scores for all but one adjective pair (hostile/friendly). Master's students gave fewer positive responses for one of the adjective pairs (regressing/improving) and doctoral students gave fewer positive responses for seven of the twelve adjectives. Domestic students reported lower mean scores for all the adjective pairs. Physical Sciences had the highest means scores for all but one of the adjective pairs (competitive/cooperative). Biological Sciences had lower mean scores for eight of the twelve adjective pairs and Mathematics had lower mean scores for all the adjective pairs.

#### Climate for Specific Groups

Respondents were asked about the climate within the college and their specific program/department for specific demographic groups. In terms of the college in general, at least half of the respondents said that the climate was at least somewhat positive for each group other than for transgender individuals and non-Christians. The climate was seen as best for men and Whites with over two-thirds of the respondents reporting the climate as being at least somewhat positive. In terms of a negative climate, non-native English speakers, Internationals, People of Color, and women all had over ten percent of the respondents reporting very negative or somewhat negative responses. Women felt that women's climate was not as favorable compared to their men counterparts' responses. Those within the LBGTQIA2S+ community felt that the climate was not as positive for both transgender individuals and those who are gay/lesbian/bisexual than those reported by heterosexuals. LatinX students rated the climate less favorable for internationals and Underrepresented students rate the climate less favorable for immigrants and non-native English. Women, members of the LGBTQIA2S+ community, White students and those with disabilities were more likely to report any given group as having a less positive climate other than for men and Whites. Students who have been at MSU for more than two years, and domestic students were also more likely to report a less positive climate for any group, other than for Whites and men, than their counterparts. Doctoral students reported less favorable climates for six groups. Physical Sciences reported the most positive climates for all groups listed. Mathematics reported less favorable climate mean scores for all groups listed. Biological Sciences reported less favor climates for six of the groups.

As with the college itself, at least 50 percent said that the climate in their programs/ departments for specific demographic groups was at least somewhat positive for each group and the climate was seen best for Whites and men. Women, international students, non-native English speakers and gay, lesbian, bisexual individuals also had over 60 percent of the respondents say the climate was at least somewhat positive for these groups which is higher than what was reported at the college level. The highest levels of negative climate within departments/programs were reported for People of Color non-native English speakers and international students which is the same as within the college itself. Those within the LBGTQIA2S+ community felt that the climate was not as positive for both transgender individuals and those who are gay/lesbian/bisexual than those reported by heterosexuals. LatinX rated the climate less favorable for internationals and Underrepresented graduate students rated the climate less favorable for immigrants and non-native English speakers. Women, members of the LGBTQIA2S+ community, students with disabilities, students who had been at MSU for more than two years, and domestic students were more likely to report lower mean scores (less positive) for all/most groups other than Whites and men. Master's students rated the climate less favorable for five groups and doctoral students rate the climate less favorable for internationals. Biological Sciences students reported less favorable climates for seven of the groups and Physical Science students reported a less favorable climate for all but immigrants.

# Climate for those with Disabilities/Roles outside of School

Respondents were also asked about the climate for graduate students with certain disabilities as well as roles outside of school for both the college in general and the respondent's program/department. Over 50% of the respondents reported the climate for two of the groups to be at least somewhat positive (those with physical disabilities and those serving/served in military). The climate for graduate students with mental health conditions received the highest percentage of negative responses, followed by learning disabilities. Women, members of the LGBTQIA2S+ community, students with disabilities, and Underrepresented students reported lower mean scores (less positive) for all disabilities and roles outside of school. Whites reported positive climates less often for all but those providing care for adults who are disabled/elderly. Students who had been at MSU for more than two years, doctoral students, and domestic students reported lower positive response for all disabilities and roles. Those in the Biological Sciences and Mathematics reported less favorable climates for all disabilities and roles compared to those in the Physical Sciences.

Graduate students reported that within their department/programs at least 50 percent of the time positive climate for all roles and disabilities, other than learning disabilities, but all the disabilities received at least 20 percent negative responses. The climate for those with mental health conditions received the highest level of negative responses. Women, members of the LGBTQIA2S+ community, LatinX students, students who had been at MSU for more than two years, and domestic students reported less favorable climates for all disabilities and roles. Those with disabilities reported less favorable climates for all disabilities/roles other than for those who serviced/serving in the military. White students reported less favorable climates for all disabilities and roles, other than providing care for adults who are disables and/or elderly. Doctoral students reported a less favorable climate for all disabilities and roles other than learning disability. Biological Sciences and Mathematics students reported less favorable all or almost all groups compared to those in the Physical Sciences.

# Welcoming and Belonging

In terms of the level of welcoming and belonging within the college, over 50% of the respondents agreed with each statement. Two areas had higher levels of negative responses— "People take time to get to know new students." and "I feel a sense of belonging." Women, those with disabilities and students who had been at MSU for more than two years were less likely to agree with all the statements. Members of the LGBTQIA2S+ community, doctoral students and domestic students were less likely to agree with some of the statements. Though there were differences by race, there was no clear pattern. Those within the Biological Sciences and those in the Physical Sciences were less likely to agree with at least half of the statements, though not the same ones. Mathematics students reported higher levels of agreement than the other two districts.

In terms of welcoming and belonging within their department/program, over 50 percent of the respondents agreed with all the statements and over 70 percent agreed with six of the nine statements. Two areas had relatively high percent of strongly to somewhat disagree responses - "People take time to welcome new students." and "My personal identities are valued in the classroom." Women and those with disabilities being less likely to agree than their counterparts for all the statements. Members of the LGBTQIA2S+ community were less likely to agree with five of the nine statements. There were differences across racial groups, but there were no clear patterns across the groups. Students who have been at MSU for more than two years were less likely to agree to all but one statement. Master's students were less likely to agree with five of the statements and doctoral students were less likely to agree with four. Domestic students were less likely to agree with six of the statements and international students were less likely to agree with two. Mathematics students were less likely to agree with all of the statements and Biological Sciences students were less likely to agree with five compared with Physical Sciences students who were more likely to agree with all.

# Values and Relationships

Respondents were also asked about their values and relationships within their department/program. These questions were not asked at the college level. For all the values/relationships, over half of the respondents reported agreeing with the statements. For all 16 statements, over half of the respondents said that they at least somewhat agreed with the statements with half of the statements having over 75% of the respondents at least somewhat agreeing. The statements with the highest levels of agreement all were associated with respect being shown to the graduate students by various positions within the department/program (other students, program/college staff, advisor, faculty). The statements with the highest level of disagreement were "My department/program operates in a clear and transparent manner.," "Faculty/leadership provide an explanation for major decisions.," and "People care about my general satisfaction in my program." Women reported lower levels of agreement than their men counterparts for eleven of the 16 statements, as did those in the LGBTQIA2S+ community. Underrepresented students were less likely to report higher levels of agreement for eleven of the statements and White respondents were less likely to agree for ten of the statements. Those with disabilities reported lower levels of agreement for all but one of the statements compared to those without disabilities. Those who had been at MSU for more than two years reported lower levels of agreement for all but three of the 16 of

the statements. Master's students were less likely to agree with twelve of the statement compared to doctoral students. Domestic students were less likely to agree than their counterparts for all but two of the statements. Biological Sciences students reported lower levels of agreement for nine of the statements and Mathematics reported lower levels of agreement for all but one.

#### Faculty and Graduate Student Diversity

# **Faculty Diversity**

Barely half of the graduate students agreed that the College had demonstrated that they were committed to creating a diverse faculty and that there was faculty that they could identify with. Over a third of the students disagreed that they were satisfied with the level of diversity of the faculty and that they had enough faculty that they could identify with. Also, a high percentage of the graduate students stated that there were too few faculty of color and women faculty members.

Women were less likely to agree as were members of the LGBTQIA2S+ community, LatinX students and those with disabilities that they felt that the college had demonstrated commitment, that they could identify with members of the faculty and that they were satisfied with the diversity of the faculty members. Underrepresented students were less likely to agree with that they could identify with members of the faculty and that they were satisfied with the diversity of the faculty members. Students who had attended MSU for more than two years and doctoral were less likely to agree with these three points as well. Domestic students were less likely to agree that the college had demonstrated a commitment to hire diverse faculty and that that they were satisfied with the level of diversity within the college's faculty. Biological Sciences and Mathematics students were less likely to agree that the college had demonstrated a commitment to hiring diverse faculty. Biological Sciences students were also less likely to agree that they were satisfied with the level of diversity within the college.

Women, members of the LGBTQIA2S+ community, LatinX students and students with disabilities were more likely to agree there were too few faculty that were of color and women, as were students that had been at MSU for more than two years, doctoral students and domestic students. White students were more likely to agree that there were too few women faculty and students in the Physical Sciences. Biological Sciences students were more likely to agree that there were too few faculty of color.

# **Graduate Student Diversity**

Students were also asked about the diversity of the graduate student population at the college level. Over 50 percent of the students agreed that the college was committed to recruiting students from diverse backgrounds, but one-third of the students disagreed that they were satisfied with the level of graduate student diversity. Women, members of the LGBTQIA2S+ community, LatinX students and students with disabilities were less likely to agree with both the college's commitment to diversity and that they were satisfied with the level of diversity amongst graduate students within the college. Underrepresented students were less likely to agree that with the college's commitment to diversity and White students were less likely to be satisfied with the level of graduate student diversity. Students who had been at MSU for more than two years, doctoral students and domestic students were less likely to agree that the college was committed to recruiting a diverse student population and were less satisfied with the level of diversity amongst the student population. Biological Sciences and Mathematics students were less likely to agree that the college demonstrated that they were committed to recruiting a diversity student body and that they were satisfied with the level of graduate student diversity within the college.

When asked specifically if there were too few graduate students of color and women graduate students within the college, almost half disagreed that there were too few women graduate students and too few graduate students of color within the college. Women, members of the LGBTQIA2S+ community, LatinX and White students and students with disabilities were more likely to agree that there were too few graduate students of color and women graduate students within the college. Those who were at MSU for more than two years and domestic students were both also more likely to agree that were too few women graduate students and graduate students of color.

Doctoral students were more likely to agree that there were too few graduate students of color and master's students were more likely to agree that there were too few women graduate students. Students in the Biological Sciences and in Mathematics were more likely to agree that there were too few graduate students of color within the college. Physical Sciences students were more likely to agree that there were too few women graduate students.

Respondents were also asked their level of agreement with the same four statements as they related to the department/program. Graduate students seemed more positive about their departments/programs than with the college in general with higher levels of agreements on both their department's commitment to a diverse graduate student body and with their satisfaction with the level of diversity. Still, one-third of the graduate students disagreed that they were satisfied with the level of diversity and the levels of agreement that there were too few women graduate students and graduate students of color were higher than at the college level.

Women, members of the LGBTQIA2S+ community, Underrepresented and White students and students with disabilities were less likely to agree with that their department/program was committed to recruiting a diverse student population. Women, members of the LGBTQIA2S+ community, LatinX and White students, and students with disabilities were less likely that they were satisfied with the level of diversity. Students who had been at MSU for more than two years and domestic students were less likely to agree that their department/program was committed to recruiting a diverse student population and were less satisfied with the level of diversity amongst the student population. Doctoral students were less likely to agree with the commitment to recruiting a diverse graduate student body. Those in the Biological Sciences and Mathematics were less likely to agree that their department/program was committed to recruiting graduate students from diverse backgrounds and were also less likely to be satisfied with the level of diversity in their department.

Women, members of the LGBTQIA2S+ community, LatinX and White students, students with disabilities, those who had been at MSU for more than two years, doctoral students, and domestic students were more likely to agree that there were too few graduate students of color within the college. Men, members of the LGBTQIA2S+ community, Underrepresented and White students, those with disabilities, those had been at MSU for more than two years, master's students and domestic students were more likely to agree that there were too few women graduates. Biological Sciences and Mathematics students were more likely to agree that there were two few graduate students of color within their department/program. Physical Sciences and Mathematics students were more likely to agree that there were too few women graduate students in their department/program.

## **Learning Opportunities**

Students were asked about their access to learning opportunities within the college. More than two-thirds of the graduate students agreed with each of the seven statements. Though there were high levels of agreement with the statements, there were still areas with relatively high levels of disagreement – mentoring relationships relevant to my career, faculty role models, learning opportunities available relevant to career, and equal opportunities for success.

There was a difference in levels of agreement for all the statements by demographic and student characteristics. Women were less likely to agree on having learning opportunities relevant to career goals, equal access to resources and to mentoring opportunities relevant to their career and that they had similar opportunities for success compared to other students. Men were less likely to agree that they had faculty role models. Members of the LGBTQIA2S+ community were less likely to agree that they had learning opportunities relevant to their career goals, support to participate in opportunities to advance their career goals, having informal/formal mentoring opportunities, and having mentoring relationships available to them compared to their counterparts. LatinX and Underrepresented students and students with disabilities were less likely to agree with all the statements related to access to learning opportunities. Students who had been at MSU for more than two years were less likely to

agree that they had learning opportunities related to their career goals, had equal access to resources to support professional learning, had access to informal and formal mentoring opportunities, and had similar opportunities for success compared to other students. Master's students were less likely to agree that they were supported to participate in learning /education opportunities to advance their career goals, having access to informal/formal mentoring opportunities, having mentoring relationships available to them relevant to their career goals, to have equal access to opportunities for success and to having faculty role models. International students were less likely to learning opportunities related to their career goals, equal access to resources, supported to participate in opportunities that could advance their career, access to informal/formal mentoring opportunities, and having mentoring relationships available relevant to their career goals. Students in the Biological Sciences and in Mathematics were less likely to agree with all the learning opportunities compared to those in the Physical Sciences.

## **Innovation Support**

There is a general agreement that the <u>college</u> supports innovation. Eight of the eleven statements received over 60 percent agreement. Four received over 75 percent agreement – "People here have interest and curiosity about new ideas and projects.", "Faculty encourage collaboration across disciplines.", "Faculty recognizes innovation." and "I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands." There are still areas with relatively high levels of disagreement. Over one-third of the graduate students agreed that "There is resistance to doing or trying something new." In addition, "Our announced visions and strategies inspire me.," "We have an outward focus on impact, purpose, and solutions that helps to drive innovation." and "Faculty engage graduate students in work that extends beyond the status quo." received relatively high levels of disagreement.

There were differences amongst the demographic and student groups. Women were less likely to agree with all but two of the statements (Table 2.13b). Members of the LGBTQIA2S+ community were less likely to agree with five of the statements compared to heterosexuals. LatinX students were less likely to agree with five of the statements and Underrepresented students were less likely to agree with nine of the statements and White students were less likely to agree with six of the statements. Students with disabilities were less likely to agree with all the statements. Students who had been at MSU for more than two years were less likely to agree with all but one of the eleven statements. Master's students were less likely to agree that they could have conversations with their advisor about longer-term career goals and that faculty supported them in taking initiatives and risks. Doctoral students were less likely to agree with six of the statements. Domestic students were less likely to agree with all but two of the statements. Biological Science and Mathematics students were less likely to agree with all the statements compared to those in the Physical Sciences.

Graduate students were also asked about innovation within their own <u>department/program</u>. There appears to be lower levels of agreement in general for innovation support with individual department/programs with all but two statements having over 50 percent agreement. The same four statements that had over 75 percent agreement at the college level also had over 75 percent at the individual department/program level. Again, "There is resistance to doing or trying something new." had over one-third of the respondents agreeing with the statement. Two other areas with relatively high levels of disagreement were Our announced visions and strategies inspire me." and "We have an outward focus on impact, purpose, and solutions that helps to drive innovation."

Women, members of the LGBTQIA2S+ community, master's students and domestic students were less likely to agree with five or more of the statements. Though there was difference by race/ethnicity there was no clear pattern. Students with disabilities and students who had been at MSU for more than two years were less likely to agree with all the statements. Those in the Biological Sciences were less likely to agree with eight of the statements and those in Mathematics were less likely to agree with all the statements compared to Physical Sciences students who were more likely to agree to all of them compared to the other two groups.

#### Mentoring

Graduate students were asked about four areas of resources/services that could be offered by their mentor(s). Each area had over 60 percent of the graduate students agreeing. There were also relatively high levels of disagreement with the statements with over 20 percent disagreeing with three of the areas – career opportunities/pathways, career preparation and professional networking. Over a quarter of the students disagreed with professional networking.

LatinX students, those who had been at MSU for more than two years and master's students were less likely to agree with all four statements. Men, members of the LGBTQIA2S+ community and White students were less likely to agree with the statement about communicating their research. Women, Underrepresented students, students with disabilities, and domestic students were less likely to agree with career opportunities/pathways. Women, Underrepresented students, and students with disabilities were less likely to agree with career preparation. Members of the LGBTQIA2S+ community, White students and domestic students were less likely to agree with professional networking. Mathematics graduate students were less likely to agree with all four statements compared to those in the Physical Sciences. Those in the Biological Sciences were less likely to agree with all but communicating their research.

Students were also asked to evaluate their mentor(s). Over 70 percent of the respondents agreed with their mentor(s) being helpful, meeting with them regularly, being paired with one soon after entering their program, and with being satisfied with their mentor(s).

Men, Underrepresented students, students with disabilities and master's students were less likely to agree with all four statements. LatinX students and students who had been at MSU for more than two years, and domestic students were less likely to find their mentor(s) helpful. White students were less likely to agree that they met regularly with their mentor(s). Members of the LGBTQIA2S+ community, LatinX students, students who had been at MSU for more than two years and domestic students were less likely to be satisfied with their mentor(s). LatinX student, students who had been at MSU for more than two years, and international students were less likely to agree that they had been paired with a mentor soon after entering their program. Those in Mathematics were less likely to agree with any of the statements. Biological Sciences students were less likely to agree that their mentor(s) were helpful and that they were satisfied with their mentor(s). Physical Sciences students were less likely to agree that they were paired with a mentor soon after entering the program.

## <u>Annual Review</u>

Students were asked about their experiences with their annual review process. Over 50 percent of the respondents agreed with all the statement and over 60 percent of the students agreed that they were comfortable asking their advisor/guidance committee questions about performance expectations and that they met at least once a year with their guidance committee. The two areas with the highest levels of disagreement were associated with communication – receiving valuable performance feedback and that the criteria used was clear and transparent.

Demographics and student characteristics were related to whether students were less likely to agree with one of the statements about their annual review. Students with disabilities and master's students were less likely to agree with any of the six statements.

Men, LatinX and White students, students who have been at MSU for two years or less, and international students were less likely to agree that they met at least once a year with their guidance committee to review their progress. Men, members of the LGBTQIA2S+ community, LatinX and White students, and domestic students were less likely to agree that they were comfortable asking their advisor/guidance committee questions about performance expectations. Members of the LGBTQIA2S+community, LatinX and White students, master's candidates, and domestic students were less likely to agree that the criteria used for their annual review was clear and transparent. Members of the LGBTQIA2S+ community, Underrepresented and White students, students who had been at MSU

for two years or less and domestic students were less likely to agree that their program followed an established annual review process. LatinX and Underrepresented students and students who had been at MSU for two years or less were less likely to agree that their performance discussions included a focus on their career goals/aspirations. Men, members of the LGBTQIA2S+ community, Underrepresented and White students, student who had been at MSU for more than two years, and domestic students were less likely to agree that their found the performance feedback valuable.

## Sexual Misconduct, Uncivil Behavior, and Bias Incidences

#### Sexual Misconduct

Given the University's stance on sexual misconduct, any agreement with the statement "I have experienced sexual harassment and/or relationship violence within my major/program/the college." needs to be given great attention, as does "Sexual harassment is a problem within my major/program/the college." In terms of experiencing it, 6.4% reported that they at least somewhat agreed with the statement and 12.8% stated that it was a problem in their major/program or within the college. Women, members of the LGBTQIA2S+ community, LatinX and Underrepresented students, those with disabilities, students who had been at MSU for more than two years and international students were more likely to agree with the statement about experiencing sexual misconduct. Those in the Physical Sciences and in Mathematics were more likely to agree that they had experienced sexual harassment or relationship violence within their department/program/the college.

Members of the LGBTQIA2S+ community, Underrepresented students, those with disabilities, students who had been at MSU for more than two years, doctoral students and domestic students were more likely to say that sexual harassment is a problem. Physical Sciences and Mathematics were more likely to state that it was a problem within their department/program/the college.

In terms of leadership handling of sexual misconduct, 58.2% of the respondents felt leadership took reports seriously and 60.5% felt that confidentiality would be maintained. Members of the LGBTQIA2S+ community, Underrepresented students, those with disabilities, students that had been at MSU for longer than two years were less, doctoral students and domestic students reported lower levels of agreement about leadership taking reports seriously. LatinX and Underrepresented students, students with disabilities, students that had been at MSU for longer than two years were less, doctoral students and domestic students were less to agree that leadership would keep reports confidential. Biological Sciences were less likely to agree that college leaders would take reports seriously, would maintain confidentiality and that they could file a report without fear of retaliation. Those in Mathematics were less likely to agree that the department/program/college leaders would maintain confidentiality.

Over 80 percent of the respondents stated that they knew how to report sexual harassment and relationship violence. Men, members of the LGBTQIA2S+ community, Underrepresented students, those with disabilities, students who had been at MSU for two years or less, doctoral students and international students were less likely to agree that they knew how to report sexual harassment and relationship violence. Mathematics graduate students were less likely to know how to file a report compared to their counterparts.

Of concern is that 18.1% of the respondents disagreed that they could report an incident without fear of retaliation. This is even more concerning when considering that those most likely to need to file a report are also the ones most likely to fear retaliation – Women, members of the LGBTQIA2S+ community, LatinX and Underrepresented students, and those with disabilities. In addition, those who had been at MSU for more than two years, doctoral students and domestic students were less likely to agree that there would be no retaliation if they reported an incident. Those in Mathematics were less likely to agree that they could file a report without retaliation.

#### **Uncivil Behavior**

There does appear to be an issue with uncivil behavior within the college for some of the behaviors that were presented in the questionnaire. Ten of the behaviors were about personal experiencing the behaviors and two were about witnessing them. Four of the personal behavior had at least 30% of the respondents stating that it had occurred at least once. Over 40% reported witnessing at least one of the behaviors being experienced by someone else. Almost all of the reported behaviors (experienced and witnessed) were more likely to have happened more than once. Women, LatinX and Underrepresented students, students with disabilities, student who had been at MSU for more than two years, and doctoral students were more likely to experience most of the uncivil. Biological Sciences students were more likely to experience eleven of the thirteen behaviors and Mathematics students were more likely to experience nine of the behaviors. Over half of the uncivil behavior was committed by faculty and/or academic staff. An additional quarter were committed by support staff.

#### **Biased Incidences**

Power differentials in the learning environment were the most reported with over one-quarter stating that they had experienced it and over two-thirds of those stating that it had happened more than once. Over a third of the respondents had witnessed power differentials with over three-quarters of the respondents who say it stating that they had witnessed it more than once. All other bias incidences listed were reported by less than fifteen percent of the respondents. Respondents were then asked about the frequency they had witnessed others experiencing bias incidences. Again, power differentials were the main form of bias incidences with over a third of the respondents reporting that they had witnessed at least one incident and of those that witnessed it, over three-quarters had witnessed it more than once. Faculty members were the leading source of bias behavior followed by graduate students/teaching assistance.

#### Bias Incident Reporting

Sixty percent of the respondents stated they knew how to report a bias incident, which is lower than the percentage that had said that they knew how to report a sexual misconduct event. When asked about fear of retaliation for reporting an event, 22.8% stated that they disagreed with the statement that they would not fear retaliation. Women, members of the LGBTQIA2S+ community, LatinX and Underrepresented students, those with disabilities, students who had been at MSU for more than two years, doctoral students and domestic students reported lower levels of agreement when asked about reporting without fear of retaliation. Those in the Biological Sciences and Mathematics were also more likely to fear retaliation than those in the Physical Sciences.

In terms of leadership's handling of the reporting, 52.6% felt that leadership would take the appropriate actions based on the claimant's desires and 22.8% disagreed. Women, members of the LGBTQIA2S+ community, LatinX and Underrepresented students, those with disabilities, students had lower levels of agreement. Only 58.4% of the respondents said that they were confident that leadership would keep the reports confidential and 24.0% did not. Women, members of the LGBTQIA2S+ community, Underrepresented students, those with disabilities, lower levels of agreement. Those in the Biological Sciences and Mathematics reported both lower levels of agreement for confidence in how leadership would hand the report and if they would maintain confidentiality than did those in the Physical Sciences.

Those who had stated that they knew of at least one incident of bias were asked if they had reported it. Of serious concern is that 83.5% stated they did not and 8.2% stated that they only reported some of the incidents they knew about. The primary reason given was that they were unsure if violated university policy (training/education need). Other reasons reported all dealt with confidence in leadership – fear of retaliation, concern with not being believed, and leadership's ability to deal appropriately with the situation. For those incidences reported, over sixty percent were reported to department/program supervisor/chair/director and almost half were reported to the graduate program, director.

Overall Comfortableness and Satisfaction with the College

Over two-thirds of the respondents stated that they were at least somewhat comfortable with the current climate within the college though 17.5% reported being at least somewhat uncomfortable. Underrepresented students, White students, those with disabilities, students who had been at MSU for more than two years, and master's students reported being less comfortable with the climate. Biological Sciences students and Mathematics students were less likely to report being comfortable with the climate in the college compared to student in the Physical Sciences.

When asked about their satisfaction with being a student in the college, over 70 percent stated that they were at least somewhat satisfied. Women, members of the LGBTTQIA2S+ community, those with disabilities, those who had been at MSU for more than two years, master's students and domestic students reported lower satisfaction than their counterparts. Those in the Biological Sciences and Mathematics reported lower levels of satisfaction compared to those in the Physical Sciences.

In addition, over two-thirds of the students stated that they were proud to be part of the College of Natural Science. LatinX students were more likely to be proud to be part of the College of Natural Science than Underrepresented or White students. Women, members of the LGBTQIA2S+ community, those with disabilities, students who had been at MSU for more than two years, doctoral students and domestic students were less likely to be proud to be part of NatSci.

Respondents were also asked how much they agreed that they planned on staying at NatSci until they graduate. Almost 95 percent agreed with the statement. Members of the LGBTQIA2S+ community, other Underrepresented students and master's students were less likely to state that they planned on staying within the college until they graduate, though their mean scores were all well above 4.0 (out of possible 5).

When asked about considering leaving their program due to negatives experiences, over 20 percent stated that they at least somewhat agreed with considering leaving. In terms of leaving their program, women, members of the LGBTQIA2S+ community, Underrepresented students, students who had been at MSU for more than two years, and master's students were more likely to state that they had thought of leaving due to negative experiences.

Those in the Biological Sciences and in Mathematics were less likely to say they were proud to be part of the college, more likely to have considered leaving the college due to negative experiences and less likely to plan to stay at NatSci until graduation compared to those in the Physical Sciences.

## Assessment and Recommendations by Respondents

The final section asked respondents to access the current situation within the college for several areas. Though no area received extremely high levels of strength, there were still areas identified as the highest strengths were "Being innovative.," "Demonstrating respectful communication.," "Demonstrating professionalism and high ethical standards.," and "Contributing to the greater good of all." No area received extremely high levels of needing improvement, but "Being a diverse community," "Demonstrating transparency and openness," "Being inclusive and promoting belonging" and "Demonstrating accountability and integrity." all had at least one-third of the students responding that these areas "needs improvement." In terms of demographic characteristics, Women, members of the LGBTQIA2S+ community, LatinX and Underrepresented students, and those with disabilities were the groups less likely to provide a more positive response, thought it did not necessarily mean that the responses were in the range of needing improvement. Students who had been at MSU for longer than two years and doctoral students and domestic students were also more likely to give lower responses. Mathematics students reported lower mean scores for all areas and Biological Sciences reported lower mean scores for all, but two areas compared to Physical Sciences students.

#### FINAL ASSESSMENT

Overall, there are areas within the report that demonstrate that the College of Natural Science is creating a quality learning environment, but as with all places there are areas of needed improvement. There are areas in this report that warrant consideration and future actions. These are not all the areas that could be improved, but they are the areas that were either identified by the respondents or patterns developed across the report. The order of the areas should not be taken as the prioritized order of importance.

#### Difference between College Districts

There are definite differences in the level of favorable response within the three districts. Both Biological Sciences and Mathematics had lower favorable responses throughout the various parts of the survey compared to Physical Sciences. These districts had less favorable responses in terms of climate, diversity, learning opportunities, innovation support, mentoring/advising, sexual misconduct, uncivil behavior, bias incidences, satisfaction with the college in general, plans to stay and assessment/recommendations. Though Mathematics reported relatively high agreement with the welcoming and belonging in the college section compared to the other two districts, they reported lower levels of agreement across all areas at the department level.

#### Years at MSU

Those students who have been at MSU for more than two years reported less favorable responses to many of the sections in the questionnaire. Students who were here when MSU implemented its response to the COVID epidemic experienced a very different learning climate than is normally experienced at MSU. This could have created the less favorable responses. Another possible reason for the less favorable responses is that the students who have been at MSU longer simply had more experience with various aspects of the college. Without further investigation, such as focus groups or topic specific survey, it is not possible to differentiate all the possible causes.

## **Students with Disabilities**

Those with disabilities appear to have a general dissatisfaction within the College of Natural Science. For almost all the sections of the questionnaire, those with disabilities continuously reported lower mean scores (higher disagreement/lower satisfaction) than their counterparts. They were likely to have experienced sexual misconduct, uncivil behavior and biased behavior. They were more likely to fear retaliation for both sexual misconduct and biased behaviors. They also reported being less comfortable with the current climate and were more likely to consider leaving their major/program due to negative experiences.

Due to concerns about the possibility of identification of a respondent, all forms of disability were merged for analysis. Still, it is unlikely that it is only one form of disability driving the differences seen between those with disabilities and those without. When respondents were asked about climate for those with disabilities, those with mental health conditions and learning disabilities did have lower levels of positive climate reported, as well as higher levels of negative climate responses.

#### LGBTQIA2S+ Students

One of the groups that was identified as having a negative climate was transgendered students. This may explain the lower mean scores (higher disagreement/lower satisfaction) that students in the LGBTQIA2S+ community reported for many of the statements throughout the survey. LGBTQIA2S+ students were also more likely to have experienced uncivil and biased behaviors and fear retaliation for reporting. They also reported some of the lowest mean scores in the assessment section, with many being in the needs improvement range. Due to concerns about possible identification, looking at specific groups within the LGBTQIA2S+ community is not an option.

#### Non-native English-Speaking Students

One of the groups that was identified as having a more negative climate was non-native English speakers. The survey did not include questions about first language, so it was not possible to determine which students fell into this category. This may be an area to be aware of when considering improvements to the college's climate.

#### Sexual Misconduct

Given that the university has a zero-tolerance policy for relationship violence and sexual misconduct, any evidence that this is not the case in the college or in department/units needs to be taken seriously. With 6.4% of the respondents stating that they have experienced sexual harassment or relationship violence within the college and 12.8% stating that it is a problem in their major/program or within the college demonstrates that there is a problem within the college. There also appears to be some concern about retaliation for reporting an incident and that confidentiality will be maintained by leadership and that leadership will take the report seriously. It appears that certain demographic groups are more likely to be victims of this behavior than others.

#### **Uncivil Behavior**

This is one of the key areas that needs to be addressed. The level of incivility identified in this report is concerning. Over 60% of the respondents reported that they had experienced and/or witnessed at least one form of incivility. The data does not allow us to determine if it is a systemic problem or if there are certain individuals who have a significant impact on the entire college. It is known that over 50 percent of the incidences were by faculty/academic staff and one-quarter by support staff. It also appears that certain demographic groups may be more likely to be targets of this type of behavior.

## **Bias Incidences**

In terms of bias, power differentials were the most reported form, both as experienced and as witnessed with 26.5% experiencing it and 37.4% witnessing it. Though it was not asked specifically of power differentials, for bias incidences in general, almost 65 percent of the incidences were faculty members and half involved graduate students/teaching assistants.

When asked if they could report a bias incident without fear of retaliation, 22.8% of the students disagreed that they could report with a fear of retaliation. Those who were more likely to fear retaliation are also the groups that are more likely to need to report an incident on their own behalf - women, members of the LGBTQIA2S+ community, LatinX and Underrepresented students, and those with disabilities.

Reporting of bias incidences was only asked in general and not for any specific form of bias. There are multiple concerns with bias reporting. The first is that 60 percent agreed that they knew how to report bias incidences. In addition, 83.5% of respondents who knew of at least one incident didn't report anything. An additional 8.2% of the respondents only reported some of the incidences they knew. The primary reason for not reporting was being unsure if the incident violated university policy which is an indication that additional training/education is needed. Other reasons were not thinking they would be believed and that they didn't think appropriate action would be taken which are related at least in part to leadership trust concerns.

#### Trust in Leadership

There appears to be some trust issues associated with the leadership in the college and department levels. This is apparent in the findings from the sexual misconduct/relationship violence section and the bias incident reporting section. If those most vulnerable are less likely to trust leadership to handle situations appropriately and to be able to protect them, it potentially increases the likelihood that incidences will not be reported. The fact that 83.5% of the incidences that people stated they experienced or witnessed were not reported supports this concern.

In addition, though unit chair/directors and college leaders were not the positions with the highest level of uncivil behavior reported, there were respondents who identified these positions as sources of uncivil behavior and that

the incidents happened more than once. This may also play a role in the lack of trust that was expressed about leadership.

#### **Innovation Support**

Innovation support may be an area of concern, though not as crucial as other areas. Over one-third of the students reported that there was resistance by the faculty to trying something new. In addition, over 15 percent of the students disagreed with "We have an outward focus on impact, purpose, and solutions that helps to drive innovation" and "Faculty engage graduate students in work that extends beyond the status quo".

### Access to Learning Opportunities/Mentoring

When asked about learning opportunities, two areas had over 20 percent of the students disagreeing – having faculty role models and having mentoring relationships available that were relevant to their career goals. In terms of mentoring, more than 20 percent of the students disagreed with having the following mentoring resources – career opportunities and pathways, career preparation, and professional networking. Most of the students did find their mentors to be helpful and that they met regularly.

There appears to be potential differences in access to learning opportunities and mentoring opportunities based on demographic characteristics. Women, LGBTQIA2S+ students, those with disabilities, LatinX and Underrepresented students, and first-generation students were reported lower levels of agreement for at least some of the learning opportunities listed in the survey. These also seem to be more of a problem in Biological Sciences and Mathematics.

### Clear communication/Transparency

When asked to assess the college on several points in terms of strength and weakness, demonstrating transparency and openness did received mean scores in needing improvement. In addition, when students were asked about their values and relationships within the college. The two areas with the lowest mean scores (negative responses) were associated with communication and had over one-quarter the students disagreeing with each - "My department/program operates in a clear and transparent manner." and "Faculty/leadership provide an explanation for major decisions." Another indication that communication within the college may need improvement is that over 20 percent of the students disagreed that they received valuable performance feedback during their annual review. In addition, over 15 percent disagreed that the criteria for their annual review was clear and transparent.

## Being Inclusive/Promoting Belonging

This was one of the areas that was identified in the Assessment and Recommendation section of the questionnaire with one of the lowest mean scores and was in the range of needing improvement. In other parts of the report, it also appeared to be a possible problem with the areas of people taking the time to get to know new students and feeling a sense of belonging (Welcoming and Belonging Section of the questionnaire) receiving more negative responses. This was less true at the department level compared to the college level.

## Being a Diverse Community

This was also identified as an area in the needed improvement by respondents in the Assessment and Recommendation Section. It was the category that received the lowest mean score and was in the "needs improvement" range. Within the college, over one-third of the students disagreed with being satisfied with the level of faculty diversity and that there were enough faculty that they identified with. Over 60 percent of the students felt that there were too few faculty of color and almost 50 percent felt that there were too few women faculty members at the college level. In terms of graduate student diversity at the college level, over one-third stated that they were not satisfied. Almost 50 percent stated that there were too few graduate students of color. Approximately one-third of the graduate students were dissatisfied with the level of diversity at the department level as well with the focus being on too few graduate students of color.

# Appendix A: Questionnaire

# **NatSci Graduate Survey**

Q1

#### Welcome!

The College of Natural Science (NatSci) leadership is asking all employees and students to help us advance our <a href="Strategic Plan">Strategic Plan</a> and core values of inclusiveness, innovation, openness, and professionalism by telling us about your experiences in and perceptions of the College.

Through the survey that follows, we are seeking to understand the current environment within the College, including climate, diversity, inclusiveness, transparency, accountability, and civility. We will conduct this survey again in 2024 and 2026 to provide metrics for how successful we have been in meeting our strategic priorities to:

- Grow and support a welcoming, diverse NatSci community that empowers the best outcomes for all regardless of role, identity, or ability status.
- Demonstrate transparency, accountability, professionalism, and respectful communication in ways that contribute to the greater good of all.

We invite and encourage your participation in this voluntary and confidential survey. We encourage you to be honest and constructive in your feedback. We appreciate your contribution to sharing your experience within NatSci and we are committed to growing and improving from the insights we gain from the combined ratings and open-ended comments.

**Time Estimate:** The survey will require about 25 minutes of your time to complete but may take more or less time depending on the amount of detail you choose to provide. Please know that if you take the time to add detailed comments, we will review them. As a way of thanking you for participating, all students who submit their completed surveys may choose to receive a \$5 Starbucks e-card. The information to distribute the gift cards is collected independently from your responses to the survey.

**Confidentiality and Consent:** MSU's Office for Survey Research will administer the survey and all results will be reported in the aggregate. No results will be reported that could identify any individual or group of individuals. All comments will be reviewed by OSR and redacted before sharing with the College. You may decline to participate, decline to answer certain questions, or discontinue participation at any time without penalty. Declining to participate will not affect your status or position within the College in any way.

The Office for Survey Research will make every effort to keep your data private to the full extent allowed under the law. However, there are certain times that law or Michigan State University policies require survey administrators to share some data with the proper authorities if someone reported child abuse, sexual assault, or child pornography. Participation in this study does not involve any known physical, financial, emotional or legal risk to you.

Your responses will help create an increasingly positive climate at the College of Natural Science. You are welcome to contact Karen Clark, Project Manager at OSR (<a href="mailto:clark@msu.edu">clark@msu.edu</a>), or email<a href="mailto:NatSci.dean@msu.edu">NatSci.dean@msu.edu</a> at any time if you have questions about the survey.

By selecting yes below and then proceeding with the survey, you are voluntarily consenting to participate in the survey and allowing your responses to be used for institutional research purposes.

- YES I consent
- NO I decline consent

# **Q2 Definition of Key Terms**

For the purposes of this survey, we are using the following definitions:

#### Climate

By "climate" we mean "current attitudes, behaviors, and standards and practices of employees and students...particularly those that concern the access for, inclusion of, and level of respect for individual and group needs, abilities, and potential" (Rankin, S. & Reason, R. (2008). Transformational Tapestry Model: A Comprehensive Approach to Transforming Campus Climate. Journal of Diversity in Higher Education. 1. 262-274. 10.1037/a0014018).

## Leadership

- **Department/Program leaders/leadership** is defined as the department chair, associate chairs, and program directors.
- College leaders/leadership is defined as the dean, associate/assistant deans, and program directors.

## Q3 I. Current Climate

For each pair of adjectives, select the point between them that reflects the extent to which you believe the adjectives describe the climate in the college based on your <u>direct experiences</u>.

	1	2	3	4	5	6	7	
Hostile	0	0	0	0	0	0	0	Friendly
Racist	0	0	0	0	0	0	0	Non-racist
Homogeneous	0	0	0	0	0	0	0	Diverse
Disrespectful	0	0	0	0	0	0	0	Respectful
Unwelcoming	0	0	0	0	0	0	0	Welcoming
Sexist	0	0	0	0	0	0	0	Non-sexist
Individualistic	0	0	0	0	0	0	0	Collaborative
Competitive	0	0	0	0	0	0	0	Cooperative
Homophobic	0	0	0	0	0	0	0	Non- homophobic
Unsupportive	0	0	0	0	0	0	0	Supportive
Ageist	0	0	0	0	0	0	0	Non-ageist
Regressing	0	0	0	0	0	0	0	Improving

## Q4 I. Current Climate

How would you rate the climate within your department/program and within the College of Natural Science as a whole for <u>graduate students</u> who are:

Your Department/Program	The College	

Women	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
Men	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
Transgender	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
Gay, lesbian, or bisexual	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
People of color	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
White	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
Immigrants	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
International	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
Non-native English speakers	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
From Christian religious affiliations	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
From religious affiliations other than Christian	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
Other (please specify)	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate

# Q5 I. Current Climate

How would you rate the climate within your department/program and within the College of Natural Science as a whole for <u>graduate students</u> who are or have:

Your Department/Program	The College

A mental health condition	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
A physical disability	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
Learning disabilities	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
Parents / guardians of dependent children	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
Providing care for adults who are disabled and/or elderly	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
Served / serving in the military	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate
Other (please specify)	▼ Very Negative Unable to Evaluate	▼ Very Negative Unable to Evaluate

# Q6 II. Diversity

Now we would like you to think about the <u>faculty</u> in the College of Natural Science. Please indicate the extent to which you agree or disagree with each of the following statements.

(NOTE: Think about "diversity" in terms of categories such as race / ethnicity, gender, religion, age, sexual

## orientation, nationality, and people with disabilities)

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
The college has demonstrated a commitment to hiring diverse faculty.	0	0	0	0	0
There are enough faculty I identify with.	0	0	0	0	0
Within the college, I am satisfied with the level of faculty diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	Ο	0	0	0	0
There are too few faculty of color.	0	0	0	0	0
There are too few women faculty.	0	0	0	0	0



# Q7 II. Diversity

Now we would like you to think about the <u>graduate students</u> in your department/program and in the College of Natural Science as a whole. Please indicate the extent to which you agree or disagree with each of the following statements.

(**NOTE:** Think about "diversity" in terms of categories such as race / ethnicity, gender, religion, age, sexual orientation, nationality, and people with disabilities)

Your Department/Program	The College

Has demonstrated a commitment to recruiting students from diverse backgrounds	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
I am satisfied with the level of graduate student diversity (e.g., in terms of race / ethnicity, gender, religion, age, sexual orientation, socioeconomic status, nationality, and people with disabilities).	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
There are too few graduate students of color.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
There are too few women graduate students.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate

# **Q8 III. Welcoming and Belonging**

Please indicate to what extent you agree or disagree with each of the following statements related to <u>welcoming</u> and belonging within your department/program and within the college.

Your Department/Program	The College

People take time to welcome new students	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
People work closely together.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
People create a sense of belonging for others.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
I am treated as an individual rather than as a representative of a racial, ethnic, cultural, national origin, or gender group.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
My personal identities are valued in the classroom.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
Faculty negatively prejudge me.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
I feel a sense of belonging.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
I am treated equally compared to other graduate students.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
I feel safe (including physical, mental, and emotional safety).	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate

# Q9 IV. Learning Opportunities

Please indicate to what extent you agree or disagree with each of the following statements as they relate to

<u>learning opportunities</u> within your department/program.

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
I have learning opportunities available to me that are relevant to my career goals.	0	0	0	0	0
I have equal access to resources to support professional learning.	0	0	0	0	0
I am supported to participate in learning and educational opportunities that could advance my career goals.	0	0	0	0	0
I have access to informal and formal mentoring opportunities.	0	0	0	0	0
I have mentoring relationships available to me that are relevant to my career goals.	0	0	0	0	0
Compared to other students, I have similar opportunities for success.	0	0	0	0	0
I have faculty role models.	0	0	0	0	0

**End of Block: LEARNING OPPORTUNITIES** 

**Start of Block: INNOVATION** 

## Q10 V. Innovation

Please indicate to what extent you agree or disagree with each of the following statements as they relate to <u>innovation</u> within your department/program and within the college.

In this context, <u>innovation</u> is defined as the development of new products, designs, ideas, or new ways of doing things.

	Your Department/Program	The College
Our announced visions and strategies inspire me.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
We have an outward focus on impact, purpose, and solutions that helps to drive innovation.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
I have sufficient discretion and freedom to use some of my time to explore new ideas and ways of doing things.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
I can have conversations with my advisor about longer-term career goals, not just immediate graduate program demands.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
Faculty support me in taking initiative and risks with new ventures or approaches in my work.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
There is resistance to doing or trying something new.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
Faculty <u>recognizes</u> innovation.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
Faculty <u>reward</u> innovation.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
Faculty encourage collaboration across disciplines.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
Faculty engage graduate students in work that extends beyond the status quo.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate
People here have interest and curiosity about new ideas and projects.	▼ Strongly Disagree Unable to Evaluate	▼ Strongly Disagree Unable to Evaluate

Please indicate to what extent you agree or disagree with each of the following statements as they relate to mentorship within your Department/Program.

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	Not Applicable
Communicating my research	0	0	0	0	0	0
Career opportunities and pathways	0	0	0	0	0	0
Career preparation	0	0	0	0	0	0
Professional Networking	0	0	0	0	0	0

## Q12

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	Not Applicable
My mentor(s) has/have been helpful.	0	0	0	0	0	0
I meet regularly with my mentor(s).	0	0	0	0	0	0
I am satisfied with my mentor(s).	0	0	0	0	0	0
I was paired with a mentor(s) soon after entering my program.	0	0	0	0	0	0

# Q13 VII. Strategic Priority

A strategic priority of the college is to "grow and support a welcoming, diverse NatSci community that empowers the best outcomes for all regardless of role, identity, or ability status."

What is	the next thing your department/program leadership and college leadership should do to improve this?
0	Department/Program Leadership:
0	College of Natural Science Leadership:

# Q14 VIII. Values and Relationships

Please indicate to what extent you agree or disagree with the following statements concerning <u>values and relationships</u> in your department/program.

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
My department/program operates in a clear and transparent manner.	0	0	0	0	0
Instructors value my contributions in the classroom.	0	0	0	0	0
Other students value my contributions in the classroom.	0	0	0	0	0
People care about my general satisfaction in my program.	0	0	0	0	0
I can voice my opinions openly.	0	0	0	0	0
People listen to me even when my views are dissimilar.	0	0	0	0	0
Faculty care about my personal well-being.	0	0	0	0	0
Advisors care about my personal well-being.	0	0	0	0	0
My department/program clearly communicates program goals, changes, and important milestones.	0	0	0	0	0
Faculty/leadership make major decisions with input from graduate students.	0	0	0	0	0
Faculty/leadership provide an explanation for major decisions.	0	0	0	0	0
I am treated with respect by <u>faculty</u> .	0	0	0	0	0
I am treated with respect by my <u>advisors</u> .	0	0	0	0	0
I am treated with respect by other students.	0	0	0	0	0
I am treated with respect by <u>program/college</u> <u>staff</u> .	0	0	0	0	0
I have access to leadership when I have concerns/problems.	0	0	0	0	0

Please indicate to what extent you agree or disagree with each of the following statements regarding your <u>annual review</u>.

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
I meet at least once a year with my guidance committee to review my progress in my program.	0	0	0	0	0
I am comfortable asking my advisor and guidance committee questions about performance expectations.	0	0	0	0	0
The criteria used in my annual review are clear and transparent.	0	0	0	0	0
My program follows an established annual review process.	0	0	0	0	0
Performance discussions include a focus on my career goals and aspirations.	0	0	0	0	0
I receive valuable performance feedback.	0	0	0	0	0

Since becoming a student in the College of Natural Science, how often, if at all, have you been in a situation where a NatSci student (graduate or undergraduate) or employee has . . .

	Never	Once	2 or More Times
Put you down or acted condescendingly to you.	0	0	0
Made demeaning or derogatory remarks to or about you.	0	0	0
Devalued your work and efforts.	0	0	0
Inappropriately interrupted or "talked over" you while you were speaking.	0	0	0
Ignored or excluded you from professional camaraderie.	0	0	0
Made negative statements or circulated negative rumors about you.	0	0	0
Paid little attention to your statements or showed little interest in your opinion.	0	0	0
Addressed you in unprofessional ways.	0	0	0
Made unwanted attempts to draw you into a discussion about personal matters.	0	0	0
Bullied you.	0	0	0
Bullied others in front of you.	0	0	0
Distrusted your description of your own personal experiences.	0	0	0
Exhibited any of the above behaviors toward others in front of you.	0	0	0

# Q17 XI. Civility

You indicated that you have experienced at least one incident of uncivil behavior. Please indicate who was involved in the incident(s), and for those involved, how often the behavior occurred.

Involved in Incident(s)	How often behavior occurred
Please select all that apply	

Unit chair or director	▼ Once 2 or More Times
College leader (dean, associate dean, program director)	▼ Once 2 or More Times
Faculty and/or academic staff	▼ Once 2 or More Times
Postdoctoral scholar	▼ Once 2 or More Times
Academic advisor	▼ Once 2 or More Times
Support staff	▼ Once 2 or More Times
Supervisor	▼ Once 2 or More Times
Co-worker	▼ Once 2 or More Times
Graduate student/Teaching assistant	▼ Once 2 or More Times
Undergraduate student	▼ Once 2 or More Times
Campus colleague (outside NatSci)	▼ Once 2 or More Times
Other (please specify)	▼ Once 2 or More Times

# Q18 X. RVSM Policies

This next set of questions is about Relationship Violence and Sexual Misconduct (RVSM).

If you are currently experiencing or have experienced an incident of relationship violence or sexual misconduct, there are resources available to you at Office for Civil Rights and Title IX Education and Compliance.

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
I have experienced sexual harassment and/or relationship violence within my department/program/the college.	0	0	0	0	0
Sexual harassment is a problem within my department/program/the college.	0	0	0	0	0
I know the steps to take if a person comes to me with a problem with sexual harassment and relationship violence.	0	0	0	0	0
College leaders take seriously reports of sexual harassment and/or relationship violence.	0	0	0	0	0
I am confident that my department/program/college leaders maintain confidentiality when handling reports related to RVSM.	0	0	0	0	0
I can report incidences of sexual harassment and/or relationship violence without fear of retaliation.	0	0	0	0	0

**End of Block: RVSM** 

**Start of Block: BIAS** 

## Q19 XI. Bias Incidents

In this section, we would like to know about <u>bias incidents</u>. A <u>bias incident</u> is an incident of verbal or non-verbal conduct that is threatening, harassing, intimidating, discriminatory or hostile and is based on a category protected under the <u>MSU Anti-Discrimination Policy</u>.

Since becoming a student in the College of Natural Science, how often, if at all, have you witnessed or experienced an incident of bias/discrimination within your department/program or within the College based on any of the following?

	Experienced	Witnessed
Power differentials in the learning environment	▼ Never 2 or More Times	▼ Never 2 or More Times
Older age	▼ Never 2 or More Times	▼ Never 2 or More Times
Younger age	▼ Never 2 or More Times	▼ Never 2 or More Times
Gender expression and identity	▼ Never 2 or More Times	▼ Never 2 or More Times
Sexual orientation	▼ Never 2 or More Times	▼ Never 2 or More Times
Race/ethnicity	▼ Never 2 or More Times	▼ Never 2 or More Times
Country of origin	▼ Never 2 or More Times	▼ Never 2 or More Times
Religious background	▼ Never 2 or More Times	▼ Never 2 or More Times
A psychological or mental health issue	▼ Never 2 or More Times	▼ Never 2 or More Times
A physical disability or health issue	▼ Never 2 or More Times	▼ Never 2 or More Times
Other (please specify)	▼ Never 2 or More Times	▼ Never 2 or More Times

# Q20 XII. Bias Incidents

icated that you <b>personally experienced</b> an incident of bias/discrimination. Please indicate who was d. <b>Please select all that apply</b>
Academic Advisor(s)
Campus visitor(s)
Dean / Assoc Dean / Asst Dean
Department / unit head / Program Director
Faculty advisor(s) / mentor(s)
Faculty member(s)
Graduate student(s) / Teaching assistant(s)
Postdoctoral scholar(s)
Staff member(s)
Supervisor(s)
Undergraduate student(s)
Other (please specify)

# Q21 XII. Bias Incidents - Reporting

Please indicate to what extent you agree or disagree with the following statements about <u>reporting</u>

bias/discrimination incidents in the College of Natural Science.

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
I know how to report bias incidents if they occurred within the College.	0	0	0	0	0
I can report bias incidents I encounter without fear of retaliation.	0	0	0	0	0
If bias incidents are reported, I believe leaders will take appropriate actions to address them based on the claimant's desires.	0	0	0	0	0
I am confident that college/unit leaders maintain confidentiality when handling reports of bias, discrimination, or incivility.	0	0	0	0	0

# Q22 XII. Bias Incidents - Reporting

You indicated that you <u>experienced or witnessed</u> at least one incident of bias/discrimination. Thinking about the incident(s) of bias/discrimination you experienced or witnessed, did you report the incident(s)?

- Reported the incident or all incidents
- Reported some of the incidents
- Did not report the incident(s)

# Q23 XII. Bias Incidents - Reporting What are the reasons why you decided not to report the incident(s)? Please select all that apply □ I feared retaliation. ☐ I did not think I would be believed. ☐ I did not think appropriate action would be taken. ☐ I was unsure if the incident violated university policies. Other reason(s) (please specify) Q24 XII. Bias Incidents - Reporting To which individual(s) or unit(s) did you report bias/discrimination incidents? Please select all that apply ☐ Office of Institutional Equity (OIE) ☐ Office for Civil Rights and Title IX Compliance (OCR) Ombudsperson Office ☐ Faculty Grievance and Dispute Resolution Office ☐ My department/program supervisor/chair/director ☐ Dean, associate dean, assistant dean □ NatSci DEI Office ☐ Graduate Program Director Undergraduate Program Director Supervisor Staff member Other (please specify)

## Q25 XIII. Strategic Priority

Another strategic priority of the college is "demonstrate transparency, accountability, professionalism, and respectful communication in ways that contribute to the greater good of all."

What is the next thing your department/program leadership and college leadership should do to improve this?

0	Department/Program Leadership:
0	College of Natural Science Leadership:

## Q26 XIV. Assessment of Current Climate

Overall, how comfortable or uncomfortable are you with the climate in the College of Natural Science?

- Very uncomfortable
- Somewhat uncomfortable
- Neither comfortable nor uncomfortable
- Somewhat comfortable
- Very comfortable

#### Q27 XIV. Assessment of Current Climate

Overall, how satisfied or dissatisfied are you with your experience as a student in the College of Natural Science?

- Very dissatisfied
- Somewhat dissatisfied
- Neither satisfied nor dissatisfied
- Somewhat satisfied
- Very satisfied



## Q28 XIV. Assessment of Current Climate

Please indicate to what extent you agree or disagree with the following statements about your experiences as a student in the College of Natural Science.

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
I am proud to be part of NatSci.	0	0	0	0	0
I have seriously considered leaving my program in NatSci because of negative experiences.	0	0	0	0	0
I intend to stay at NatSci until graduation.	0	0	0	0	0

\_\_\_\_\_\_

#### Q29 XIV. Assessment of Current Climate

Think of what is possible, that is, how well are we reaching our greatest potential for climate and values, and where do we most need additional attention and commitment.

For each area covered in this survey, what is your assessment and recommendation to NatSci leaders?

Being a welcoming, safe, and supportive community.

Being a diverse community.

Being inclusive and promoting belonging.

Empowering the best outcomes for all regardless of role, identity, or ability status.

Being open to perspectives and ideas.

Creating an environment of trust where ideas are freely shared and discussed.

Being innovative.

Demonstrating transparency and openness.

Demonstrating accountability and integrity.

Demonstrating professionalism and high ethical standards.

Demonstrating respectful communication.

Contributing to the greater good of all.

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

▼ Needs Significant Improvement ... Is Exemplary, Best Possible

**End of Block: Block 15** 

**Start of Block: OPEN-ENDS** 

## Q30 XIV. Assessment of Current Climate

Thank you for all of your ratings. Please add some thoughts in your own words to help us better understand your

experience as a member of the NatSci community and your ideas for strengthening and improving NatSci clim and values. For the greatest positive impact, include specific actionable ideas.	ate
What are the factors that most influence your desire to stay part of NatSci or your desire to leave NatSci?	
Q31 X. Demographics	
Please complete this section so that we may better understand the perspectives of respondent groups. These will be held confidential by the Office of Survey Research (OSR) and will not be reported in ways that would lir any individual respondents with their answers. In each case you have the option to decline to answer, but the more information you provide the more complete our analyses of the climate will be.	nk

▼ Actuarial Science Program Prefer not to answer		
Q32 W	hat degree are you pursuing?	
0	Master's Degree	
0	Doctoral / Professional Degree	
0	Other degree (please specify):	

What is your department or degree program?

# Q33 X. Demographics

What year did you enter your graduate degree program at Michigan State University

▼ 2022 ... Prefer not to answer

Q34 When do you expect to complete your current degree program?

▼ 2022 ... Prefer not to answer

# Q35 X. Demographics

In what year were you born?

▼ 2004 ... Prefer not to answer

# Q36 X. Demographics

What is your gender identity? Please select all that apply		
	Agender	
	Cisgender Man	
	Cisgender Woman	
	Gender non-conforming	
	Genderqueer	
	Non-binary	
	Transgender Man	
	Transgender Woman	
	Two-spirit	
	In another way, please specify if you wish:	
	Prefer not to answer	
Q37 X. Demographics		
What is	s your sexual orientation/identity?	
0	Asexual	
0	Bisexual	
0	Demisexual	
0	Gay	
0	Lesbian	
0	Pansexual	
0	Queer	
0	Questioning or unsure	
0	Same-gender loving	
0		
	Straight	
0	Straight Another identity not listed (please specify if you wish):	

# Q38 X. Demographics

What is your race and/or ethnicity? Please select all that apply		
	African, African American, or Black	
	American Indian or Alaska Native	
	Asian or Asian American	
	Hispanic or Latina, Latino, Latinx	
	Middle Eastern or North African	
	Native Hawaiian or Other Pacific Islander	
	White or Caucasian	
	Another identity not listed (please specify):	
	Prefer not to answer	
Q39 <b>X.</b> I	Demographics	
Are you	u an international student	
0	Yes	
0	No	
0	Prefer not to answer	
Q40 X. Demographics		
Which	of the following best describes the educational experience of your parents/guardians?	
0	At least one parent or guardian completed a 4-year college degree or higher	
0	Neither parent or guardian completed a 4-year college degree or higher	
0	Unsure	
0	Prefer not to answer	

# Q41 X. Demographics

With which of the following religious background(s), if any, do you identify? Please select all that apply		
	Agnostic	
	Atheist	
	Buddhist	
	Christian	
	Hindu	
	Humanist	
	Jewish	
	Muslim	
	Spiritual, non-religious	
	Unitarian / Universalist	
	None	
	Other (please specify):	
	Prefer not to answer	

# Q42 X. Demographics

	(if any) of the disabilities / conditions listed below have you been diagnosed with that impact your learning, or living activities? Please select all that apply	
	Acquired / traumatic brain injury	
	Attention Deficit / Hyperactivity Disorder	
	Autism Spectrum	
	Low vision or blind	
	Hard of Hearing or deaf	
	Learning disability	
	Medical condition	
	Mental health / psychological condition	
	Physical / mobility condition that affects walking	
	Physical / mobility condition that does not affect walking	
	Speech / communication	
	Other (please specify):	
	I have none of the listed conditions	
	Prefer not to answer	
	Demographics ou ever served, or are you currently serving, in the U.S. Armed Forces, Military Reserves, or National Yes	
0	No	
Q43 <b>XI.</b>	Final Thoughts	
As you leave this survey, is there anything else you hope NatSci leaders are thinking about?		