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CRC Students' Online Learning Experiences, Expectations, and
Needs Survey Results
Fall 2020

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Table of Contents

Executive Summary

The fall 2020 Online Experiences, Expectations, and Needs survey was envisaged following CRC's switch to remote operations under the circumstances of the COVID-19 pandemic. The purpose of the survey was to gain preliminary insights about CRC students' experiences, expectations, and needs in a fully online learning environment.

Survey results demonstrate that CRC students have varying access to technology and prior experiences with online learning. Approximately 58% of enrolled students in fall 2020 indicated having prior experience in three or more online courses. Respondents who reported not having access to a computer or other device with which to complete their schoolwork reported having less experience with online learning. This was also true for Black/African American respondents, Middle Eastern respondents, and respondents of "other" race/ethnicity. While about 93% of respondents said they have access to a computer or device (other than a smartphone) with which to complete their schoolwork, 86% of Black/African American students indicated that they have access to such a device, and 85% of non-binary respondents indicated that they have access to such a device.

Students' most frequently cited concerns about the online learning environment are: **managing classroom assignments and due dates**, **getting their textbooks and/or course materials by the start of the semester**, and **communicating with instructors**. However, students without access to a device with which to complete their schoolwork were most concerned about their access to technology, and students with no prior experience with online learning were most concerned about communicating with instructors.

Ultimately, while students' experiences and needs vary slightly, respondents agree on general supports that would help them succeed in the online learning environment. Respondents ranked an **organized learning environment** and **regular communication with my instructors** highest in terms of importance to their success in online courses. They also suggest **frequent communication, accessible information**, **academic support**, and **help with accessing or paying for books, technology, and course materials, including open educational resources** as additional supports that CRC could implement to help them succeed. Additionally, Black/African American respondents and non-binary respondents more frequently cited financial aid, assistance with basic needs, and finding a quiet place to study as support mechanisms that CRC could implement to help them succeed in the online environment.

While survey respondents expressed concerns about learning online and offered suggestions for helping them to succeed, an overwhelming number of respondents requested mutual empathy and the concept that "we are all in this together". Students also offered advice to one

another, citing a goal-orientated mindset, accountability and self-care as important factors to their success in online courses.

Students provided much thoughtful and actionable feedback on this survey, some of which leads to further questions about students' perceptions and experiences of the online learning environment. Thus, the Research Office is currently working in collaboration with other areas of campus, including students, to develop a series of focus groups that will delve deeper into questions about students' experiences with online learning.

There are some caveats and limitations to keep in mind when considering these data. The survey was administered via email and advertised on social media, so responses may be skewed towards those with access to a computer/technology, or those who are frequent users of such technology. Several student groups (male students, students under 25, and Hispanic/Latinx students) are underrepresented in the responses to the survey. Finally, while this survey was developed in line with existing research on online higher education practices, it did not involve cross-functional input from across campus, including student voices. It is important that future instruments be tested with students to ensure their focus, language, and intent are in line with students' needs.

Background & Methodology

The CRC online learning expectations, experiences, and needs survey was distributed on Tuesday, August 11, 2020 to all enrolled or waitlisted students as of that date. It was distributed anonymously via email and advertised on social media. The survey was open for two weeks and closed on August 26, 2020. It garnered 1,430 responses, representing about 9.5% of the Fall 2020 student population as of the writing of this report.

Methodology

The survey was designed following CRC's switch to remote operations under the circumstances of the COVID-19 pandemic, in order to gain preliminary insights about CRC students' experiences, expectations, and needs in a fully online learning environment. The survey was designed to answer the following research questions:
1. What are CRC students' prior experiences with online learning, if any?
2. What are CRC students' expectations for online learning in fall 2020?
3. What do CRC students need to support their online learning in fall 2020?

The survey was developed by the research office using existing and parallel studies in the higher education field. Due to time constraints at the beginning of the semester, the instrument involved little cross-functional input from campus stakeholders and students, a factor that is discussed further in the *Implications* section of this report.

The survey instrument opened with four quantitative questions about students' experiences and expectations for the online learning environment, such as their access to a computer, their prior experiences with online courses, and their biggest concerns for the semester (for the full survey instrument, see Appendix I). It then closed with four open-ended questions asking students about their needs and help-seeking behavior in the online learning environment. The survey also included three voluntary demographic questions. For the qualitative questions, inductive coding was used to identify emergent themes in the data. Then, these codes were applied to each qualitative response, using two passes through the data to ensure the accuracy and consistency in application of these codes. Finally, codes were grouped into overarching themes. These qualitative themes and the overall coding process are discussed further in the *In CRC Students' Words* section of this report.

All findings in this report are displayed in tables with aggregate percentages in the leftmost column. The tables include demographic disaggregation for the student subpopulations that varied from the average findings for the overall student population. Full demographic breakouts for each question are available in the appendices. While groups of less than ten students are not included in the analyses, as the margin of error with such groups is large, a breakdown of their responses is available in all appendices.

Respondent Demographics

Though the survey was anonymous, respondents were asked to voluntarily identify their race, gender, and age group, with about 84% of 1,430 participants doing so.

Hispanic/Latinx students, students younger than twenty-five, and male students were underrepresented (see tables 1-3 below) compared to the fall 2020 CRC student population. Around 16% of respondents did not report their race, gender, or age group.

Table 1: Respondent Demographic Representation by Race

Race	N respondents	% total respondents	Fall 2020 enrolled students	% Fall 2020 enrolled students	% difference
Asian	294	20.56%	3,554	23.66%	-3.10%
Black or African American	111	7.76%	1,412	9.40%	-1.64%
Filipino	50	3.50%	804	5.35%	-1.85%
Hispanic / Latinx	222	15.52%	4,167	27.74%	-12.22%
Middle Eastern	31	2.17%	*	*	*
More than one race / ethnicity	106	7.41%	1,089	7.25%	+0.16%
Native American	12	0.84%	70	0.47%	+0.37%
Other	40	2.80%	14	0.09%	+2.71%
Pacific Islander / Native Hawaiian	26	1.82%	205	1.36%	+0.46%
White	303	21.19%	3,419	22.76%	-1.57%
Did not respond to demographic question	235	16.43%	-	-	-
Unknown (enrollment data)	-	-	285	1.90%	-
Total	**1,430**	**100.00%**	**15,019**	**100.00%**	

*It is commonly reported that Middle Eastern subpopulations are underrepresented in the Census categories, and thus 'Middle Eastern' was added to the typical Census categories on this survey.

Table 2: Respondent Demographic Representation by Age Group

Age Group	N respondents	% total respondents	Fall 2020 enrolled students	% Fall 2020 enrolled students	% difference
24 or younger	691	48.32%	9,583	63.81%	-15.49%
25 or older	513	35.87%	5,436	36.19%	-0.32%
Did not respond to demographic question	226	15.80%	-	-	-
Unknown	-	-	0	0.00%	-
Total	**1,430**	**100.00%**	**15,019**	**100.00%**	

Table 3: Respondent Demographic Representation by Gender

Gender	N respondents	% total respondents	Fall 2020 enrolled students	% Fall 2020 enrolled students	% difference
Female	833	58.25%	8,650	57.59%	+0.66%
Male	350	24.48%	6,109	40.68%	-16.20%
Non-binary	20	1.40%	19	0.13%	+1.27%
Did not respond to demographic question	227	15.87%	-	-	-
Unknown	-	-	241	1.60%	-
Total	**1,430**	**100.00%**	**15,019**	**100.00%**	

Respondents were also asked about their access to a computer or device (other than a smartphone) with which to complete their schoolwork. This question is analyzed in the *Student needs and help-seeking behavior* section of this report.

Findings

CRC Students' Prior Experiences with Online Learning

The survey set out to learn about students' prior experiences with online learning in order to gauge how familiar they are with the structure, and also to provide context for later questions related to their concerns and needs in the online environment.

Respondents were asked to report how many online courses they had taken in the past, either in high school or in the higher education context. 15.07% of respondents reported not having taken any online courses in the past. 26.81% reported having taken 1-2 online courses, 31.01% reported having taken 3-4 online courses, and 27.10% of respondents reported having taken 5 or more courses online in the past. Black/African American respondents, Middle Eastern respondents, and respondents of "other" race/ethnicity reported having less experience with online learning. Respondents who reported not having access to a computer or other device with which to complete their schoolwork also reported having less experience with online learning.

The table below outlines respondents' previous experience in online courses, along with data disaggregation for the demographic groups that vary from the average by more than 5%. Full demographic disaggregation for this question are available in Appendix A.

Table 4. Previous experience in online courses by Access to Technology

	All respondents (n=1,380)	"No"/ "maybe" have access to a computer (n=96)
0 online courses	15.07%	21.88%
1-2 online courses	26.81%	27.08%
3+ online courses	58.11%	51.04%

Table 5. Previous experience in online courses by Race

	All respondents (n=1,380)	Black / African American (n=111)	Middle Eastern (n=31)	Other race (n=40)
0 online courses	15.07%	13.51%	19.35%	15.00%
1-2 online courses	26.81%	33.33%	32.36%	42.5%
3+ online courses	58.11%	53.15%	48.39%	42.5%

CRC Students' Expectations for Online Learning in Fall 2020

Next, the survey asked students questions about their biggest worries and barriers to a successful online semester, with the hopes of gathering information to help mitigate these worries and barriers in fall 2020 and beyond.

Respondents were asked to indicate if they were worried about a variety of different academic, social, technological, and basic needs in the online learning environment. Overall, more than half of the student respondents indicated they were most concerned about:
- Managing my classroom assignments and due dates (55.5%)
- Getting my textbooks and/or course materials by the start of the semester (51.5%)
- Communicating with instructors (50.5%)

These concerns were especially true for students with limited access to computer technology, as well as students who identified as non-binary, Black/African American, Hispanic/Latinx, Pacific Islander/Native Hawaiian, and Middle Eastern. Students with no prior experience with online learning most frequently indicated concerns about communicating with instructors (61.54% compared to 50.5% overall). Additionally, non-binary students more frequently cite being worried about finding a quiet place to concentrate than other students (65% v. 37.41%).

Table 6 (below) demonstrates differences for students with no prior experience with online learning and limited access to technology, who vary by more than ten percentage points from the average on some question items. Survey items are listed in order of highest frequency in selection by the overall survey population. For full disaggregation by students' prior experiences with online learning and access to technology, see Appendix B.

Table 6. Students' Concerns in the Online Learning Environment by Experience with Online Learning and Access to Technology

Which of the following are you worried about in the online learning environment?			
	All respondents (n=1,430)	0 online courses (n=208)	"No"/ "maybe" have access to a computer (n=96)
Managing my classroom assignments and due dates	55.52%	58.65%	57.29%
Getting my textbooks and/or course materials by the start of the semester	51.54%	50.00%	62.50%
Communicating with instructors	50.49%	61.54%	52.08%
Learning the same amount I would in an in-person class	45.38%	45.19%	57.29%
Finding a quiet space to concentrate	37.41%	33.17%	46.88%
Finding time for my studies	34.41%	31.25%	38.54%
Communicating with other students	30.00%	34.13%	31.25%
Figuring out technology (logging into my courses, video meetings, email, etc.)	27.06%	40.87%	45.83%
Finding a reliable internet connection	23.57%	21.63%	46.88%
Socializing with other students	22.03%	21.15%	17.71%

Table 7 demonstrates differences for Black/African American, Hispanic/Latinx, Pacific Islander/Native Hawaiian, and Middle Eastern students, who vary more than ten percentage points from the average on some question items. Survey items are listed in order of highest frequency in selection by the overall survey population. For full disaggregation by race, see Appendix B.

Table 7. Students' Concerns in the Online Learning Environment by Race

Which of the following are you worried about in the online learning environment?					
	All respondents (n=1,430)	Black / African American (n=111)	Hispanic / Latinx (n=222)	Pacific Islander / Native Hawaiian (n=26)	Middle Eastern (n=31)
Managing my classroom assignments and due dates	55.52%	69.37%	66.67%	88.46%	61.29%
Getting my textbooks and/or course materials by the start of the semester	51.54%	60.36%	58.56%	73.08%	67.74%
Communicating with instructors	50.49%	58.56%	56.76%	61.54%	67.74%
Learning the same amount I would in an in-person class	45.38%	51.35%	55.86%	50.00%	51.61%
Finding a quiet space to concentrate	37.41%	38.74%	48.20%	50.00%	58.06%
Finding time for my studies	34.41%	43.24%	40.54%	38.46%	38.71%
Communicating with other students	30.00%	27.93%	28.83%	42.31%	38.71%
Figuring out technology (logging into my courses, video meetings, email, etc.)	27.06%	33.33%	33.78%	42.31%	22.58%
Finding a reliable internet connection	23.57%	23.42%	33.33%	26.92%	32.26%
Socializing with other students	22.03%	18.92%	20.72%	38.46%	29.03%

Table 8 demonstrates differences for non-binary students, who vary more than ten percentage points from the average on some question items. Survey items are listed in order of highest frequency in selection by the overall survey population.

Table 8. Students' Concerns in the Online Learning Environment by Gender

Which of the following are you worried about in the online learning environment?			
	All respondents (n=1,430)	Female (n=833)	Male (n=350)	Non-binary gender (n=20)
Managing my classroom assignments and due dates	55.52%	62.79%	58.00%	95.00%
Getting my textbooks and/or course materials by the start of the semester	51.54%	59.30%	50.57%	70.00%
Communicating with instructors	50.49%	56.42%	56.86%	60.00%
Learning the same amount I would in an in-person class	45.38%	51.14%	50.57%	55.00%
Finding a quiet space to concentrate	37.41%	44.18%	34.29%	65.00%
Finding time for my studies	34.41%	40.70%	32.29%	45.00%
Communicating with other students	30.00%	31.09%	37.71%	20.00%
Figuring out technology (logging into my courses, video meetings, email, etc.)	27.06%	30.85%	28.57%	40.00%
Finding a reliable internet connection	23.57%	28.21%	21.43%	40.00%
Socializing with other students	22.03%	22.21%	27.43%	25.00%

CRC Students' Needs in the Online Learning Environment

The ultimate goal of the survey was to identify concrete, actionable ways that CRC can support students in the online learning environment in fall 2020 and beyond. Thus, this section was comprised of questions pertaining to students' online learning needs, and particularly open-ended questions.

Students were first asked to indicate their access to a computer or other device with which to complete their schoolwork. 93.04% of respondents indicated that they have access to a computer or device (other than a smartphone) that they can use to complete their schoolwork, while 6.96% indicated they do not have access or "maybe" have access to such a device. However, 14.42% of Black/African American respondents and 15.00% of non-binary respondents indicated that they do not have access to a digital device (see table 9 and chart 1).

Table 9. Access to Computer or Device

Do you have access to a computer or device (other than a smartphone) that you can use to complete your school work?			
	All respondents (n=1,379)	Non-binary gender (n=20)	Black / African American (n=111)
Maybe	4.35%	10.00%	6.31%
No	2.61%	5.00%	8.11%
Yes	93.04%	85.00%	85.59%

Chart 1. Access to Computer or Other Device to Complete School Work - "Maybe" or "No" by Race/Ethnicity

When asked to rank a variety of factors in order of importance to success in their courses, students regularly ranked "Organized learning environment (Canvas, syllabus)" (mean rank = 2.56) and "Regular communication with my instructors" (mean rank = 2.84) highest, as shown in Table 10. As this was a rank order question with 10 items, a lower average ranking indicates that respondents ranked the item as being more important to their learning, with 1 being the most important. A higher mean indicates that respondents ranked the item as being less important to their learning compared to the other items. Respondents without access to a computer or device to complete their schoolwork rank technology (laptop, wifi) slightly higher than other respondents, placing it third in order of importance behind regular communication and an organized learning environment. Non-binary students rank support for basic needs higher than other students, placing it fourth (see Table 10).

Table 10. Importance of factors to students' success, Average Ranking

	All respondents (n=1,258)	"No"/ "maybe" have access to a computer (n=32)	Other race/ethnicity (n=39)	Non-binary gender (n=20)
Organized online learning environment (Canvas, syllabus)	2.56	3.37	2.64	3.5
Regular communication with my instructors	2.84	3.29	2.97	3.9
Clear expectations	3.55	4.24	3.79	3.6
Low-cost course materials (books, software, etc.)	4.89	4.46	5.15	5.1
Academic support (Library and tutoring resources, etc.)	5.10	5.38	5.38	5.3
Technology (laptop, wifi)	5.21	3.96	4.69	5.15
Support for basic needs (food, housing, etc.)	6.65	5.99	6.44	4.65
Collaboration with other students	7.21	7.35	7.05	8.45
Access to healthcare (medical care, mental health resources, etc.)	7.41	7.3	7.49	6.05

In CRC Students' Words: Online Learning Needs and Advice for Peers

The survey instrument relied heavily on open-ended qualitative data in order to limit preconceptions of the student experience and allow students to describe their experiences in their own words. The following questions asked respondents to write in a response:
- "When you experience difficulties with school, where do you go for support?"
- "What would you like your instructors to know about you and other students in the online learning environment?"
- "What advice would you give your fellow CRC classmates for succeeding in their Fall 2020 courses?"
- "What else can CRC do to help support your learning in the Fall 2020 semester?"

The analysis for each of these questions involved inductive coding. Inductive coding is the process wherein the coder determines theme/classifications from reviewing the qualitative data, as opposed to applying a preconceived coding scheme. While the quantification of these data is useful for understanding general trends, and trends for different groups of students, the thematic tables are juxtaposed with quotes and narrative that attempt to exemplify the different nuances of each theme.

Tables 11 through 19 list the number of times a theme was referenced by a respondent. The counts for each theme add up to more than 1,430, the number of survey respondents, as many respondents referenced more than one theme in their responses. The percentages listed are based on the total number of survey respondents, so the percentages can be read as the percentage of respondents who referenced that theme.

Generally, students say that online learning is not easy, particularly under the added stress of COVID-19 and outside obligations. They recognize that faculty and staff at CRC might also be struggling, and call for a culture of empathy, hard work, and self-compassion. One student succinctly summarizes the findings across all four of these qualitative questions, "*You are trying your best, and we are too. Professors and staff can try to be understanding of everyone's new situation at home.*" Another student says, "*Just do your best to help us get our education. We don't expect that you be perfect, these times are not in any way easy.*"

Students call for the humanization of online learning, and ask for additional supports to help them put forward their best effort. While students' preference for either synchronous learning or asynchronous courses were mixed, they agree that clear expectations, consistent communication, and flexibility will help them succeed in their online coursework. Finally, respondents offered thanks for the support they have seen thusfar in the online learning environment, with one student saying, "*For the professors who are and haven't been aware of the negative affects of this pandemic and shown kindness throughout this challenging time, thank you.*"

CRC Student Supports

When asked where they turn for support when experiencing difficulties with school, the plurality of respondents indicate that they turn to trusted contacts, including family, friends, classmates, colleagues, and others whom they know have experience in college. They also frequently report turning to instructors, teaching assistants, or materials that they can access through those individuals, such as syllabi and Canvas materials.

Filipino and Pacific Islander respondents report turning to friends, family, and instructors with the most frequency (see Table 11 below). In addition, Filipino respondents report turning to counselors, advisors, and case managers with more frequency.

The third most commonly cited source of support for students was "myself, the internet, or outside resources". One student in this group said, *"I don't have support. I try to figure it out by myself."*, and another said, *"I just dig deep and get it done."* Comments such as these came up more frequently than comments related to counseling, academic support services, or student services (see Table 11 below).

Table 11. Students' sources of support by Race

	All respondents (n=1,430)	Black or African American (n=111)	Filipino (n=50)	More than one race/ ethnicity (n=106)	White (n=303)
Family / friends / classmates	25.31% (362)	32.43% (36)	36.00% (18)	34.91% (37)	32.67% (99)
Instructors / TAs / course materials	25.17% (360)	30.63% (34)	38.00% (19)	29.25% (31)	32.67% (99)
Myself / internet / outside resources	11.26% (161)	14.41% (16)	Low n	14.152% (15)	12.54% (38)
Counselors / advisors / case managers	10.35% (148)	14.41% (16)	22.00% (11)	Low n	9.57% (29)
Academic support services	6.92% (99)	Low n	Low n	Low n	9.57% (29)
None / unsure / need help /	5.94% (85)	Low n	Low n	Low n	7.6% (23)

services are impacted					
Student services / Athletics / Affinity groups	3.92% (56)	Low n	Low n	Low n	5.0% (15)
Department / admin / tech support	3.43% (49)	Low n	Low n	Low n	4.3% (13)

Female students reported turning to their instructors, TAs, or course materials slightly more than average (30.7% v. 25.3%), and slightly more often than they reported turning to family/friends. Male students reported turning to their own resources, the internet, or resources outside the school slightly more than average (17.4% v. 11.3%).

Table 12. Students' sources of support by Gender

When you experience difficulties with school, where do you go for support?			
	All respondents (n=1,430)	Female (n=833)	Male (n=350)
Family / friends / classmates	25.31% (362)	29.29% (244)	29.71% (104)
Instructors / TAs / course materials	25.17% (360)	30.73% (256)	24.29% (85)
Myself / internet / outside resources	11.26% (161)	11.04% (92)	17.43% (61)
Counselors / advisors / case managers	10.35% (148)	12.48% (104)	10.86% (38)
Academic support services	6.92% (99)	8.52% (71)	7.14% (25)
None / unsure / need help / services are impacted	5.94% (85)	6.96% (58)	5.71% (20)
Student services / Athletics / Affinity groups	3.92% (56)	4.20% (35)	5.43% (19)
Department / admin / tech support	3.43% (49)	3.72% (31)	4.00% (14)

Younger students were slightly more likely to report turning to family, friends, or classmates (32.3% v. 25.3%), while older students were more likely to report turning to their instructors, TAs, or course materials (31.8% v. 25.2%). Older students more often reported turning to their instructors than to their family or friends (31.8% v. 25.3%).

Table 13. Students' sources of support by Age Group

When you experience difficulties with school, where do you go for support?			
	All respondents (n=1,430)	24 or younger (n=691)	25 or older (n=513)
Family / friends / classmates	25.31% (362)	32.27% (223)	25.34% (130)
Instructors / TAs / course materials	25.17% (360)	26.19% (181)	31.77% (163)
Myself / internet / outside resources	11.26% (161)	12.16% (84)	14.23% (73)
Counselors / advisors / case managers	10.35% (148)	13.60% (94)	10.14% (52)
Academic support services	6.92% (99)	6.80% (47)	10.14% (52)
None / unsure / need help / services are impacted	5.94% (85)	6.95% (48)	6.63% (34)
Student services / Athletics / Affinity groups	3.92% (56)	2.89% (20)	6.82% (35)
Department / admin / tech support	3.43% (49)	3.04% (21)	5.07% (26)

Online Student Characteristics

When asked what they would like instructors to know about them in the online learning environment, respondents most often cited:
- A desire for empathy, connection, and collective positive assumptions (18.9% of respondents)
- Specifics related to their learning style or learning preferences (13.1%)
- Specific difficulties related to organizing their workload, managing their health and/or mental health, and taking exams in the online environment (11.9%)
- A desire for clear communication, clear expectations, and an organized online learning environment (10%)

The most frequently cited theme was students' desire for collective empathy and positive assumptions. In that vein, one student said, *"[I would like instructors to know] that some students are having to deal with COVID personally or financial problems and that they might be struggling but they are still trying there best to get their education done."* Another said, *"We are human and not just names on a screen. We are dealing with difficulties just like the instructors."*

Respondents who are new to online learning were more likely to report that they want their instructors to be aware of and empathetic to that fact (11.1% v. 5.3%), while students with lower access to technology were more likely to report difficulties related to organizing their workload, managing their health, and taking exams in the online environment (17.7% v. 11.9%).

Table 14. Online Student Characteristics Students Want Instructors to Consider by Prior Experience with Online Learning and Access to Technology

What would you like your instructors to know about you and other students in the online learning environment?			
	All respondents (n=1,430)	0 online courses (n=208)	"No"/ "maybe" have access to a computer (n=96)
Empathy / connection / collective positive assumptions	18.88% (270)	17.31% (36)	19.79% (19)
Learning styles / preferences	13.15% (188)	11.54% (24)	13.54% (13)
Difficulties focusing / taking exams / organizing workload / managing mental health	11.89% (170)	6.25% (13)	17.77% (17)
Clear communication, expectations & learning	10.00% (143)	8.65% (18)	Low n

environment			
Outside obligations	6.36% (91)	5.29% (11)	11.45% (11)
New to online / new student / returning student	5.10% (73)	11.06% (23)	Low n
Technology / software / course materials	4.06% (58)	Low n	Low n
Unsure / none / other	3.15% (45)	5.77% (12)	Low n
Academic support / accessibility needs	2.38% (34)	Low n	Low n

Hispanic/Latinx respondents reported outside obligations more often than the average for all students (11.7% v. 6.4%). Filipino students reported specific difficulties related to organizing their workload, managing their health and/or mental health, and taking exams in the online environment more often (26% v. 11.9%) (see Table 15 below).

Table 15. Online Student Characteristics Students Want Instructors to Consider by Race

What would you like your instructors to know about you and other students in the online learning environment?							
	All respondents (n=1,430)	Black or African American (n=112)	Filipino (n=50)	Hispanic / Latinx (n=222)	More than one race/ ethnicity (n=)	Other race/ethnicity (n=40)	White (n=303)
Empathy / connection / collective positive assumptions	18.88% (270)	23.42% (26)	26.00% (13)	27.48% (61)	25.47% (27)	27.50% (11)	18.81% (57)
Learning styles / preferences	13.15% (188)	22.52% (25)	Low n	17.57% (39)	10.38% (11)	Low n	18.15% (55)
Difficulties focusing / taking exams / organizing workload / managing mental health	11.89% (170)	11.71% (13)	26.00% (13)	15.32% (34)	12.26% (13)	Low n	10.56% (32)
Clear communication, expectations & learning environment	10.00% (143)	11.71% (13)	20.00% (10)	7.21% (16)	12.26% (13)	Low n	13.53% (41)
Outside obligations	6.36% (91)	Low n	Low n	11.71% (26)	Low n	Low n	7.92% (24)
New to online / new student / returning student	5.10% (73)	Low n	Low n	6.76% (15)	9.43% (10)	Low n	4.29% (13)
Technology / software / course materials	4.06% (58)	Low n	Low n	Low n	Low n	Low n	4.62% (14)
Unsure / none / other	3.15% (45)	Low n	Low n	Low n	Low n	Low n	4.29% (13)
Academic support / accessibility needs	2.38% (34)	Low n	Low n	Low n	Low n	Low n	Low n

Younger students more often reported a desire for empathy, connection, and collective positive assumptions (24.7% v. 18.9%), while older students more often reported outside obligations, such as childcare, work, household, or other obligations (10.1% v. 6.4%).

Table 16. Online Student Characteristics by Age Group

What would you like your instructors to know about you and other students in the online learning environment?			
	All respondents (n=1,430)	24 or younger (n=691)	25 or older (n=513)
Empathy / connection / collective positive assumptions	18.88% (270)	24.75% (171)	17.93% (92)
Learning styles / preferences	13.15% (188)	13.02% (90)	17.93% (92)
Difficulties focusing / taking exams / organizing workload / managing mental health	11.89% (170)	15.92% (110)	11.11% (57)
Clear communication, expectations & learning environment	10.00% (143)	9.99% (69)	13.06% (67)
Outside obligations	6.36% (91)	5.64% (39)	10.14% (52)
New to online / new student / returning student	5.10% (73)	6.51% (45)	5.46% (28)
Technology / software / course materials	4.06% (58)	4.63% (32)	4.68% (24)
Unsure / none / other	3.15% (45)	3.04% (21)	4.48% (23)
Academic support / accessibility needs	2.38% (34)	2.60% (18)	2.92% (15)

Advice for Fellow Classmates

Respondents most frequently cited a positive or goal-oriented mindset, self accountability, and self-care as the keys to succeeding in the online learning environment (42.6%). One student says,

> *"Make sure to take care of your mental health so that you're in the best mindset to do schoolwork. Get up and stretch in between assignments. Go on a walk to get fresh air and clear your head in between classes. Listen to your body and give it the nourishment it needs, but don't get too carried away because we still have assignments to complete."*

Another student suggests mutual empathy and seeking help from others, *"Be patient with your teachers, we're all in this together. "Don't be afraid to ask questions or vent your concerns. Ask for help when needed."*

Black/African American respondents more often recommended a positive or goal-oriented mindset, accountability, and self-care (52.3% v. 42.6%) and forming community/connection with instructors and students (18.9% v. 10.1%). Filipino respondents were more likely to recommend a positive or goal-oriented mindset, accountability, and self-care (70% v. 42.6%). Two examples of accountability that often came up were to set a regular schedule or routine for coursework, or to find a way to mimic on-site learning through either scheduling or a dedicated workspace.

Table 17. Advice for Fellow Classmates by Race

What advice would you give your fellow CRC classmates for succeeding in their Fall 2020 courses?			
	All respondents (n=1,430)	Black or African American (n=111)	Filipino (n=50)
Mindset / accountability / positivity / self-care	42.59% (609)	52.25% (58)	70.00% (35)
Community / Connection	10.14% (145)	18.92% (21)	Low n
Ask questions / Seek help	5.24% (75)	9.01% (10)	Low n
Environment	3.64% (52)	Low n	Low n
Unsure / I need help / None	2.38% (34)	Low n	Low n
Study habits	1.61% (23)	Low n	Low n

Additional Support Recommendations

When asked what else CRC can do to help support students' learning in the online environment, respondents most frequently cited the following:

- Clear, frequent communication and accessible information (11.9%)
- Academic support (8.7%). Respondents with more than one race/ethnicity cited academic support more frequently than any other item (15.1%).
- Help with accessing or paying for books, technology, and course materials, or free open educational resources (8.6%). This item was most frequently cited by respondents with less access to technology (16.7%).
- Black/African American students more frequently cited financial aid, help with basic needs, finding a quiet space to study (12.6% v. 5.9%)
- Additionally, 9% of question respondents stated that they were unsure what additional support CRC could provide or that they were sufficiently satisfied with the support CRC has given.

Students suggest clearly advertising and regularly reminding them of the resources and services available to them, including academic support and general information. Students specifically ask for tutoring or other academic support (8.67%), including the broad availability of such services across subject areas and time of day. Students also ask academic and professional guidance and encouragement, with one student saying, "*Help me make plans for my future, and keep up my motivation though those plans.*"

Finally, students routinely point to the cost of books and other materials (n= 66), calling for both open educational resources (n= 14), access to physical library books or space to study (n= 24), and help funding their course expenses (n= 31). Respondents also offered specific strategies for support in the classroom and beyond, with one student summarizing a range of students' input,

> *I would like instructors to know that posting lectures online after they do live sessions for students to watch later on their own time would be helpful for those students who work. Clear, specific instructions on assignments and providing resources/websites for students to know about would be helpful for students to have a good online learning experience. Low cost textbooks or older version of textbooks would be good for many students if the professors are ok with it.*

For a full breakdown of the themes that came up for this question, see Tables 18-19 below.

Table 18. Additional Support Recommendations by Access to Technology

What else can CRC do to help support your learning in the Fall 2020 semester?		
	All respondents (n=1,430)	"No"/ "maybe" have access to a computer (n=96)
Communication / Accessible information	11.96% (171)	10.41% (10)
None / unsure	9.02% (129)	Low n
Academic support	8.67% (124)	Low n
Books / Materials / OER / Computers	8.60% (123)	16.67% (16)
Empathy / Flexibility	5.94% (85)	Low n
Financial aid / Basic needs / Space / Health	5.94% (85)	Low n
Learning styles / modality preferences	3.71% (53)	Low n
Counseling / Guided Pathways	3.36% (48)	Low n
Administrative	3.15% (45)	Low n
Community / connection	0.91% (13)	Low n

Black/African American students more frequently cited financial aid, help with basic needs, finding a quiet space to study (12.6% v. 5.9%).

Table 19. Additional Support Recommendations by Race

What else can CRC do to help support your learning in the Fall 2020 semester?			
	All respondents (n=1,430)	Black or African American (n=111)	More than one race/ ethnicity (n=106)
Communication / Accessible information	11.96% (171)	15.32% (17)	13.21% (14)
None / unsure	9.02% (129)	10.81% (12)	11.32% (12)
Academic support	8.67% (124)	13.51% (15)	15.09% (16)
Books / Materials / OER / Computers	8.60% (123)	9.01% (10)	9.43% (10)
Empathy / Flexibility	5.94% (85)	9.01% (10)	Low n
Financial aid / Basic needs / Space / Health	5.94% (85)	12.61% (14)	Low n
Learning styles / modality preferences	3.71% (53)	Low n	Low n
Counseling / Guided Pathways	3.36% (48)	Low n	Low n
Administrative	3.15% (45)	Low n	Low n
Community / connection	0.91% (13)	Low n	Low n

Implications

The implications of this survey extend to all areas of campus, including, but not limited to: distance education coordinators, professional development coordinators, teaching and learning leads, student services areas, faculty, and marketing and communication. The institution has the opportunity to develop a collaborative approach to meeting the needs student identify for online learning. Notably, students indicate an immediate desire for clear organization and communication from CRC, something which touches upon all areas of the institution.

When considering the findings of this survey, it is important to consider where the self-identified needs of students in the online environment overlap with existing equity gaps at the institution. Hearing and responding to these needs can align with the goals of the fall 2020 *We Won't Fall Campaign* and other initiatives across campus.

Students provided much thoughtful and actionable feedback on this survey, some of which leads to further questions about students' perceptions and experiences of the online learning environment. Thus, the Research Office is currently working in collaboration with other areas of campus, including students, to develop a series of focus groups that will delve deeper into questions about students' experiences with online learning. The focus groups will draw upon these exploratory findings, existing research from established online education entities, and also upon concurrent statewide and national studies on the rapid online learning transformation of the higher education field. Some (non-exhaustive) areas being considered for further research are outlined below:

- *What does an 'organized online learning environment' look like to students?*
- *How has communication with instructors and the school gone now that the semester is underway? What aspects might be improved?*
  - *What communication strategies can CRC employ to streamline and clarify information?*
- *How has academic support worked well in the online environment? How could it work better?*
- *What are some examples of empathy and positive assumptions at work in the online learning environment that students recommend be utilized more broadly?*

The implications of this survey and all research about CRC's online learning environment do not end with the return to on-campus operations; it is likely that COVID-19 will transform higher education in perpetuity, and CRC can draw upon these insights as it adapts to that transformation.

Caveats and Limitations

There are some caveats and limitations to keep in mind when considering these data.

The survey was distributed at the end of August and would have missed students who had already decided not to enroll in fall 2020 courses. Future research might include surveying students as they drop classes, and surveying students who do not persist from fall 2020 to spring 2020.

Additionally, the survey was administered via email and advertised on social media, so responses may be skewed towards those with access to a computer/technology, or those who are frequent users of such technology. Future research might consider phone surveys, which are still possible in the remote environment, in addition to computer-based research.

Several student groups (male students, students under 25, and Hispanic/Latinx students) are underrepresented in the responses to the survey. While male students are typically underrepresented in research both locally at CRC and nationally across higher education, younger students and Hispanic/Latinx students are not. Future research should consider oversampling these populations to ensure a representative sample.

Finally, while this survey was developed in line with existing research on online higher education practices, it did not involve cross-functional input from across campus, including student voices. It is important that future instruments be tested with students to ensure their focus, language, and intent are in line with students' needs.

Appendices

Appendix A: Previous experience in online courses

Previous experience in online learning by access to technology

Do you have access to a computer/device?	0 online classes	1-2 online classes	3-4 online classes	5 or more online classes	Grand Total
No response					
N	1				1
%	100.00%	0.00%	0.00%	0.00%	100.00%
Maybe					
N	14	20	15	11	60
%	23.33%	33.33%	25.00%	18.33%	100.00%
No					
N	7	6	15	8	36
%	19.44%	16.67%	41.67%	22.22%	100.00%
Yes					
N	186	344	398	355	1283
%	14.50%	26.81%	31.02%	27.67%	100.00%
Total N	**208**	**370**	**428**	**374**	**1380**
Total %	**15.07%**	**26.81%**	**31.01%**	**27.10%**	**100.00%**

Previous experience in online learning by race

Race	0 online classes	1-2 online classes	3-4 online classes	5 or more online classes	Grand Total
No Response					
N	27	52	63	43	185
%	14.59%	28.11%	34.05%	23.24%	100.00%
Asian					
N	42	80	111	61	294
%	14.29%	27.21%	37.76%	20.75%	100.00%
Black or African American					
N	15	37	35	24	111
%	13.51%	33.33%	31.53%	21.62%	100.00%
Filipino					
N	4	15	18	13	50
%	8.00%	30.00%	36.00%	26.00%	100.00%
Hispanic / Latinx					
N	31	64	66	61	222
%	13.96%	28.83%	29.73%	27.48%	100.00%
Middle Eastern					
N	6	10	10	5	31
%	19.35%	32.26%	32.26%	16.13%	100.00%
More than one race / ethnicity					
N	18	26	33	29	106
%	16.98%	24.53%	31.13%	27.36%	100.00%
Native American					
N	2	5	4	1	12
%	16.67%	41.67%	33.33%	8.33%	100.00%
Other					

Race	0 online classes	1-2 online classes	3-4 online classes	5 or more online classes	Grand Total
N	6	17	9	8	40
%	15.00%	42.50%	22.50%	20.00%	100.00%
Pacific Islander / Native Hawaiian					
N	4	4	10	8	26
%	15.38%	15.38%	38.46%	30.77%	100.00%
White					
N	53	60	69	121	303
%	17.49%	19.80%	22.77%	39.93%	100.00%
Total N	**208**	**370**	**428**	**374**	**1380**
Total %	**15.07%**	**26.81%**	**31.01%**	**27.10%**	**100.00%**

Previous experience in online learning by age group

Age Group	0 online classes	1-2 online classes	3-4 online classes	5 or more online classes	Grand Total
No response					
N	24	51	60	41	176
%	13.64%	28.98%	34.09%	23.30%	100.00%
24 or younger					
N	117	163	224	187	691
%	16.93%	23.59%	32.42%	27.06%	100.00%
25 or older					
N	67	156	144	146	513
%	13.06%	30.41%	28.07%	28.46%	100.00%
Total N	**208**	**370**	**428**	**374**	**1380**
Total %	**15.07%**	**26.81%**	**31.01%**	**27.10%**	**100.00%**

Previous experience in online learning by gender

Gender	0 online classes	1-2 online classes	3-4 online classes	5 or more online classes	Grand Total
No response					
N	24	50	61	42	177
%	13.56%	28.25%	34.46%	23.73%	100.00%
Female					
N	123	215	252	243	833
%	14.77%	25.81%	30.25%	29.17%	100.00%
Male					
N	59	101	108	82	350
%	16.86%	28.86%	30.86%	23.43%	100.00%
Non-binary					
N	2	4	7	7	20
%	10.00%	20.00%	35.00%	35.00%	100.00%
Total N	**208**	**370**	**428**	**374**	**1380**
Total %	**15.07%**	**26.81%**	**31.01%**	**27.10%**	**100.00%**

Appendix B: Students' Concerns in the Online Learning Environment

Concerns in the online learning environment by experience with online learning

How many online classes have you taken in the past?	Learning the same amount I would in an in person class	Communicating with instructors	Communicating with other students	Figuring out technology	Finding a reliable internet connection	Socializing with other students	Finding time for my studies	Finding a quiet space to concentrate	Managing my classroom assignments and due dates	Getting my textbooks and or course materials by the start of the semester
0 online classes										
%	45.19%	61.54%	34.13%	40.87%	21.63%	21.15%	31.25%	33.17%	58.65%	50.00%
N	94	128	71	85	45	44	65	69	122	104
1-2 online classes										
%	53.24%	55.41%	33.78%	29.73%	24.32%	25.68%	36.22%	41.35%	60.27%	54.86%
N	197	205	125	110	90	95	134	153	223	203
3-4 online classes										
%	45.56%	50.23%	31.78%	26.40%	26.17%	24.07%	40.19%	41.36%	57.24%	53.27%
N	195	215	136	113	112	103	172	177	245	228
5 or more online classes										
%	43.58%	46.52%	25.94%	21.12%	24.06%	19.52%	32.35%	36.36%	54.55%	54.01%
N	163	174	97	79	90	73	121	136	204	202
N	649	722	429	387	337	315	492	535	794	737
Grand Total	45.38%	50.49%	30.00%	27.06%	23.57%	22.03%	34.41%	37.41%	55.52%	51.54%

Concerns in the online learning environment by access to technology

Do you have access to a computer/device?	Learning the same amount I would in an in person class	Communicating with instructors	Communicating with other students	Figuring out technology	Finding a reliable internet connection	Socializing with other students	Finding time for my studies	Finding a quiet space to concentrate	Managing my classroom assignments and due dates	Getting my textbooks and or course materials by the start of the semester
Yes										
%	46.22%	52.30%	31.02%	26.73%	22.76%	23.15%	35.39%	38.11%	57.52%	52.69%
N	593	671	398	343	292	297	454	489	738	676
Maybe										
%	61.67%	46.67%	31.67%	48.33%	46.67%	20.00%	43.33%	48.33%	56.67%	66.67%
N	37	28	19	29	28	12	26	29	34	40
No										
%	50.00%	61.11%	30.56%	41.67%	47.22%	13.89%	30.56%	44.44%	58.33%	55.56%
N	18	22	11	15	17	5	11	16	21	20
No response										
%	1.96%	1.96%	1.96%	0.00%	0.00%	1.96%	1.96%	1.96%	1.96%	1.96%
N	1	1	1	0	0	1	1	1	1	1
N	**649**	**722**	**429**	**387**	**337**	**315**	**492**	**535**	**794**	**737**
%	**45.38%**	**50.49%**	**30.00%**	**27.06%**	**23.57%**	**22.03%**	**34.41%**	**37.41%**	**55.52%**	**51.54%**

Concerns in the online learning environment by race

Race	Learning the same amount I would in an in person class	Communicating with instructors	Communicating with other students	Figuring out technology	Finding a reliable internet connection	Socializing with other students	Finding time for my studies	Finding a quiet space to concentrate	Managing my classroom assignments and due dates	Getting my textbooks and or course materials by the start of the semester
Asian										
%	51.70%	59.52%	46.94%	30.61%	29.59%	31.29%	39.12%	41.84%	57.48%	58.84%
N	152	175	138	90	87	92	115	123	169	173
Black or African American										
%	51.35%	58.56%	27.93%	33.33%	23.42%	18.92%	43.24%	38.74%	69.37%	60.36%
N	57	65	31	37	26	21	48	43	77	67
Filipino										
%	48.00%	64.00%	38.00%	26.00%	30.00%	32.00%	42.00%	38.00%	64.00%	62.00%
N	24	32	19	13	15	16	21	19	32	31
Hispanic / Latinx										
%	55.86%	56.76%	28.83%	33.78%	33.33%	20.72%	40.54%	48.20%	66.67%	58.56%
N	124	126	64	75	74	46	90	107	148	130
Middle Eastern										
%	51.61%	67.74%	38.71%	22.58%	32.26%	29.03%	38.71%	58.06%	61.29%	67.74%
N	16	21	12	7	10	9	12	18	19	21
More than one race / ethnicity										
%	51.89%	61.32%	28.30%	25.47%	25.47%	21.70%	37.74%	33.96%	62.26%	60.38%
N	55	65	30	27	27	23	40	36	66	64

Race	Learning the same amount I would in an in person class	Communicating with instructors	Communicating with other students	Figuring out technology	Finding a reliable internet connection	Socializing with other students	Finding time for my studies	Finding a quiet space to concentrate	Managing my classroom assignments and due dates	Getting my textbooks and or course materials by the start of the semester
No response										
%	17.02%	20.43%	16.17%	11.06%	8.09%	13.19%	14.89%	15.74%	23.40%	22.55%
N	40	48	38	26	19	31	35	37	55	53
Native American										
%	41.67%	50.00%	16.67%	8.33%	25.00%	8.33%	25.00%	66.67%	58.33%	66.67%
N	5	6	2	1	3	1	3	8	7	8
Other										
%	60.00%	52.50%	10.00%	32.50%	25.00%	17.50%	40.00%	45.00%	75.00%	60.00%
N	24	21	4	13	10	7	16	18	30	24
Pacific Islander / Native Hawaiian										
%	50.00%	61.54%	42.31%	42.31%	26.92%	38.46%	38.46%	50.00%	88.46%	73.08%
N	13	16	11	11	7	10	10	13	23	19
White										
%	45.87%	48.51%	26.40%	28.71%	19.47%	19.47%	33.66%	37.29%	55.45%	48.51%
N	139	147	80	87	59	59	102	113	168	147
%	**45.38%**	**50.49%**	**30.00%**	**27.06%**	**23.57%**	**22.03%**	**34.41%**	**37.41%**	**55.52%**	**51.54%**
N	**649**	**722**	**429**	**387**	**337**	**315**	**492**	**535**	**794**	**737**

Concerns in the online learning environment by age group

Age group	Learning the same amount I would in an in person class	Communicating with instructors	Communicating with other students	Figuring out technology	Finding a reliable internet connection	Socializing with other students	Finding time for my studies	Finding a quiet space to concentrate	Managing my classroom assignments and due dates	Getting my textbooks and or course materials by the start of the semester
24 or younger										
%	52.97%	59.62%	37.63%	31.84%	29.81%	29.23%	41.82%	47.76%	69.18%	60.78%
N	366	412	260	220	206	202	289	330	478	420
25 or older										
%	48.54%	52.05%	26.51%	28.07%	22.22%	16.57%	33.92%	33.92%	52.63%	52.24%
N	249	267	136	144	114	85	174	174	270	268
No response										
%	15.04%	19.03%	14.60%	10.18%	7.52%	12.39%	12.83%	13.72%	20.35%	21.68%
N	34	43	33	23	17	28	29	31	46	49
%	**45.38%**	**50.49%**	**30.00%**	**27.06%**	**23.57%**	**22.03%**	**34.41%**	**37.41%**	**55.52%**	**51.54%**
N	**649**	**722**	**429**	**387**	**337**	**315**	**492**	**535**	**794**	**737**

Concerns in the online learning environment by gender

Gender	Learning the same amount I would in an in person class	Communicating with instructors	Communicating with other students	Figuring out technology	Finding a reliable internet connection	Socializing with other students	Finding time for my studies	Finding a quiet space to concentrate	Managing my classroom assignments and due dates	Getting my textbooks and or course materials by the start of the semester
Female										
%	51.14%	56.42%	31.09%	30.85%	28.21%	22.21%	40.70%	44.18%	62.79%	59.30%
N	426	470	259	257	235	185	339	368	523	494
Male										
%	50.57%	56.86%	37.71%	28.57%	21.43%	27.43%	32.29%	34.29%	58.00%	50.57%
N	177	199	132	100	75	96	113	120	203	177
Non-binary										
%	55.00%	60.00%	20.00%	40.00%	40.00%	25.00%	45.00%	65.00%	95.00%	70.00%
N	11	12	4	8	8	5	9	13	19	14
No response										
%	15.42%	18.06%	14.98%	9.69%	8.37%	12.78%	13.66%	14.98%	21.59%	22.91%
N	35	41	34	22	19	29	31	34	49	52
%	**45.38%**	**50.49%**	**30.00%**	**27.06%**	**23.57%**	**22.03%**	**34.41%**	**37.41%**	**55.52%**	**51.54%**
N	**649**	**722**	**429**	**387**	**337**	**315**	**492**	**535**	**794**	**737**

Appendix C: Access to Computer or Device

Access to computer or device by experience with online learning

How many online classes have you taken in the past?	Maybe	No	Yes	Grand Total
0 online classes				
N	14	7	186	207
%	6.76%	3.38%	89.86%	100.00%
1-2 online classes				
N	20	6	344	370
%	5.41%	1.62%	92.97%	100.00%
3-4 online classes				
N	15	15	398	428
%	3.50%	3.50%	92.99%	100.00%
5 or more online classes				
N	11	8	355	374
%	2.94%	2.14%	94.92%	100.00%
Total N	**60**	**36**	**1283**	**1379**
Total %	**4.35%**	**2.61%**	**93.04%**	**100.00%**

Access to computer or device by race

Race	Maybe	No	Yes	Grand Total
No response				
N	9	6	169	184
%	4.89%	3.26%	91.85%	100.00%
Asian				
N	18	7	269	294
%	6.12%	2.38%	91.50%	100.00%
Black or African American				
N	7	9	95	111
%	6.31%	8.11%	85.59%	100.00%
Filipino				
N			50	50
%	0.00%	0.00%	100.00%	100.00%
Hispanic / Latinx				
N	12	4	206	222
%	5.41%	1.80%	92.79%	100.00%
Middle Eastern				
N	1	1	29	31
%	3.23%	3.23%	93.55%	100.00%
More than one race / ethnicity				
N	3	2	101	106
%	2.83%	1.89%	95.28%	100.00%
Native American				
N	1		11	12
%	8.33%	0.00%	91.67%	100.00%
Other				
N	5		35	40

	Maybe	No	Yes	Grand Total
%	12.50%	0.00%	87.50%	100.00%
Pacific Islander / Native Hawaiian				
N		2	24	26
%	0.00%	7.69%	92.31%	100.00%
White				
N	4	5	294	303
%	1.32%	1.65%	97.03%	100.00%
Total N	**60**	**36**	**1283**	**1379**
Total %	**4.35%**	**2.61%**	**93.04%**	**100.00%**

Access to computer or device by age group

Age group	Maybe	No	Yes	Grand Total
No response				
N	9	6	160	175
%	5.14%	3.43%	91.43%	100.00%
24 or younger				
N	25	12	654	691
%	3.62%	1.74%	94.65%	100.00%
25 or older				
N	26	18	469	513
%	5.07%	3.51%	91.42%	100.00%
Total N	**60**	**36**	**1283**	**1379**
Total %	**4.35%**	**2.61%**	**93.04%**	**100.00%**

Access to computer or device by gender

Gender	Maybe	No	Yes	Grand Total
No response				
N	10	6	160	176
%	5.68%	3.41%	90.91%	100.00%
Female				
N	31	23	779	833
%	3.72%	2.76%	93.52%	100.00%
Male				
N	17	6	327	350
%	4.86%	1.71%	93.43%	100.00%
Non-binary				
N	2	1	17	20
%	10.00%	5.00%	85.00%	100.00%
Total N	**60**	**36**	**1283**	**1379**
Total %	**4.35%**	**2.61%**	**93.04%**	**100.00%**

Appendix D: Importance of factors to students' success

Importance of factors by access to technology

Do you have access to a computer/device?	Regular communication with my instructors	Organized online learning environment	Clear expectations	Academic support	Support for basic needs	Access to healthcare	Technology	Collaboration with other students	Low cost course materials
Yes	2.81	2.50	3.49	5.08	6.70	7.42	5.30	7.20	4.92
Maybe	3.16	3.21	4.37	5.53	5.96	7.39	4.19	7.35	4.25
No	3.53	3.66	4.00	5.13	6.03	7.16	3.53	7.34	4.84
No response	2.00	4.00	6.00	3.00	1.00	5.00	7.00	8.00	9.00
All students	**2.84**	**2.56**	**3.55**	**5.10**	**6.65**	**7.41**	**5.21**	**7.21**	**4.89**

Importance of factors by experience with online learning

How many online classes have you taken in the past?	Regular communication with my instructors	Organized online learning environment	Clear expectations	Academic support	Support for basic needs	Access to healthcare	Technology	Collaboration with other students	Low cost course materials
0 online classes	2.49	2.81	3.47	4.72	6.81	7.35	5.22	7.31	5.15
1-2 online classes	2.62	2.54	3.68	4.98	6.62	7.51	5.43	7.12	4.96
3-4 online classes	2.91	2.57	3.63	5.16	6.54	7.32	5.19	7.07	4.91
5 or more online classes	3.16	2.44	3.37	5.36	6.69	7.44	5.01	7.40	4.67
All students	**2.84**	**2.56**	**3.55**	**5.10**	**6.65**	**7.41**	**5.21**	**7.21**	**4.89**

Importance of factors by race

Race	Regular communication with my instructors	Organized online learning environment	Clear expectations	Academic support	Support for basic needs	Access to healthcare	Technology	Collaboration with other students	Low cost course materials
Asian	2.84	2.41	3.67	4.96	6.65	7.24	5.45	6.96	5.11
Black or African American	3.25	2.92	3.64	4.83	6.35	7.39	4.87	7.47	4.55
Filipino	3.09	2.70	3.55	5.23	6.06	7.66	4.96	7.06	4.74
Hispanic / Latinx	2.89	2.76	3.69	5.19	6.50	7.45	4.82	7.51	4.51
Middle Eastern	2.53	3.17	4.43	4.93	6.50	7.07	5.73	7.13	4.17
More than one race / ethnicity	2.83	2.69	3.44	5.17	6.62	7.63	5.10	7.21	4.95
No response	2.65	2.54	3.41	5.00	6.48	7.22	5.66	7.46	4.97
Native American	2.45	2.27	3.64	4.82	6.09	7.73	5.36	7.45	5.18
Other	2.97	2.64	3.79	5.38	6.44	7.05	4.69	7.49	5.15
Pacific Islander / Native Hawaiian	2.76	2.68	4.20	5.08	6.68	7.24	4.72	7.08	4.56
White	2.73	2.31	3.19	5.27	7.08	7.56	5.34	7.05	5.12
All students	**2.84**	**2.56**	**3.55**	**5.10**	**6.65**	**7.41**	**5.21**	**7.21**	**4.89**

Importance of factors by age group

Do you have access to a computer/device?	Regular communication with my instructors	Organized online learning environment	Clear expectations	Academic support	Support for basic needs	Access to healthcare	Technology	Collaboration with other students	Low cost course materials
24 or younger	2.93	2.60	3.60	5.04	6.60	7.34	5.23	7.13	4.89
25 or older	2.78	2.52	3.49	5.23	6.76	7.55	5.07	7.24	4.87
No response	2.54	2.52	3.49	4.91	6.35	7.15	5.71	7.71	5.06
All students	**2.84**	**2.56**	**3.55**	**5.10**	**6.65**	**7.41**	**5.21**	**7.21**	**4.89**

Importance of factors by gender

Do you have access to a computer/device?	Regular communication with my instructors	Organized online learning environment	Clear expectations	Academic support	Support for basic needs	Access to healthcare	Technology	Collaboration with other students	Low cost course materials
Female	2.94	2.53	3.58	5.14	6.74	7.46	5.06	7.33	4.64
Male	2.59	2.60	3.50	5.04	6.60	7.40	5.45	6.74	5.48
Non-binary	3.90	3.50	3.60	5.30	4.65	6.05	5.15	8.45	5.10
No response	2.67	2.51	3.45	5.00	6.43	7.23	5.58	7.66	4.89
All students	**2.84**	**2.56**	**3.55**	**5.10**	**6.65**	**7.41**	**5.21**	**7.21**	**4.89**

Appendix E: Student Supports

Where do you go for support by access to technology?

Do you have access to a computer/device?	Academic Support services	Counselors / Advisors / Case managers	Department / admin / tech support	Family / Friends / Classmates / Colleagues	Instructors / TA / Course materials	Myself / Internet / Outside resources	None / unsure / need help/ services impacted	Student services / Affinity groups	No Response
Yes									
%	7.01%	10.91%	3.35%	26.66%	26.58%	11.85%	5.69%	4.13%	28.29%
N	90	140	43	342	341	152	73	53	363
Maybe									
%	11.67%	8.33%	5.00%	21.67%	21.67%	8.33%	11.67%	3.33%	25.00%
N	7	5	3	13	13	5	7	2	15
No									
%	5.56%	8.33%	8.33%	19.44%	16.67%	11.11%	13.89%	2.78%	27.78%
N	2	3	3	7	6	4	5	1	10
No response									
%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
N	0	0	0	0	0	0	0	0	51
%	**6.92%**	**10.35%**	**3.43%**	**25.31%**	**25.17%**	**11.26%**	**5.94%**	**3.92%**	**30.70%**
N	**99**	**148**	**49**	**362**	**360**	**161**	**85**	**56**	**439**

Where do you go for support by prior experience with online learning?

Do you have access to a computer/device?	Academic Support services	Counselors / Advisors / Case managers	Department / admin / tech support	Family / Friends / Classmates / Colleagues	Instructors / TA / Course materials	Myself / Internet / Outside resources	None / unsure / need help/ services impacted	Student services / Affinity groups	No Response
0 online classes									
%	6.73%	10.58%	3.37%	27.88%	21.15%	14.42%	5.29%	4.33%	26.92%
N	14	22	7	58	44	30	11	9	56
1-2 online classes									
%	10.54%	10.00%	3.51%	24.86%	25.41%	9.46%	8.92%	5.41%	25.68%
N	39	37	13	92	94	35	33	20	95
3-4 online classes									
%	5.37%	11.45%	4.21%	25.93%	26.17%	10.51%	5.14%	3.74%	30.61%
N	23	49	18	111	112	45	22	16	131
5 or more online classes									
%	6.51%	10.70%	2.94%	27.01%	29.41%	13.64%	5.08%	2.94%	28.61%
N	23	40	11	101	110	51	19	11	107
%	**7.17%**	**10.72%**	**3.55%**	**26.23%**	**26.09%**	**11.67%**	**6.16%**	**4.06%**	**28.19%**
N	**99**	**148**	**49**	**362**	**360**	**161**	**85**	**56**	**439**

Where do you go for support by race

Race	Academic Support services	Counselors / Advisors / Case managers	Department / admin / tech support	Family / Friends / Classmates / Colleagues	Instructors / TA / Course materials	Myself / Internet / Outside resources	None / unsure / need help/ services impacted	Student services / Affinity groups	No Response
Asian									
%	8.16%	12.93%	4.08%	26.53%	24.83%	12.59%	5.10%	3.06%	26.19%
N	24	38	12	78	73	37	15	9	77
Black or African American									
%	6.31%	14.41%	5.41%	32.43%	30.63%	14.41%	7.21%	6.31%	10.81%
N	7	16	6	36	34	16	8	7	12
Filipino									
%	6.00%	22.00%	4.00%	36.00%	38.00%	16.00%	2.00%	2.00%	8.00%
N	3	11	2	18	19	8	1	1	4
Hispanic / Latinx									
%	7.21%	13.96%	3.15%	26.13%	28.38%	11.71%	6.76%	3.60%	20.27%
N	16	31	7	58	63	26	15	8	45
Middle Eastern									
%	16.13%	3.23%	0.00%	16.13%	19.35%	12.90%	12.90%	12.90%	16.13%
N	5	1	0	5	6	4	4	4	5
More than one race / ethnicity									
%	7.55%	8.49%	1.89%	34.91%	29.25%	14.15%	4.72%	7.55%	21.70%
N	8	9	2	37	31	15	5	8	23
No response									
%	0.00%	0.85%	1.28%	5.53%	6.81%	2.98%	1.70%	0.43%	85.11%
N	0	2	3	13	16	7	4	1	200
Native American									

Race	Academic Support services	Counselors / Advisors / Case managers	Department / admin / tech support	Family / Friends / Classmates / Colleagues	Instructors / TA / Course materials	Myself / Internet / Outside resources	None / unsure / need help/ services impacted	Student services / Affinity groups	No Response
%	8.33%	8.33%	8.33%	8.33%	0.00%	0.00%	16.67%	8.33%	50.00%
N	1	1	1	1	0	0	2	1	6
Other									
%	7.50%	17.50%	7.50%	27.50%	22.50%	15.00%	10.00%	5.00%	20.00%
N	3	7	3	11	9	6	4	2	8
Pacific Islander / Native Hawaiian									
%	11.54%	11.54%	0.00%	23.08%	38.46%	15.38%	15.38%	0.00%	11.54%
N	3	3	0	6	10	4	4	0	3
White									
%	9.57%	9.57%	4.29%	32.67%	32.67%	12.54%	7.59%	4.95%	18.48%
N	29	29	13	99	99	38	23	15	56
%	**6.92%**	**10.35%**	**3.43%**	**25.31%**	**25.17%**	**11.26%**	**5.94%**	**3.92%**	**30.70%**
N	**99**	**148**	**49**	**362**	**360**	**161**	**85**	**56**	**439**

Where do you go for support by age group

Age Group	Academic Support services	Counselors / Advisors / Case managers	Department / admin / tech support	Family / Friends / Classmates / Colleagues	Instructors / TA / Course materials	Myself / Internet / Outside resources	None / unsure / need help/ services impacted	Student services / Affinity groups	No Response
24 or younger									
%	6.80%	13.60%	3.04%	32.27%	26.19%	12.16%	6.95%	2.89%	21.42%
N	47	94	21	223	181	84	48	20	148
25 or older									
%	10.14%	10.14%	5.07%	25.34%	31.77%	14.23%	6.63%	6.82%	18.32%
N	52	52	26	130	163	73	34	35	94
No response									
%	0.00%	0.88%	0.88%	3.98%	7.08%	1.77%	1.33%	0.44%	87.17%
N	0	2	2	9	16	4	3	1	197
%	**6.92%**	**10.35%**	**3.43%**	**25.31%**	**25.17%**	**11.26%**	**5.94%**	**3.92%**	**30.70%**
N	**99**	**148**	**49**	**362**	**360**	**161**	**85**	**56**	**439**

Where do you go for support by gender

Gender	Academic Support services	Counselors / Advisors / Case managers	Department / admin / tech support	Family / Friends / Classmates / Colleagues	Instructors / TA / Course materials	Myself / Internet / Outside resources	None / unsure / need help/ services impacted	Student services / Affinity groups	No Response
Female									
%	8.52%	12.48%	3.72%	29.29%	30.73%	11.04%	6.96%	4.20%	20.17%
N	71	104	31	244	256	92	58	35	168
Male									
%	7.14%	10.86%	4.00%	29.71%	24.29%	17.43%	5.71%	5.43%	20.57%
N	25	38	14	104	85	61	20	19	72
Non-binary									
%	0.44%	20.00%	5.00%	15.00%	20.00%	20.00%	15.00%	5.00%	15.00%
N	1	4	1	3	4	4	3	1	3
No response									
%	10.00%	0.88%	1.32%	4.85%	6.61%	1.76%	1.76%	0.44%	86.34%
N	2	2	3	11	15	4	4	1	196
%	**6.92%**	**10.35%**	**3.43%**	**25.31%**	**25.17%**	**11.26%**	**5.94%**	**3.92%**	**30.70%**
N	**99**	**148**	**49**	**362**	**360**	**161**	**85**	**56**	**439**

Appendix F: Online Student Characteristics

What would you like your instructors to know about you by access to technology

Do you have access to a computer/device?	Academic support / accessibility needs	Clear communication / expectations / learning environment	Difficulties focusing / time management / organizing workload / taking exams online / mental health	Empathy / connection / trying our best	Learning styles / preferences	New to online / new student / returning student	Outside obligations / job	Technology / software issues / materials	Unsure / none / other	No Response
Yes										
%	2.26%	10.68%	11.93%	19.56%	13.64%	5.22%	6.24%	4.05%	3.43%	37.41%
N	29	137	153	251	175	67	80	52	44	480
Maybe										
%	3.33%	6.67%	15.00%	20.00%	10.00%	6.67%	13.33%	8.33%	1.67%	36.67%
N	2	4	9	12	6	4	8	5	1	22
No										
%	8.33%	5.56%	22.22%	19.44%	19.44%	5.56%	8.33%	2.78%	0.00%	27.78%
N	3	2	8	7	7	2	3	1	0	10
No response										
%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
N	0	0	0	0	0	0	0	0	0	51
%	**2.38%**	**10.00%**	**11.89%**	**18.88%**	**13.15%**	**5.10%**	**6.36%**	**4.06%**	**3.15%**	**39.37%**
N	**34**	**143**	**170**	**270**	**188**	**73**	**91**	**58**	**45**	**563**

What would you like your instructors to know about you by prior experience with online learning

How many online classes have you taken in the past?	Academic support / accessibility needs	Clear communication / expectations / learning environment	Difficulties focusing / time management / organizing workload / taking exams online / mental health	Empathy / connection / trying our best	Learning styles / preferences	New to online / new student / returning student	Outside obligations / job	Technology / software issues / materials	Unsure / none / other	No Response
0 online classes										
%	2.40%	8.65%	6.25%	17.31%	11.54%	11.06%	5.29%	4.33%	5.77%	37.02%
N	5	18	13	36	24	23	11	9	12	77
1-2 online classes										
%	2.43%	9.19%	14.86%	20.54%	12.97%	5.14%	7.84%	3.78%	4.32%	36.49%
N	9	34	55	76	48	19	29	14	16	135
3-4 online classes										
%	2.80%	10.05%	12.62%	20.79%	15.65%	4.21%	6.78%	5.14%	1.64%	37.38%
N	12	43	54	89	67	18	29	22	7	160
5 or more online classes										
%	2.14%	12.83%	12.83%	18.45%	13.10%	3.48%	5.88%	3.48%	2.67%	37.70%
N	8	48	48	69	49	13	22	13	10	141
No response										
%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
N	0	0	0	0	0	0	0	0	0	50
%	**2.38%**	**10.00%**	**11.89%**	**18.88%**	**13.15%**	**5.10%**	**6.36%**	**4.06%**	**3.15%**	**39.37%**
N	**34**	**143**	**170**	**270**	**188**	**73**	**91**	**58**	**45**	**563**

What would you like your instructors to know about you by race

Race	Academic support / accessibility needs	Clear communication / expectations / learning environment	Difficulties focusing / time management / organizing workload / taking exams online / mental health	Empathy / connection / trying our best	Learning styles / preferences	New to online / new student / returning student	Outside obligations / job	Technology / software issues / materials	Unsure / none / other	No Response
Asian										
%	2.38%	9.86%	14.29%	17.69%	8.84%	6.46%	4.76%	5.78%	6.12%	37.07%
N	7	29	42	52	26	19	14	17	18	109
Black or African American										
%	5.41%	11.71%	11.71%	23.42%	22.52%	7.21%	7.21%	1.80%	1.80%	24.32%
N	6	13	13	26	25	8	8	2	2	27
Filipino										
%	4.00%	20.00%	26.00%	26.00%	14.00%	6.00%	6.00%	6.00%	6.00%	16.00%
N	2	10	13	13	7	3	3	3	3	8
Hispanic / Latinx										
%	2.70%	7.21%	15.32%	27.48%	17.57%	6.76%	11.71%	3.15%	1.80%	26.58%
N	6	16	34	61	39	15	26	7	4	59
Middle Eastern										
%	0.00%	12.90%	16.13%	29.03%	12.90%	3.23%	9.68%	9.68%	6.45%	19.35%
N	0	4	5	9	4	1	3	3	2	6
More than one race / ethnicity										
%	2.83%	12.26%	12.26%	25.47%	10.38%	9.43%	7.55%	3.77%	0.94%	26.42%
N	3	13	13	27	11	10	8	4	1	28

Race	Academic support / accessibility needs	Clear communication / expectations / learning environment	Difficulties focusing / time management / organizing workload / taking exams online / mental health	Empathy / connection / trying our best	Learning styles / preferences	New to online / new student / returning student	Outside obligations / job	Technology / software issues / materials	Unsure / none / other	No Response
No response										
%	0.43%	3.83%	1.28%	3.40%	3.83%	0.43%	0.00%	1.28%	0.00%	88.51%
N	1	9	3	8	9	1	0	3	0	208
Native American										
%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	8.33%	58.33%
N	0	3	0	0	0	0	1	0	1	7
Other										
%	0.00%	10.00%	15.00%	27.50%	17.50%	5.00%	5.00%	10.00%	0.00%	27.50%
N	0	4	6	11	7	2	2	4	0	11
Pacific Islander / Native Hawaiian										
%	7.69%	3.85%	34.62%	23.08%	19.23%	3.85%	7.69%	3.85%	3.85%	19.23%
N	2	1	9	6	5	1	2	1	1	5
White										
%	2.31%	13.53%	10.56%	18.81%	18.15%	4.29%	7.92%	4.62%	4.29%	31.35%
N	7	41	32	57	55	13	24	14	13	95
%	**2.38%**	**10.00%**	**11.89%**	**18.88%**	**13.15%**	**5.10%**	**6.36%**	**4.06%**	**3.15%**	**39.37%**
N	**34**	**143**	**170**	**270**	**188**	**73**	**91**	**58**	**45**	**563**

What would you like your instructors to know about you by age group

Age group	Academic support / accessibility needs	Clear communication / expectations / learning environment	Difficulties focusing / time management / organizing workload / taking exams online / mental health	Empathy / connection / trying our best	Learning styles / preferences	New to online / new student / returning student	Outside obligations / job	Technology / software issues / materials	Unsure / none / other	No Response
24 or younger										
%	2.60%	9.99%	15.92%	24.75%	13.02%	6.51%	5.64%	4.63%	3.04%	30.82%
N	18	69	110	171	90	45	39	32	21	213
25 or older										
%	2.92%	13.06%	11.11%	17.93%	17.93%	5.46%	10.14%	4.68%	4.48%	28.46%
N	15	67	57	92	92	28	52	24	23	146
No response										
%	0.44%	3.10%	1.33%	3.10%	2.65%	0.00%	0.00%	0.88%	0.44%	90.27%
N	1	7	3	7	6	0	0	2	1	204
%	2.38%	10.00%	11.89%	18.88%	13.15%	5.10%	6.36%	4.06%	3.15%	39.37%
N	34	143	170	270	188	73	91	58	45	563

What would you like your instructors to know about you by gender

Gender	Academic support / accessibility needs	Clear communication / expectations / learning environment	Difficulties focusing / time management / organizing workload / taking exams online / mental health	Empathy / connection / trying our best	Learning styles / preferences	New to online / new student / returning student	Outside obligations / job	Technology / software issues / materials	Unsure / none / other	No Response
Female										
%	2.04%	11.88%	14.89%	22.09%	15.85%	6.24%	8.52%	5.16%	2.40%	29.65%
N	17	99	124	184	132	52	71	43	20	247
Male										
%	4.29%	10.00%	10.86%	22.00%	12.86%	5.14%	5.14%	2.86%	7.14%	31.14%
N	15	35	38	77	45	18	18	10	25	109
Non-binary										
%	5.00%	10.00%	25.00%	10.00%	10.00%	15.00%	10.00%	15.00%	0.00%	20.00%
N	1	2	5	2	2	3	2	3	0	4
No response										
%	0.44%	3.08%	1.32%	3.08%	3.96%	0.00%	0.00%	0.88%	0.00%	89.43%
N	1	7	3	7	9	0	0	2	0	203
%	2.38%	10.00%	11.89%	18.88%	13.15%	5.10%	6.36%	4.06%	3.15%	39.37%
N	34	143	170	270	188	73	91	58	45	563

Appendix G: Advice for Fellow Classmates

What advice do you have for your classmates by access to technology

Do you have access to a computer/device?	Ask questions / seek help	Community/ connection	Environment	Mindset	Study habits	Unsure / I need help	No Response
Yes							
%	5.14%	10.52%	3.82%	44.43%	1.71%	2.65%	42.79%
N	66	135	49	570	22	34	549
Maybe							
%	10.00%	10.00%	1.67%	40.00%	0.00%	0.00%	53.33%
N	6	6	1	24	0	0	32
No							
%	8.33%	11.11%	5.56%	41.67%	2.78%	0.00%	41.67%
N	3	4	2	15	1	0	15
No response							
%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
N	0	0	0	0	0	0	51
%	**5.24%**	**10.14%**	**3.64%**	**42.59%**	**1.61%**	**2.38%**	**45.24%**
N	**75**	**145**	**52**	**609**	**23**	**34**	**647**

What advice do you have for your classmates by prior experience with online learning

How many online classes have you taken in the past?	Ask questions / seek help	Community /connection	Environment	Mindset	Study habits	Unsure / I need help	No Response
0 online classes							
%	3.37%	8.17%	4.33%	36.06%	1.44%	4.33%	50.48%
N	7	17	9	75	3	9	105
1-2 online classes							
%	5.41%	11.35%	2.70%	44.32%	1.35%	2.70%	41.62%
N	20	42	10	164	5	10	154
3-4 online classes							
%	6.31%	11.21%	3.04%	42.99%	1.64%	2.57%	43.46%
N	27	48	13	184	7	11	186
5 or more online classes							
%	5.61%	10.16%	5.35%	49.73%	2.14%	1.07%	40.64%
N	21	38	20	186	8	4	152
No response							
%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
N	0	0	0	0	0	0	50
%	**5.24%**	**10.14%**	**3.64%**	**42.59%**	**1.61%**	**2.38%**	**45.24%**
N	**75**	**145**	**52**	**609**	**23**	**34**	**647**

What advice do you have for your classmates by race

Race	Ask questions / seek help	Community / connection	Environment	Mindset	Study habits	Unsure / I need help	No Response
Asian							
%	3.40%	9.52%	1.36%	44.22%	1.36%	5.44%	42.18%
N	10	28	4	130	4	16	124
Black or African American							
%	9.01%	18.92%	5.41%	52.25%	1.80%	1.80%	30.63%
N	10	21	6	58	2	2	34
Filipino							
%	4.00%	18.00%	6.00%	70.00%	4.00%	0.00%	22.00%
N	2	9	3	35	2	0	11
Hispanic / Latinx							
%	7.21%	11.26%	5.86%	50.90%	2.25%	2.25%	32.88%
N	16	25	13	113	5	5	73
Middle Eastern							
%	12.90%	16.13%	3.23%	51.61%	0.00%	0.00%	32.26%
N	4	5	1	16	0	0	10
More than one race / ethnicity							
%	8.49%	7.55%	6.60%	53.77%	0.94%	3.77%	33.02%
N	9	8	7	57	1	4	35
No response							
%	0.43%	1.28%	0.43%	2.55%	0.00%	0.43%	95.74%
N	1	3	1	6	0	1	225
Native American							
%	0.00%	8.33%	0.00%	33.33%	0.00%	8.33%	50.00%
N	0	1	0	4	0	1	6
Other							

	Ask questions / seek help	Community/connection	Environment	Mindset	Study habits	Unsure / I need help	No Response
%	12.50%	20.00%	5.00%	52.50%	0.00%	2.50%	30.00%
N	5	8	2	21	0	1	12
Pacific Islander / Native Hawaiian							
%	11.54%	26.92%	0.00%	50.00%	7.69%	3.85%	15.38%
N	3	7	0	13	2	1	4
White							
%	4.95%	9.90%	4.95%	51.49%	2.31%	0.99%	37.29%
N	15	30	15	156	7	3	113
%	**5.24%**	**10.14%**	**3.64%**	**42.59%**	**1.61%**	**2.38%**	**45.24%**
N	**75**	**145**	**52**	**609**	**23**	**34**	**647**

What advice do you have for your classmates by age group

Age Group	Ask questions / seek help	Community/connection	Environment	Mindset	Study habits	Unsure / I need help	No Response
24 or younger							
%	5.07%	10.71%	3.62%	49.35%	1.74%	2.32%	38.06%
N	35	74	25	341	12	16	263
25 or older							
%	7.60%	13.45%	5.07%	51.46%	2.14%	3.51%	31.97%
N	39	69	26	264	11	18	164
No response							
%	0.44%	0.88%	0.44%	1.77%	0.00%	0.00%	97.35%
N	1	2	1	4	0	0	220
Grand Total	5.24%	10.14%	3.64%	42.59%	1.61%	2.38%	45.24%
	75	145	52	609	23	34	647

What advice do you have for your classmates by gender

Gender	Ask questions / seek help	Community / connection	Environment	Mindset	Study habits	Unsure / I need help	No Response
Female							
%	6.36%	12.85%	4.44%	50.66%	1.68%	2.64%	35.65%
N	53	107	37	422	14	22	297
Male							
%	5.71%	10.29%	3.14%	50.57%	2.57%	2.86%	34.29%
N	20	36	11	177	9	10	120
Non-binary							
%	5.00%	0.00%	15.00%	25.00%	0.00%	10.00%	50.00%
N	1	0	3	5	0	2	10
No response							
%	0.44%	0.88%	0.44%	2.20%	0.00%	0.00%	96.92%
N	1	2	1	5	0	0	220
%	**5.24%**	**10.14%**	**3.64%**	**42.59%**	**1.61%**	**2.38%**	**45.24%**
N	**75**	**145**	**52**	**609**	**23**	**34**	**647**

Appendix H: Additional Support Recommendations

Additional support recommendations by access to technology

Do you have access to a computer/device?	Academic support	Administrative	Books / materials / OER	Communication / Accessible information	Community / Connection	Counseling / Guided Pathways	Empathy / Flexibility	Financial Aid / Basic needs	Learning styles / modality preferences	None/ unsure
Yes										
%	8.96%	3.12%	8.34%	12.55%	1.01%	3.43%	6.24%	6.24%	4.05%	9.51%
N	115	40	107	161	13	44	80	80	52	122
Maybe										
%	10.00%	5.00%	8.33%	13.33%	0.00%	1.67%	6.67%	5.00%	1.67%	8.33%
N	6	3	5	8	0	1	4	3	1	5
No										
%	8.33%	5.56%	30.56%	5.56%	0.00%	8.33%	2.78%	5.56%	0.00%	5.56%
N	3	2	11	2	0	3	1	2	0	2
No response										
%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
N	0	0	0	0	0	0	0	0	0	0
%	**8.67%**	**3.15%**	**8.60%**	**11.96%**	**0.91%**	**3.36%**	**5.94%**	**5.94%**	**3.71%**	**9.02%**
N	**124**	**45**	**123**	**171**	**13**	**48**	**85**	**85**	**53**	**129**

Additional support recommendations by experience with online learning

How many online classes have you taken in the past?	Academic support	Administrative	Books / materials / OER	Communication / Accessible information	Community / Connection	Counseling / Guided Pathways	Empathy / Flexibility	Financial Aid / Basic needs	Learning styles / modality preferences	None /unsure
0 online classes										
%	7.69%	4.81%	5.29%	15.38%	0.96%	4.33%	6.73%	2.88%	3.37%	11.06%
N	16	10	11	32	2	9	14	6	7	23
1-2 online classes										
%	11.35%	2.70%	9.19%	10.27%	1.89%	4.59%	6.76%	5.14%	4.05%	11.35%
N	42	10	34	38	7	17	25	19	15	42
3-4 online classes										
%	7.94%	3.50%	7.71%	12.62%	0.47%	2.57%	5.37%	7.94%	3.74%	7.94%
N	34	15	33	54	2	11	23	34	16	34
5 or more online classes										
%	8.56%	2.67%	12.03%	12.57%	0.53%	2.94%	6.15%	6.95%	4.01%	8.02%
N	32	10	45	47	2	11	23	26	15	30
No response										
%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
N	0	0	0	0	0	0	0	0	0	0
%	**8.67%**	**3.15%**	**8.60%**	**11.96%**	**0.91%**	**3.36%**	**5.94%**	**5.94%**	**3.71%**	**9.02%**
N	**124**	**45**	**123**	**171**	**13**	**48**	**85**	**85**	**53**	**129**

Additional support recommendations by race

Race	Academic support	Administrative	Books / materials / OER	Communication / Accessible information	Community / Connection	Counseling / Guided Pathways	Empathy / Flexibility	Financial Aid / Basic needs	Learning styles / modality preferences	None/ unsure
Asian										
%	9.18%	4.08%	10.54%	8.84%	0.68%	2.72%	5.44%	6.12%	3.74%	11.90%
N	27	12	31	26	2	8	16	18	11	35
Black or African American										
%	13.51%	3.60%	9.01%	15.32%	0.90%	2.70%	9.01%	12.61%	2.70%	10.81%
N	15	4	10	17	1	3	10	14	3	12
Filipino										
%	18.00%	6.00%	14.00%	14.00%	2.00%	4.00%	12.00%	14.00%	0.00%	6.00%
N	9	3	7	7	1	2	6	7	0	3
Hispanic / Latinx										
%	11.26%	2.25%	10.36%	16.22%	1.80%	4.95%	8.11%	7.21%	3.15%	10.81%
N	25	5	23	36	4	11	18	16	7	24
Middle Eastern										
%	9.68%	3.23%	9.68%	19.35%	0.00%	3.23%	6.45%	6.45%	3.23%	9.68%
N	3	1	3	6	0	1	2	2	1	3
More than one race / ethnicity										
%	15.09%	3.77%	9.43%	13.21%	0.00%	3.77%	3.77%	4.72%	3.77%	11.32%
N	16	4	10	14	0	4	4	5	4	12
No response										
%	0.85%	0.43%	1.70%	1.28%	0.00%	0.00%	0.00%	0.85%	0.85%	0.00%
N	2	1	4	3	0	0	0	2	2	0
Native American										
%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%	8.33%	0.00%	0.00%	16.67%
N	0	0	0	0	0	1	1	0	0	2

Other										
%	5.00%	5.00%	12.50%	20.00%	0.00%	2.50%	15.00%	7.50%	7.50%	10.00%
N	2	5	8	0	1	6	3	3	4	
Pacific Islander / Native Hawaiian										
%	11.54%	7.69%	11.54%	26.92%	0.00%	7.69%	3.85%	3.85%	11.54%	11.54%
N	3	2	3	7	0	2	1	1	3	3
White										
%	7.26%	3.63%	8.91%	15.51%	1.65%	4.95%	6.93%	5.61%	6.27%	10.23%
N	22	11	27	47	5	15	21	17	19	31
%	**8.67%**	**3.15%**	**8.60%**	**11.96%**	**0.91%**	**3.36%**	**5.94%**	**5.94%**	**3.71%**	**9.02%**
N	**124**	**45**	**123**	**171**	**13**	**48**	**85**	**85**	**53**	**129**

Additional support recommendations by age group

Age	Academic support	Administrative	Books / materials / OER	Communication / Accessible information	Community / Connection	Counseling / Guided Pathways	Empathy / Flexibility	Financial Aid / Basic needs	Learning styles / modality preferences	None/ unsure
24 or younger										
%	8.68%	3.18%	8.10%	17.66%	1.16%	5.35%	7.09%	7.67%	3.33%	9.26%
N	60	22	56	122	8	37	49	53	23	64
25 or older										
%	12.09%	4.29%	12.48%	9.36%	0.97%	2.14%	7.02%	5.85%	5.85%	12.48%
N	62	22	64	48	5	11	36	30	30	64
No response										
%	0.88%	0.44%	1.33%	0.44%	0.00%	0.00%	0.00%	0.88%	0.00%	0.44%
N	2	1	3	1	0	0	0	2	0	1
%	**8.67%**	**3.15%**	**8.60%**	**11.96%**	**0.91%**	**3.36%**	**5.94%**	**5.94%**	**3.71%**	**9.02%**
N	**124**	**45**	**123**	**171**	**13**	**48**	**85**	**85**	**53**	**129**

Additional support recommendations by gender

Gender	Academic support	Administrative	Books / materials / OER	Communication / Accessible information	Community / Connection	Counseling / Guided Pathways	Empathy / Flexibility	Financial Aid / Basic needs	Learning styles / modality preferences	None/ unsure
Female										
%	10.68%	3.12%	11.16%	13.09%	0.96%	4.08%	7.20%	7.08%	3.96%	10.08%
N	89	26	93	109	8	34	60	59	33	84
Male										
%	9.14%	4.57%	6.86%	17.14%	1.43%	3.71%	6.00%	6.29%	5.14%	12.29%
N	32	16	24	60	5	13	21	22	18	43
Non-binary										
%	5.00%	0.00%	10.00%	0.00%	0.00%	5.00%	20.00%	10.00%	5.00%	10.00%
N	1	0	2	0	0	1	4	2	1	2
No response										
%	0.88%	1.32%	1.76%	0.88%	0.00%	0.00%	0.00%	0.88%	0.44%	0.00%
N	2	3	4	2	0	0	0	2	1	0
%	**8.67%**	**3.15%**	**8.60%**	**11.96%**	**0.91%**	**3.36%**	**5.94%**	**5.94%**	**3.71%**	**9.02%**
N	**124**	**45**	**123**	**171**	**13**	**48**	**85**	**85**	**53**	**129**

Appendix I: Survey Instrument

Fall 2020 Online Learning Expectations

Welcome, Fall 2020 student! CRC is collecting feedback about student expectations for and experiences with online learning, with the goal of **supporting your success in the online learning environment**.

Thank you for completing this survey, which should take approximately 5 minutes. Your responses will remain entirely anonymous and confidential. No identifying information will be linked to your responses, and your responses will not affect your courses or grades in any way.

Our hope is to use your feedback to help create a positive online learning experience for all students. By continuing with the survey, you consent to share parts of your responses with CRC faculty, staff, and administrators in order to support student learning.

This survey will refer to the "online learning environment". This means all aspects of a class that take place online (Canvas materials, discussion boards, online tests, video meetings, online student hours, etc.).

How many classes have you taken online in the past, at CRC or at a different institution (another college, high school, etc.) ?
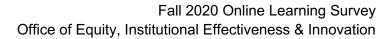- 0 online classes
- 1-2 online classes
- 3-4 online classes
- 5 or more online classes

Do you have access to a computer or device (other than a smartphone) that you can use to complete your school work?

 o Yes (1)
 o No (2)
 o Maybe (3)

How important are each of the following to your success in your online courses?
Rank items in order of importance where 1= most important and 10=least important. Drag and drop items to place them in the desired order.

_____ Regular communication with my instructors (1)
_____ Organized online learning environment (Canvas, syllabus) (2)
_____ Clear expectations (3)
_____ Academic support (Library and tutoring resources, etc.) (7)
_____ Support for basic needs (food, housing, etc.) (8)
_____ Access to healthcare (medical care, mental health resources, etc.) (9)
_____ Technology (laptop, wifi) (4)
_____ Collaboration with other students (5)
_____ Low-cost course materials (books, software, etc.) (10)
_____ Other (6)

Which of the following are you worried about in the online learning environment? (select all that apply, if any)
☐ Learning the same amount I would in an in-person class (1)
☐ Communicating with instructors (2)
☐ Communicating with other students (3)
☐ Figuring out technology (logging into my courses, video meetings, email, etc.) (5)
☐ Finding a reliable internet connection (13)
☐ Socializing with other students (6)
☐ Finding time for my studies (7)
☐ Finding a quiet space to concentrate (8)
☐ Managing my classroom assignments and due dates (9)
☐ Getting my textbooks and/or course materials by the start of the semester (11)
☐ Other (10) _____

When you experience difficulties with school, where do you go for support?

_____

_____

_____

_____

_____

What would you like your instructors to know about you and other students in the online learning environment?

_____

_____

_____

_____

What else can CRC do to help support your learning in the Fall 2020 semester?

_____

_____

_____

_____

_____

What advice would you give your fellow CRC classmates for succeeding in their Fall 2020 online courses?
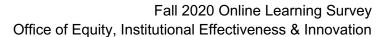
_____

_____

_____

_____

_____

You are almost done with the survey! We have just a few more questions to help us ensure that the feedback we collect is representative of the diverse CRC student population. As with the rest of the survey, your participation in the following questions is voluntary.

What is your gender?
o Male (18)
o Female (19)
o Non-binary (21)

What is your race/ethnicity?
o Asian (11)
o Black or African American (12)
o Filipino (13)

o Hispanic / Latinx (14)
o Middle Eastern (21)
o More than one race / ethnicity (15)
o Native American (17)
o Other (20)
o Pacific Islander / Native Hawaiian (19)
o White (16)

What is your age group?

o 24 or younger (12)
o 25 or older (13)