

# A-5

## STANDING COMMITTEES

Academic and Student Affairs Committee

### Student Regent Presentation

#### INFORMATION

This item is for information only.

#### BACKGROUND

Each year, the Student Regent is given the opportunity to highlight a particular aspect of the student experience to the Board at its May meeting. Appropriately, in this pandemic year, 2020-21 Student Regent Kristina Pogosian will use the results of a student survey to encourage the Board and the faculty to discuss which practices of the pandemic year might be retained for the post-pandemic future.

#### *Attachment*

What COVID-19 Taught Us About Education

# What COVID-19 Taught Us About Education

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**Regent Kristina Pogosian's  
Student Survey and Faculty  
Focus Groups on Education in a  
Post-Pandemic World**

# What COVID-19 Taught Us About Education

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Each year, the Student Regent is given the opportunity to highlight an aspect of the student experience to the Board of Regents. Appropriately, Regent Kristina Pogosian spearheaded a student survey and faculty focus groups to discuss which practices of the pandemic year might be retained for the post-pandemic future.



**Kristina Pogosian, 2020-2021 Student Regent**

Kristina was appointed by Governor Inslee to the University of Washington's Board of Regents. Before transferring to UW Tacoma, she worked in student government and the legislature. As a daughter of immigrants, Kristina leads two nonprofits to serve Armenians in Washington and abroad. Currently, she is working with the Washington Student Achievement Council to create a statewide strategic plan for meeting student basic needs.

This report was created by the **Polling and Open Data Initiative at the University of Washington** (PODUW), a registered student organization that creates, analyzes, and presents data to advance public understanding of our community and the Pacific Northwest. | [poddata.org](http://poddata.org)



**Phillip Meng, Executive Director & Chief Analyst**

Phillip is an undergraduate student at the Foster School of Business from Vancouver, Washington. He leads PODUW and its projects. Building the organization from an idea into a team of 20+ passionate analysts has been the highlight of Phillip's Husky experience, and outside of data analytics, he is grateful for opportunities in undergraduate research, Interdisciplinary Honors, Foster Consulting, and the Lavin Entrepreneurship Program.



**Hayoung Jung, Technology Director**

Hayoung is an undergraduate student double-majoring in Computer Science and Political Science, from Vancouver, Washington. He leads PODUW's technical planning and managed the visualizations for this project. Outside of PODUW, Hayoung is the Vice Chair of the UW Association for Computing Machinery, a Research Assistant in the Social Computing Lab, and a computer science instructor at Juni Learning.

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# EXECUTIVE SUMMARY

Since the onset of the COVID-19 pandemic in March 2020, University of Washington students have experienced an unprecedented virtual college journey. As restrictions are lifted, our community is exploring an important question: which educational practices should the University continue in a post-pandemic world? 3,769 undergraduate and graduate students responded through a tri-campus survey, and faculty weighed in through focus groups. This report shares student and faculty voices from these studies.

## **Key Findings:**

### *Overall Experiences*

- A majority of students (57%) described their remote learning experience as “a mix of positive and negative,” followed by “mostly positive” experiences.
- Graduate students reported more positive experiences than undergraduate students.
- Bothell and Tacoma students reported more positive experiences than Seattle students.

### *What Students Want to See Continued*

- Students advocated for practices that promote educational accessibility, increase flexibility, and continue course features and policies created during the pandemic.
- Nearly one in three (29%) students mentioned recorded courses and lectures; many others want virtual office hours and online access to support staff to continue.
- Other students advocated for asynchronous and hybrid options, course leniency, improved online organization of classes, and greater focus on assignments as opposed to exams. In addition, there were noted differences between responses from each campus.

### *Faculty and Administrative Findings*

- Faculty members see benefits in using technology to administer a post-pandemic classroom, but also have concerns about academic freedom, student engagement, and constrained bandwidth.
- Leaders across the University are already involved in implementing technology in teaching, encouraging accessible practices, and studying how to improve the student experience. These are potential collaborators in fostering the post-pandemic vision.

## **Recommendations:**

This study was designed as a starting point for understanding student and faculty voices, and as a preface to further exploration. This report recommends:

- Further investigation of the central question (what should continue after remote learning?) at program and campus-specific levels
- Implementing pilot programs to further study the impacts of recorded lectures, virtual office hours, and use of online tools for course organization

## **Questions for the Board of Regents:**

- What is your vision for the University of Washington in a post-pandemic world?
- How does the University's economy shift in your vision of a post-pandemic world?

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# SURVEY INTRODUCTION

## METHODOLOGY

### Overview

The survey was created in collaboration with the Office of Educational Assessment and the Academic Experience Design & Delivery divisions. It was distributed to students through three main channels: an all-advisor email (including Honors and departmental advisors), all-student email (facilitated by ASUW, ASUWT, ASUWB, and GPSS), and marketing on student government social media accounts. The survey was also shared as an action item on MyUW, the student portal. Responses were collected anonymously through the Qualtrics survey platform.

### Survey Questions

The survey asked four questions (possible responses in parentheses): two demographic questions, one experience question, and an open-ended recommendation:

1. At which UW campus are you primarily taking courses? (*Bothell, Seattle, or Tacoma*)
2. Which of the following best describes you? (*Undergraduate or Graduate*)
3. Thinking about your remote learning experience overall, how would you describe it? (*Largely positive, A mix of positive and negative, or Largely negative*)
4. What aspect(s) of your remote learning experience do you hope continue once restrictions for COVID-19 are lifted? (*open-ended*)

The responses to the demographic questions are discussed in this introduction. Questions 3 and 4 are each covered in dedicated sections.

### Analytical Approach

The analysis in this report has two primary goals. First, it aims to present a general picture of how students view their remote learning experience. To understand the differences in how different campuses and degree levels reported their experiences, data from each group was isolated. Significance and post-hoc tests were then performed to understand differences and correlations.

Second, the analysis aims to present common aspects of the remote learning experience that students wish to see continued. To identify trends within this large set of qualitative data, top keywords were recognized using Natural Language Processing (NLP) techniques. Clustered words and terms were identified through Latent Dirichlet Analysis, and data on keywords were disaggregated by campus and degree level. Further, analysts subjectively identified representative quotes based on these findings.

Along with findings from the faculty focus groups, these analytical techniques inform the recommendations on page XX and invite further study.

## DEMOGRAPHICS

The survey received **3,769 responses**, which represents an **overall response rate of 7.3% of the student population.**<sup>1</sup> 80.5% of respondents were undergraduate students. Nearly 50% of respondents were undergraduates at the Seattle campus, and 25% were undergraduates at Bothell.

**TABLE 1 Responses by Campus and Degree Level**

	Seattle	Bothell	Tacoma	Total (n)
Undergraduate	48.4%	24.0%	8.1%	80.5%
	(1825)	(903)	(307)	(3035)
Graduate	15.4%	2.8%	1.2%	19.5%
	(581)	(106)	(47)	(734)
Total (n)	63.8%	26.8%	9.4%	100.0%
	(2406)	(1009)	(354)	(3769)

Response rates varied widely between the three campuses. Students at UW Bothell responded at a particularly impressive response rate; roughly 17% of Bothell undergraduates and 22% of graduates responded to the survey, a rate nearly two-and-a-half times the average.

**TABLE 2 Response Rates by Campus and Degree Level**

	Seattle	Bothell	Tacoma	Total
Undergraduate	6.3%	17.2%	7.5%	7.9%
Graduate	4.8%	22.2%	6.4%	5.5%
Total	5.8%	17.6%	7.3%	7.3%

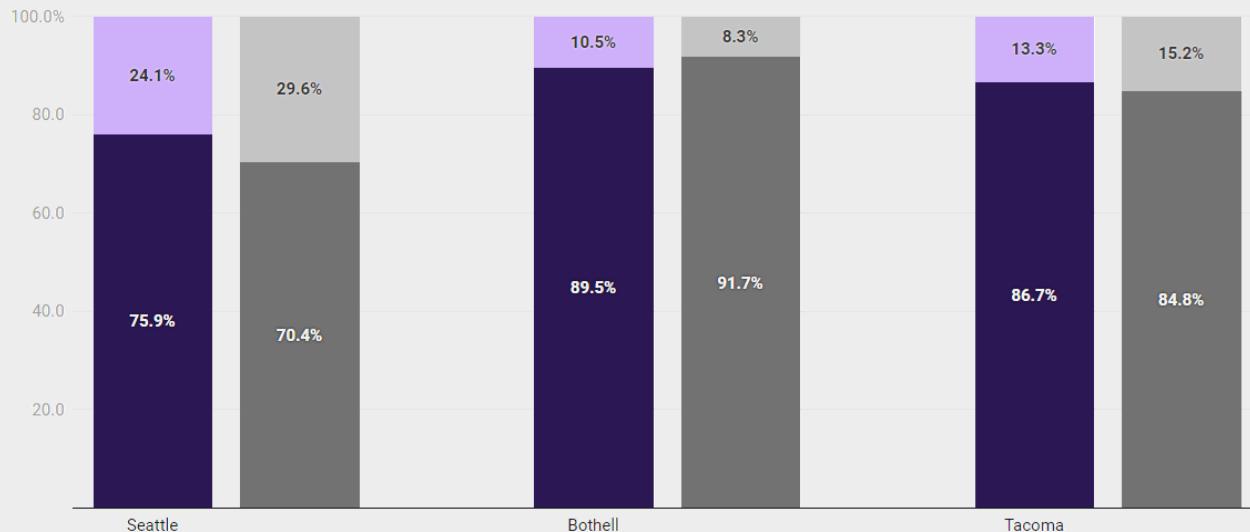
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<sup>1</sup> Response rates are calculated based on the Spring 2021 Quick Stats of Student Enrollment produced by the Office of Academic Data Management.

## Proportions of Undergraduate and Graduate Students in the Survey Sample are Similar to Proportions in the Population

This chart shows the percentage of graduate and undergraduate respondents to the survey, compared to the percentage for all students as of Spring Quarter 2021.

Undergrad. (sample)   Grad. (sample)   Undergrad. (population)   Grad. (population)



## ANALYSIS LIMITATIONS

The sampling and analytical approaches are intended to provide as representative a portrait of student voices as possible. The following limitations to the analysis should be noted:

- Students without digital access may not have had the same access to the survey
- While all students should have been contacted through at least one channel, the sample may not be perfectly random
- Participants in this survey may have held certain opinions that rendered them more likely to respond (participation bias, non-response bias)

This report identifies correlations but does not imply causation. Because most data was qualitative, this report does not weight responses. Consequently, some campuses and degree levels (e.g. students at Bothell) feature more prominently than would be expected in the population.

# OVERALL EXPERIENCES

“ Learning remotely as a single parent has made my dream of going back to school more accessible. I am able to work on school work in my own time and still provide supervision for my kids. ”

**TABLE 3 Overall Experiences with Remote Learning**

	Mostly positive	A mix of positive and negative	Mostly negative	Total
Thinking about your remote learning experience overall, how would you describe it?	27.4% (n=1032)	56.7% (n=2133)	15.9% (n=600)	100.0% (n=3765)

Of the 3,765 students who responded to this question, **the majority (56.7%) answered “a mix of positive and negative.”** The next most common response was “mostly positive” (27.4%) while the least common was “mostly negative” (15.9%). This order was also true for every combination of campus and degree type except:

- Seattle undergraduate students, who were more likely to report “mostly negative” experiences than “mostly positive” ones
- Tacoma graduate students, who most commonly reported “mostly positive” experiences

## Remote Learning Experiences by Degree Level

As a whole, graduate students reported more positive experiences with remote learning than undergraduate students. Among undergraduate students, 26.2% described “mostly positive” experiences, 57.0% described “a mix of positive and negative,” and 16.8% described “mostly negative” experiences. Graduate students were more likely to describe “mostly positive” experiences (32.4%) and less likely to describe mixed (55.0%) and “mostly negative” (12.6%) ones.

Further analysis through t-tests for significance<sup>1</sup> suggests that (for more detailed information about statistical tests applied please see *Appendix B*):

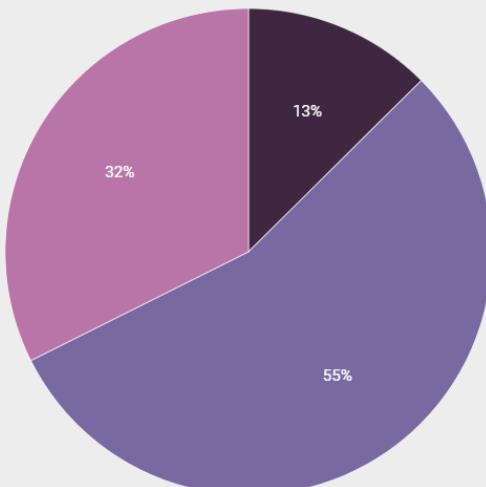
- There was a significant difference in reported student experiences between undergraduate and graduate students overall ( $p = 0.000104$ ).
- Graduate students were more likely to report “mostly positive” experiences and less likely to report “mostly negative” experiences than undergraduate students at **all three campuses**.

<sup>1</sup> A 5% significance level ( $\alpha = 0.05$ ) is used throughout this report.

## Graduate Students Express More Positive Experiences With Remote Learning than Undergraduate Students

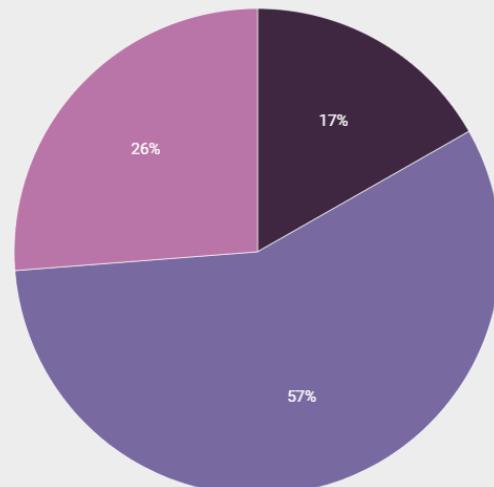
This chart shows how 732 graduate students and 3,031 undergraduate students rated their remote learning experience. Graduate students were more likely to report positive experiences and less likely to report negative experiences to remote learning.

■ Mostly negative ■ A mix of positive and negative ■ Mostly positive



Graduate students

Total:  
732



Undergraduate students

Total:  
3,031

However, the differences in reported student experiences between undergraduate and graduate students at the Bothell ( $p = 0.336$ ) and Tacoma ( $p = 0.104$ ) campuses do not meet the significance threshold, largely because the sample sizes of graduate students at these campuses (106 and 45) are small.

## Remote Learning Experiences by Campus

Meanwhile, students at the Seattle campus reported generally less positive experiences than students at Bothell and Tacoma. The proportions of responses at the Bothell and Tacoma campuses were nearly identical; each proportion was within two percentage points. At both campuses, approximately 38% of students reported "mostly positive experiences," 50% reported "a mix of positive and negative" and 12% reported "mostly negative experiences."

On the other hand, only 22% of Seattle students reported "mostly positive experiences," sixteen percentage points lower. 60% reported "a mix of positive and negative" (60%) and 18% reported "mostly negative" experiences – both higher than the other two campuses.

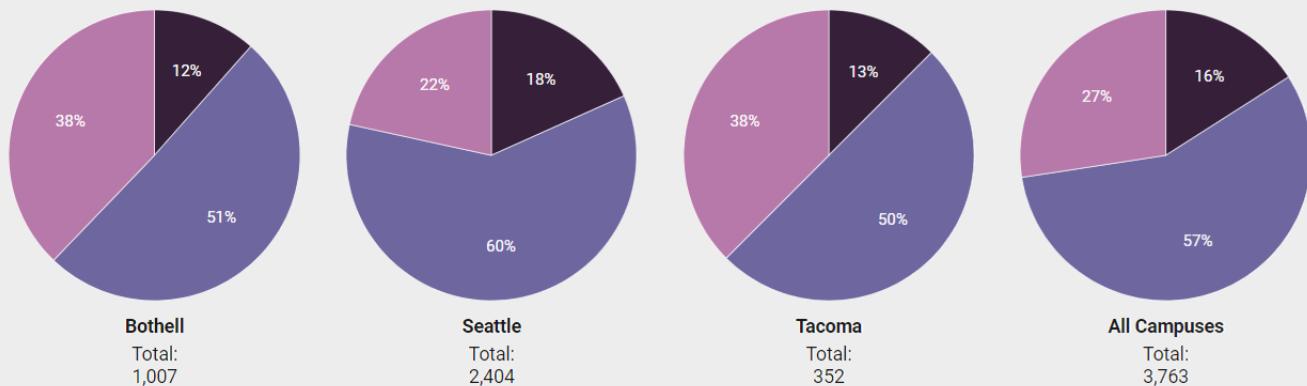
Further analysis through the Kruskal Wallis H-test and Dunn's Multiple Comparison test suggests that:

- There was a significant difference in reported student experiences between the three campuses, both among undergraduate ( $p = 2.98 \times 10^{-29}$ ) and graduate ( $p = 0.00283$ ) students.

## While Responses at Bothell and Tacoma Were Nearly Identical, Seattle Students Reported Significantly Fewer Positive Experiences

This chart shows the distribution of sentiments on remote learning experience per campus. At all three campuses, a majority of respondents chose "A mix of positive and negative" to describe their remote learning experiences. At all campuses, fewer than one-fifth of students described their experience as "mostly negative."

■ Mostly negative ■ A mix of positive and negative ■ Mostly positive



- Among undergraduate students, Seattle students reported significantly less positive experiences than Bothell ( $p = 1.36 \times 10^{-23}$ ) and Tacoma ( $p = 4.75 \times 10^{-9}$ ) students. The difference between responses for Bothell and Tacoma was not significant.
- Similarly, among graduate students, Seattle students reported significantly less positive experiences than Bothell ( $p = 0.0298$ ) and Tacoma ( $p = 0.0298$ ) students. The difference between responses for Bothell and Tacoma was not significant.

**TABLES 4, 5 Breakdown of Responses by Campus for Undergraduate and Graduate Students**

Undergraduate students			Graduate students			
	Mostly positive	A mix of positive and negative	Mostly negative	Mostly positive	A mix of positive and negative	Mostly negative
Bothell	37.2% (335)	51.3% (462)	11.5% (104)	43.4% (46)	45.3% (48)	11.3% (12)
Seattle	19.3% (351)	60.7% (1107)	20.0% (365)	29.0% (168)	58.1% (337)	12.9% (75)
Tacoma	35.5% (109)	51.8% (159)	12.7% (39)	51.1% (23)	37.8% (17)	11.1% (5)
Overall	26.2% (795)	57.0% (1728)	16.8% (3031)	32.4% (237)	55.0% (402)	12.6% (92)

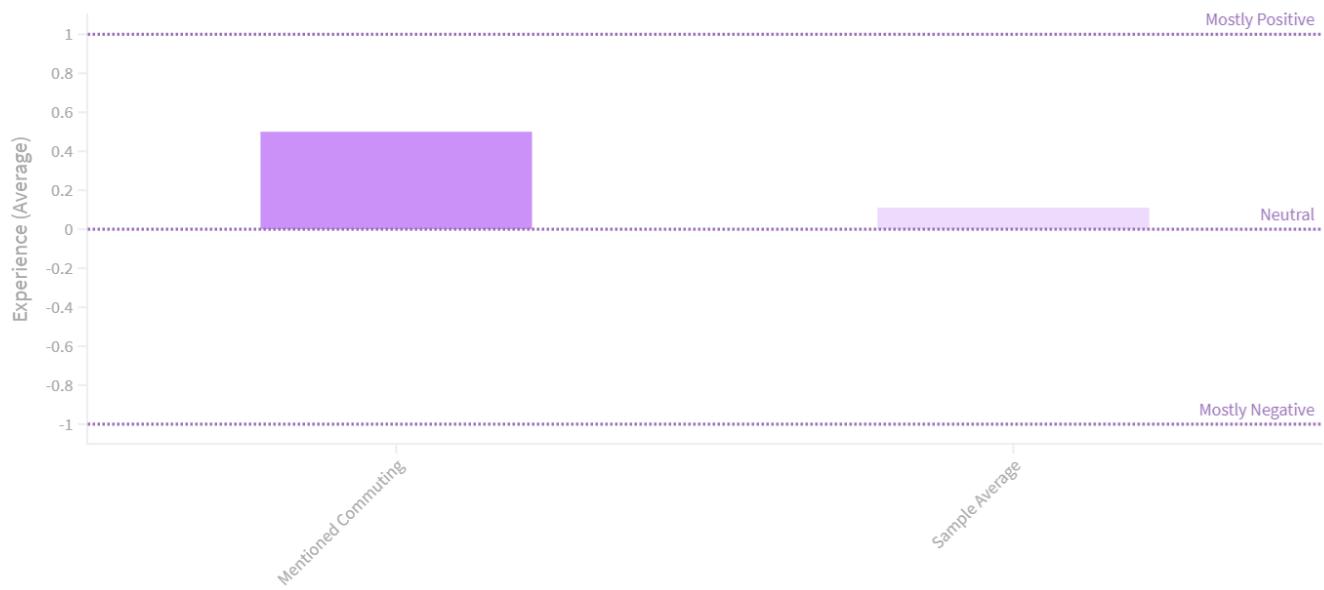
## Commuting and Remote Learning Experiences

Apart from campus and degree type, this report finds that the positivity of remote learning experiences is also correlated with some information that students provided about themselves in the fourth question of the survey (*What aspect(s) of your remote learning experience do you hope continue once restrictions for COVID-19 are lifted?*).

In particular, students who mentioned some variant of "commute" (generally indicating that they commute to their university campus), reported more positive remote learning experiences. When "mostly positive" responses are assigned a value of 1, mixed responses are assigned a value of 0, and "mostly negative" responses are assigned a value of -1, students who mentioned commuting had an average value of 0.5 – compared to 0.11 among all respondents.

### **Experience Among Respondents Who Mentioned "Commuting"**

Respondents who mentioned the word "commuting" ( $n = 143$ ) had a more positive experience with remote learning on average (0.50) compared to that of the overall sample of respondents (0.11).



The 143 students who mentioned "commute" were more likely to be at Bothell and Tacoma, and more likely graduate students, than the survey population as a whole. 29.4% (42) were at Bothell, 58.7% (84) were at Seattle, and 11.9% (17) were at Tacoma. 68.5% (98) were undergraduate and 31.5% (45) were graduate students.

Representative student responses included:

- *As a commuter student from Tacoma, WA it was wonderful for me to regain 4+ hours of my day (that was a commute) to take remote classes.*
- *Being able to attend evening meetings and RSO functions remotely, as it creates greater accessibility for commuters.*
- *Lessons that can be taught remotely are nice because it saves me a lot of time without having to commute. But I would really like to have some in-person interaction with study groups and labs.*

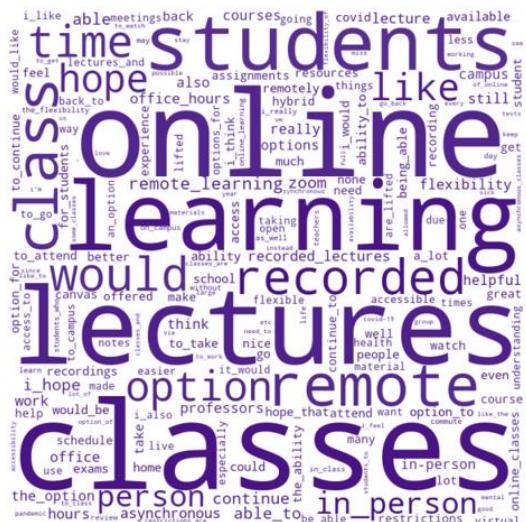
# WHAT STUDENTS WANT CONTINUED

“ I really enjoyed the accessibility of course materials and office hours in a virtual environment. I also appreciated the recording of lectures and believe that should continue for all classes as students who have extra needs outside of the classroom [might] not be able to make class. ”

The survey's fourth and final question asked, *what aspect(s) of your remote learning experience do you hope continue once restrictions for COVID-19 are lifted?* Students were invited to provide open-ended responses, with no minimum or maximum length, and 87% (3,284) of survey respondents provided an answer.

## KEYWORDS

To identify themes and response patterns, common keywords within student responses were first identified. In the keyword cloud below, more common responses are larger, while the chart to the right indicates the ten most common keywords. Most of these terms are general (classes, learning, time), but several (recorded, remote) point to student preferences.



## MOST COMMON KEYWORDS

classes	1260
online	1221
lectures	1023
learning	813
students	726
remote	721
class	720
recorded	608
would	562
time	516

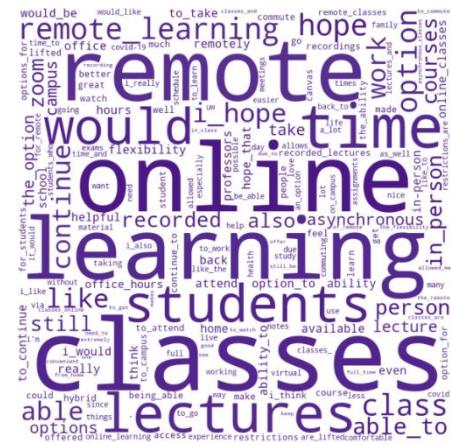
## **Breakdown by Overall Experience with Remote Learning**

That said, not all students used the same keywords to describe their experiences. There were some differences based on how students answered the previous question (*Thinking about your remote learning experience overall, how would you describe it?*)

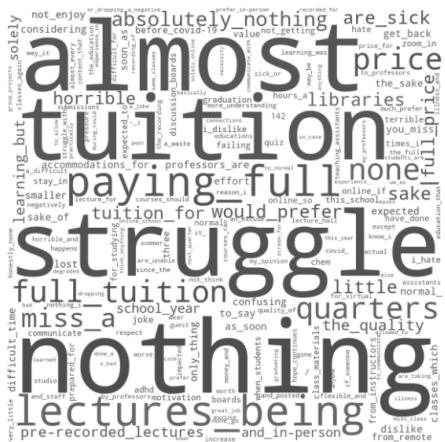
# **Keywords for Positive Overall Experiences**

The top keywords for students who described their remote learning experience as “mostly positive” closely matched those for all respondents. The *keyword cloud* to the right indicates the most common keywords for students with positive experiences.

Students were likely to discuss remote learning, online courses, and other common key terms. These areas, and others, will be discussed in detail in *Topics*.



## **Keywords for Negative Overall Experiences**



600 respondents who described their remote learning experience as “mostly negative” (18.3%) responded to the question. While their most common keywords were similar to those of all respondents, some keywords were strongly associated with negative experiences.

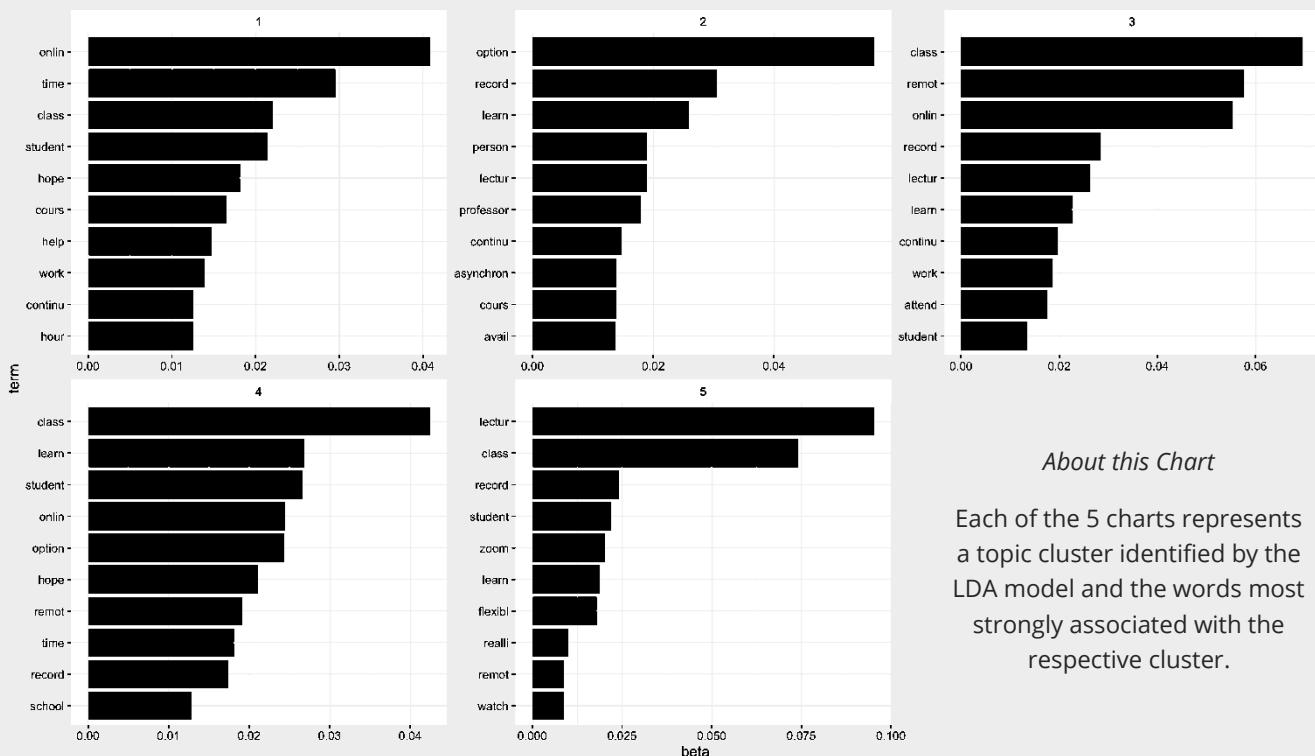
The *negativity* word cloud on the left indicates keywords that were disproportionately mentioned by students with negative overall experiences). In this case, keywords with higher negativity ratios are larger.

The keyword with the highest negativity ratio was “none” or

"nothing." Fewer students who had mostly negative experiences indicated practices that they hoped would continue, and many took the opportunity to highlight struggles with the virtual format. Some students invoked the cost of tuition (12 responses). The word "almost" was also strongly associated with negative experiences as students used it to characterize the difficulty in adjusting to remote learning ("almost meaningless," "almost none," "almost impossible").

Other common themes included decreases in communication and social opportunities, fatigue/lack of motivation, decreased course engagement, and difficulty staying focused. Representative student responses included:

- Practically none; I hate staring at a screen for 2 hour classes, feeling uncomfortable participating in Zoom discussions, not getting to know any of the peers who are taking the same classes as me, not being able to go into any of the buildings on campus \*\*especially the libraries.\*\*
  - Just want the school to be more understand[ing] and have more sympathy towards students. Not everyone lives in a good home and not everyone has the ability to be as successful while being at home.
  - I hope that online courses and learning will incorporate more synchronous class sessions in the format. The traditional method of instructors being "hands-off" and student interaction limited to a discussion board is not helpful to my learning.
  - Professors were forced to increase difficulty of exams making them nearly impossible to pass. Communication became scarce between student-professor and also student-student. Zoom's breakout rooms were widely unsuccessful.



#### About this Chart

Each of the 5 charts represents a topic cluster identified by the LDA model and the words most strongly associated with the respective cluster.

## TOPICS

### Keyword Clusters

To extend this understanding of keywords further, Latent Dirichlet Allocation (LDA) techniques helped to identify clusters and patterns within the text. The graphs above show five commonly associated word clusters and the top associated words within each cluster.<sup>1</sup> These clusters suggested students' interest in keeping online and digital elements of classes, including:

- Online/asynchronous classes ("class, remote, online," "online, time, class")
- Recorded lectures ("option, recorded, learning," "lecture, class, recorded")

### Topic Areas

Based on the keywords, clusters, and subjective analysis of individual responses, this report identifies three primary topic areas. While these topic areas are naturally not mutually exclusive (and students frequently cover multiple in their responses), they introduce and provide structure to what students want continued from remote learning.

**Accessibility:** Formats and policies that expand or alter student access to education and resources (including recorded lectures, virtual office hours, remote education, online access to university centers and support groups)

**Flexibility:** Formats, policies, and attitudes that provide students with more flexibility in their schedule and experience (including asynchronous classes, hybrid education, professor leniency)

<sup>1</sup> These graphs should be interpreted with additional caution due to the variation in response form and length.

**Course Guidelines and Tools:** Course, syllabus, and exam rules, and specific tools, that were introduced during the pandemic to account for remote learning (including take-home assignments and exams, open-note and open-book rules)

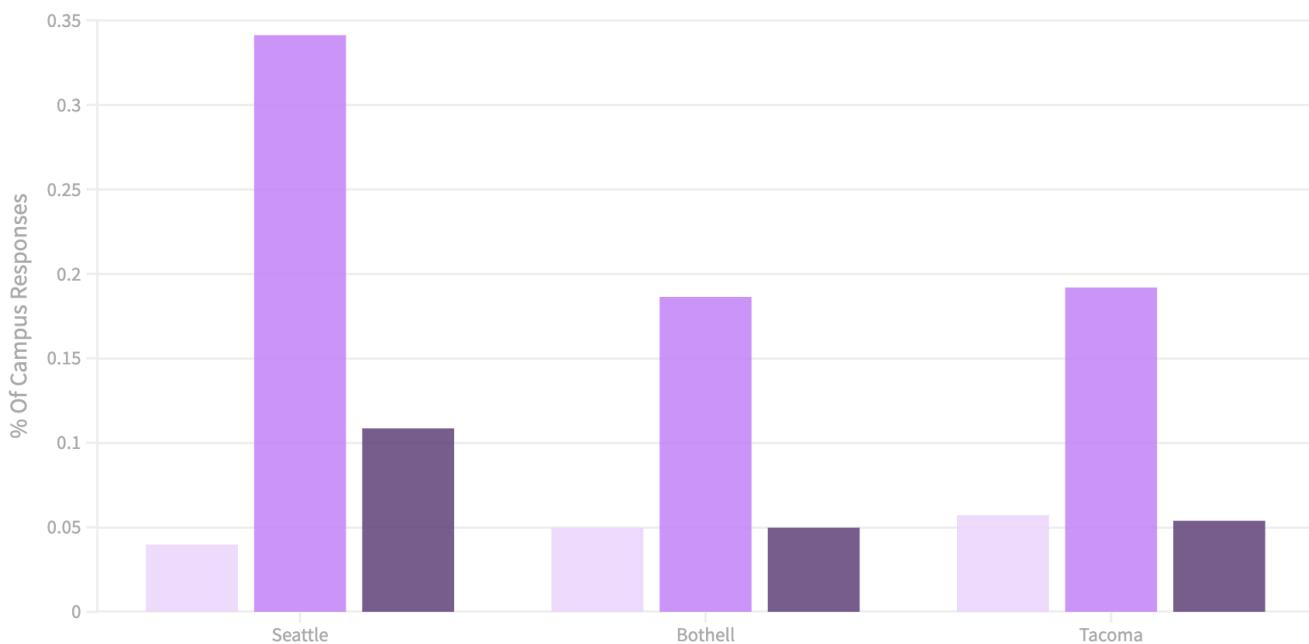
Each of these topic areas will be explored in more detail below.

## ACCESSIBILITY

### Proportion of Responses from Each Campus That Included Accessibility-Related Terms

Main identifying keywords were aggregated (per respective campus totals) to compare and highlight campus differences.

■ Commut(e/ing) ■ Record ■ Access(ibility)



In the chart above, for each term and campus, the number of responses from that campus containing the term was divided by the total number of responses from that campus.

Maintaining the accessibility of courses and course content (recorded lectures, online classes, and online office hours) was the most common response area.

Nearly one in three respondents (29%) named **recorded** courses, lectures, and other related terms, the most common suggestion for what should continue post-COVID-19.<sup>2</sup> Seattle students were significantly more likely (34.1%) to mention recorded courses. While some classes were previously recorded, many students asked for all classes to be recorded in the future.

Further, many students mentioned **office hours**, which have largely shifted online over the past academic year. The largest proportion of these students advocated for continued virtual office hours

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<sup>2</sup> Derivative forms of “record” – including recorded and recording – were counted.

to increase accessibility to instructors. A higher proportion of graduate respondents (15.1%) brought up office hours than undergraduate respondents (11.9%).

Some representative student responses called for **continued online accessibility of support staff**:

- *I hope to continue the experience of optional online services for meeting with counselors. It definitely helps with people with busy schedules.*
- *Campus resources to still offer online help, such as writing and learning centers. And for the university pantry to offer the option of delivering food to the student's home.*
- *The option for virtual office hours and advising meeting [sic] increasing accessibility to attend.*

Many **students with disabilities** hope that recordings, closed captioning, and other accessibility features can continue after the pandemic:

- *As a disabled undergraduate student, it was so frustrating that before covid this accommodation was regularly refused despite my documented health struggles. Talking with my peers, all of them have benefited from the recordings because we can rewatch and pause as needed - it helped our notetaking and organization so much. Having subtitles was also really helpful. It was also really helpful that teachers and TAs were quick to respond to emails outside of class.*
- *Lecture recordings with captions. This is very important for my severe traumatic brain injury impairments. Zoom access and remote course sections.*
- *For myself personally [sic], as an Autistic student, I frequently get burnt out from how much social interaction I have while in person and it makes my grades suffer either because I am too burnt out to attend for a bit or because I can't focus on my assignments. An online option would help this problem entirely.*

Furthermore, some students – especially international and immunocompromised students – anticipated immediate challenges even if the pandemic begins to recede in the fall.

- *I think it is EXTREMELY important that remote learning options are continued after COVID-19 restrictions are limited. At this point, UW students live across the country and world and relocating to Seattle may not be feasible for all students even once things are safe in the local Seattle area.*
- *Option to remotely attend classes!!! Please don't make classes all in person. Some of us are immuno-compromised or have relatives that are highly susceptible to COVID, so regardless of lifted restrictions, we would still have to make accommodations (nothing is perfect).*

Finally, some students noted that the value of increased accessibility varies by class and circumstances:

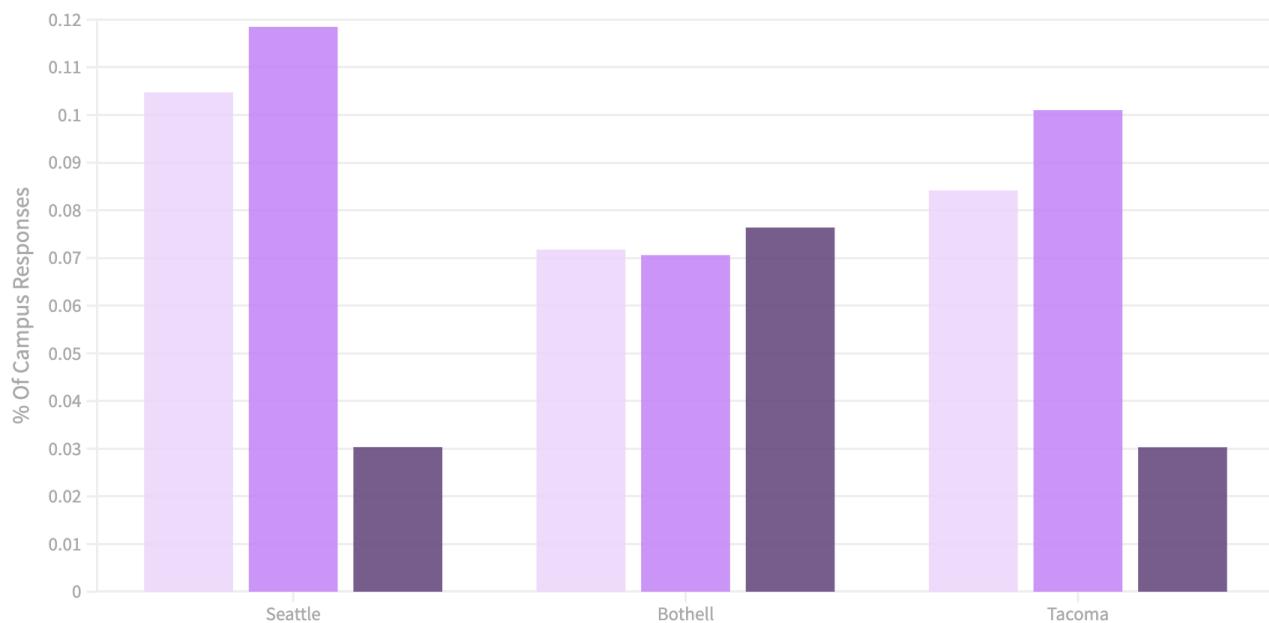
- *Realistically, none because remote learning is not the same. Maybe it would be good for really large (500+) lecture classes like PSYCH 210, CHEM 142, and CSE 142. Quiz and discussion sections should still be in person. I would not be surprised if some professors stuck with video office hours though.*
- *There are many courses where there is nothing gained by commuting to campus to experience in-person, such as math courses where there is a lot of lecture and little interaction. The ease of logging in at home saves me time and energy that would otherwise be wasted for no gain.*

# FLEXIBILITY

## Proportion of Responses from Each Campus That Included Flexibility-Related Terms

Main identifying keywords were aggregated (per respective campus totals) to compare and highlight campus differences.

Flexibl(e)ity Asynchronous Hybrid



A second important topic area was flexibility. Many students praised faculty leniency, softer deadlines and attendance requirements, and suggested more flexible scheduling and educational arrangements (e.g. asynchronous or hybrid education).

**Asynchronous learning** was included in 9% (341) of responses, while **hybrid** was included in 3.7% (140). Commuter and graduate students were particularly likely to put these formats forward. Mentions of asynchronous learning were markedly more common among responses from Bothell than at Seattle or Tacoma.

Furthermore, many students praised the increased leniency of faculty and course structures towards schedule changes and individual circumstances. 351 responses mentioned professor(s) in some form, and nearly a third of these students also mentioned of leniency or a related term. Students at Seattle were most likely to discuss leniency and flexibility.

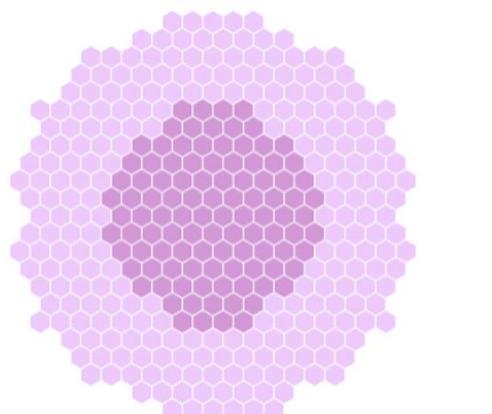
By contrast, relatively few (36) students mentioned **S/NS grading flexibility** with respect post-pandemic education.

## "Professors" and "Leniency" Were Associated in Student Responses

Among answers mentioning "professor(s)" (n= 351), 30% also used a synonym of leniency.

Included "flexibility", "understanding", "leniency", or "grace" (n= 104).

Mentions of "Professor"



Many representative student responses were related to the flexibility of **asynchronous learning**:

- *The flexibility of being able to complete lectures, labs, and coursework in an asynchronous format. This allows me to spread out my work, plan ahead, and complete work as I have time.*
- *Having a portion of online classes- I enjoyed taking classes from the comfort of my home, and hopefully this part of it stays. I'd gladly still pay for the tuition needed just to take my classes online. Surely all classes can't be online but I hope they'd make half of the section in person or online so that we'd have more choices without having to drive all the way to campus or fly back if we need to*

Others addressed **professor and deadline flexibility**:

- *Some of my professors were more willing to give extensions or make syllabus adjustments as the quarter went on because of these "unprecedented times" but I think this attitude should continue regardless.*
- *More leniency with classes and deadlines. Covid has shown us that classes do not need to be so tight on deadlines for successful learning*

Some students, especially graduate students, emphasized the value of flexibility in balancing **parenting and work**:

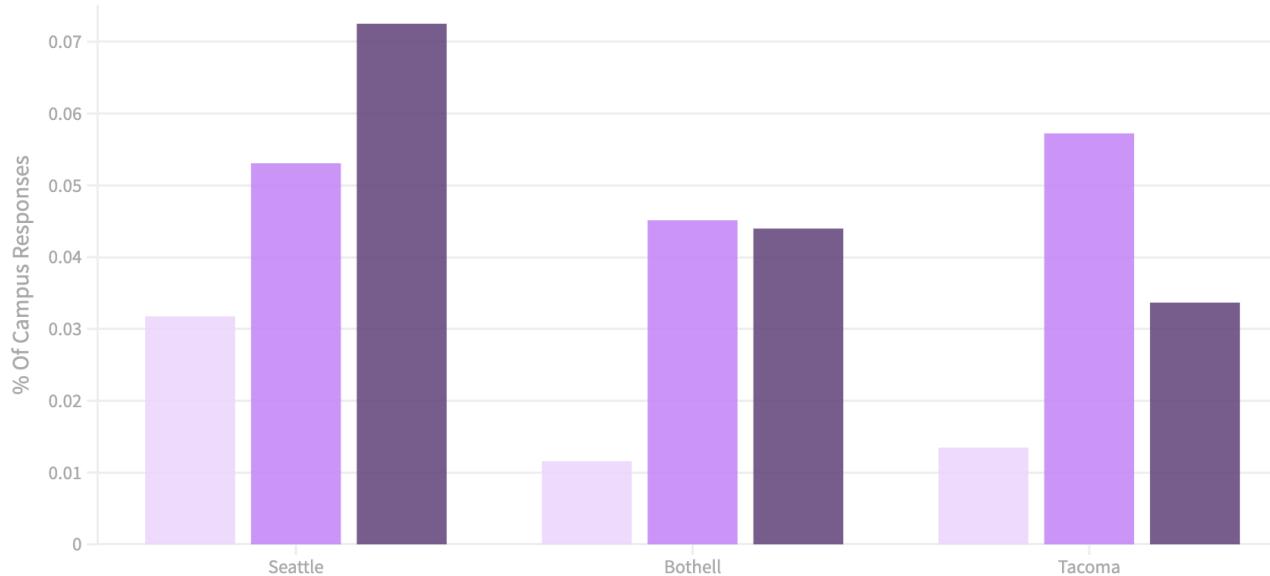
- *I think the option to take classes remotely from time to time would be helpful. For people like me who have to raise kids, it has been extremely helpful for me to be home and help my spouse take care of our child.*
- *I work full-time, am enrolled in two grad programs and do an internship for one of them. The ability to take classes online has been a silver lining and made attending school more equitable for working folk, so I would suggest considering that UW expands its online class availability beyond what it offered pre-COVID.*

# COURSE GUIDELINES AND TOOLS

## Proportion of Responses from Each Campus That Included Course Guidelines-Related Terms

Main identifying keywords were aggregated (per respective campus totals) to compare and highlight campus differences.

Quiz   Assignment   Exam



The third topic area identified was course guidelines and tools. As part of the university's transition to remote learning, many policies regarding assignments, quizzes, and exams were changed. Furthermore, new tools were introduced.

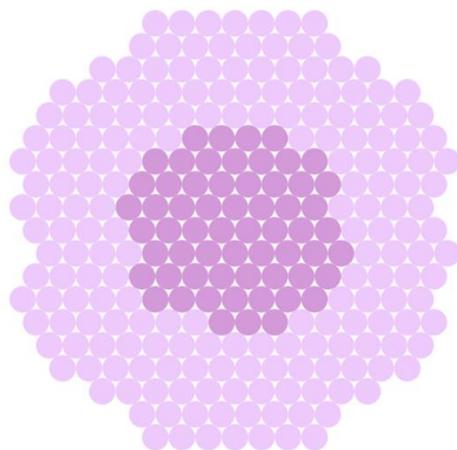
6.8% (255) of respondents mentioned **quizzes or exams**; many asked for continued leniency, open-book, open-note, and/or take-home policies. While the frequency of responses for assignments was similar, quizzes and exams were more commonly discussed at Seattle than at the other two campuses.

Many other students mentioned the **digital platforms introduced during the quarter**. After Zoom, Canvas was the most discussed platform, followed by Panopto (generally with respect to course recordings), Discord, and Slack. The latter two are notable as instant messaging platforms. Discord has become particularly popular as a classroom messaging tool.

## "Quiz" and "Exam" Were Associated with Policy Alterations

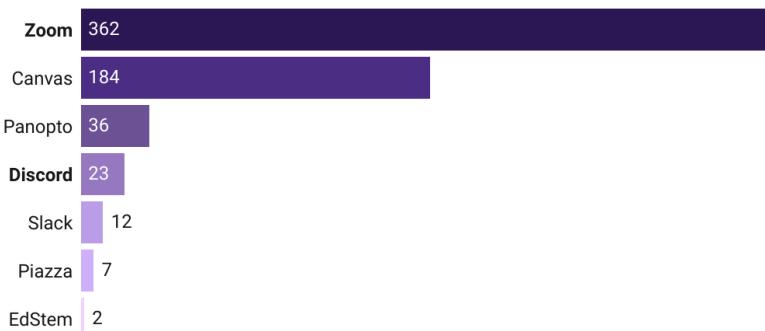
Among answers mentioning "quiz" or "exam" (n = 255), nearly one-quarter (24%) also mentioned "open book," "open note," or "take home."

- Mentioned "open book," "open note," or "take home"
- Mentioned "quiz" or "exam"



## Zoom, Canvas, and Panopto Were the Most Mentioned Digital Platforms for Learning During the Pandemic

This chart shows the most frequently mentioned online platforms from the qualitative question\* in the survey. Zoom was by far the most commonly mentioned platform. Discord was one of the most frequently mentioned platforms that students used outside of class.



\*Survey Qualitative Question: *What aspect(s) of your remote learning experience do you hope continue once restrictions for COVID-19 are lifted?*

Some representative student responses addressed **maintaining improvements in course organization online**:

- *High professor activity on Canvas. The best part of online is having all materials and announcements being on Canvas so they can be checked and/or used at any time.*
- *I hope that professors continue to be organized with the course material and post all lecture recordings and use things like a tablet to keep things cleaner.*

This connected closely with responses about specific **technological platforms**:

- *Having more online communities for my classes (like a Discord server) was helpful in connecting with people.*
- *Utilization of easily accessible online resources like EdStem in the CS department, and Google Docs and Canvas for humanities classes. These tools made the resources easy to access and refer to after classes, and they allowed me to organize my class resources instead of having endless papers and handouts.*
- *I hope the University still equips students with a zoom account with unlimited meeting times. I think even after covid, people will opt to conduct some group work over zoom rather than traveling to campus if there isn't a convenient time when everyone is there.*
- *Once COVID-19 restrictions are lifted, I hope remote classes continue to have guided modules on canvas. It is incredibly helpful to have each week mapped out!*

As previously discussed, many students advocated for **take-home and open-note exams and assignments**:

- *For all the classes I have had so far, I think it is extremely important to keep open-book exams and finals. This is important to me because not everyone does well with learning when it becomes memorizing for a test, the open book concept is there to assist, not to be dependent on.*
- *Currently, there's a bigger emphasis on mastery of concepts through assignments instead of the traditional exams which I believe is significantly better overall.*
- *I enjoyed the concept of individualized test taking. I kind of enjoy having the ability to hear my thoughts out since I'm an audible learner / processor so it made taking tests a lot easier. However, in contrast to this there was a prevalent cheating issue from what I've noticed...*

# FACULTY PERSPECTIVES

Faculty perspectives are critical to the conversation on educational practices and provide key insights on their implementation and attainability.

In this part of the study, a series of discussions were conducted with faculty representative bodies, including UW Tacoma's Faculty Affairs Committee, UW Bothell's Executive Council, and the UW Faculty Senate Chair's Cabinet and the Council on Student Affairs. For each discussion, Regent Pogosian either conducted a semi-structured interview or observed an externally facilitated conversation. Faculty were asked to weigh in on **what they learned about teaching during the COVID-19 pandemic, and how they can apply those lessons to the post-pandemic environment.**

## FINDINGS

The following ideas were cited as **beneficial practices to continue** by at least one faculty member in each group:

- Posting recorded lectures online for students who either missed class or want to review
- Using Canvas, UW's learning management system, to administer assignments, quizzes, discussion boards, and reading assignments
- Increasing student accessibility and save commuting time by offering remote lectures, office hours, and course assignments
- Offering students an understanding of personal circumstances by granting deadline extensions or other forms of academic support
- Continuing offering hybrid or online course options to students

The following ideas were cited as **concerns** related to the above practices:

- Students may be uncomfortable to participate in discussions that are being recorded
- It would be difficult to teach students in-person, while simultaneously allowing students to join class sessions remotely (this was especially emphasized by instructors who don't have the support of a teaching assistant)
- There is little to no compensation provided for learning new teaching approaches, including how to incorporate technology into instruction
- Fear of getting exposed to COVID-19 when returning to teach in-person, especially if responsible for dependents at home
- Mandating faculty members to adopt a certain teaching practice, particularly one that doesn't serve the unique needs of each discipline
- Fear of losing human connection, community, and the value of interpersonal relationships by transitioning to more online learning options
- Because students can look through notes during exams in online courses, they would have an unfair advantage compared to students who take in-person exams

# RECOMMENDATIONS & CURRENT INITIATIVES

## RECOMMENDATIONS

This study was designed as a starting point for understanding student and faculty voices, and as a preface to further exploration. Based on the insights presented:

Further investigation of the central question (what should continue after remote learning?) is recommended. In particular, campus and program-specific studies would provide a more nuanced assessment. Remote learning experiences have varied based on location and course of study, and the value of potential future practices likely will too.

Implementing pilot programs to further study the impacts of recorded lectures, virtual office hours, and use of online tools for course organization is recommended. These practices are popular among many students, and it would also be helpful to gauge both positive and negative opinion towards them. Comparing results of pilot programs with courses that did not use these practices, and investigating how the differences impacted the student experience, would be beneficial.

Following further research, efforts to raise faculty awareness of evidence-based practices are recommended. Students, faculty, and administrators alike have demonstrated enormous adaptability during the COVID-19 pandemic. Carrying these lessons forward can help University of Washington students achieve greater academic dreams.

## CURRENT INITIATIVES ON CAMPUS

Leaders across the University are involved in implementing technology in teaching, encouraging accessible practices, and studying how to improve the student experience. The following are some potential collaborators in fostering what we've learned from the remote environment to a post-pandemic world.

### Ally

Ally is an accessibility tool for Canvas (Canvas is UW's official learning management system, which helps faculty and students with course management). Ally integrates seamlessly with Canvas to automatically check course content and files uploaded by instructors for accessibility issues. Using advanced machine learning algorithms, Ally generates alternative formats—such as text that is readable by a screen reader, electronic braille, or audio—that students can download and use to support their learning.

### Course Evaluations

UW's Office of Educational Assessment (OEA) conducts tri-campus student course evaluations at the middle and end of every quarter. By studying the student input about instructors and courses, OEA help assist faculty in instructional development, inform administrative decision-making, and help students select courses. They have been especially helpful in measuring student performances and attitudes throughout the COVID-19 pandemic.

### **Center for Teaching and Learning**

The Center for Teaching and Learning is a tri-campus service that offers instructors guidance for both remote and in-person teaching. They use evidence-based resources to help faculty teach effectively, engage students, and incorporate an equity lens. Their efforts include faculty workshops about implementing technological tools in the classroom, as well as improving course construction, assessment methods, and student participation.

### **Well-Being for Life and Learning (WBLL)**

WBLL is a tri-campus initiative that aids instructors in promoting student well being in their learning environment. UW's Resilience Lab developed a guidebook with study-based teaching practices, including teaching for equity and access, nurturing connection, building resilience coping skills, and connecting to the environment. Moving forward, the lab aims to expand the community of practice model across the three campuses and formally assess the impact of the initiative on student learning and retention.

# ACKNOWLEDGEMENTS

Regent Pogosian would like to thank the many people who made this project possible:

Thank you to Janice Fournier, Jason Johnson, and Sean Gehrke for helping construct and distribute the student survey; Aaron Yared, Camille Hattwig, Djelli Berisha, Mustapha Samateh, and Vincent Da for supporting student outreach; Chris Laws, Joe Janes, Robin Angotti, Sarah Hampson, and Turan Kayaoglu for supporting faculty outreach; the Polling and Open Data Initiative for conducting the survey's data analysis; Peter Seibel and Henry Lyle for their advice on statistical methods; Beth Kalikoff, Bree Callahan, Glenna Chang, and Megan Kennedy for highlighting current campus initiatives; Ana Mari Cauce, Craig Cole, David Kerwin, Denzil Suite, Herb Simon, James McShay, Lincoln Johnson, Kristianne Blake, Mark Pagano, Mark Richards, Mentha Hynes-Wilson, Phil Reid, Sally Jewell, Sarah Hall, Sharon Jones, Vicky Carwein, and Wolf Yeigh for providing feedback. To all Regents, thank you for sharing your input throughout the project.

To the 3,769 students who responded to this survey, thank you for sharing your voices and ideas. This report would not have been possible without your dedication to the University and your peers.

## STUDENT PANEL

Special thanks to the following students for providing input on the project as part of Regent Pogosian's student panel:



**Maliya Jackson ([mjacks4@uw.edu](mailto:mjacks4@uw.edu))**

UW Bothell | Freshman | American Ethnic Studies

Maliya is a freshman, first-generation student at the University of Washington Bothell. She plans to major in American Ethnic Studies and eventually become a teacher. Maliya enrolled after graduating from Cascade High School in Everett, Washington. Despite struggling with homelessness through high school, Maliya served as Captain of the Varsity Cheerleading Team and President of Educators Rising. She chose UW Bothell because of its small classroom sizes and diverse community. She provides guidance and resources to new students at UW Bothell as a Peer Coach. In her free time, Maliya enjoys hiking in the beautiful State of Washington.



**Cathy Pick ([cpick253@uw.edu](mailto:cpick253@uw.edu))**

UW Tacoma | Senior | Business Management

Cathy Pick is a senior in Business Management at the University of Washington Tacoma, Milgard School of Business. Cathy transferred from Tacoma Community College, where she served as a Student Senator. While attending college, Cathy and her family have struggled with housing insecurity. Her experience and observation of mass evictions led to her spearheading an award-winning research project focused on tenants' rights. She chose UW Tacoma because of networking opportunities with community leaders in the South Sound. During Covid-19, Cathy completed her coursework while simultaneously facilitating her 5th grader's remote learning. She is a recent inductee into the Beta Gamma Sigma Honor Society. Cathy is currently participating in the Legal Pathways program as she plans on attending Law School to continue her passion for tenant rights and family court reform.



**Colby Tong ([cjtong@uw.edu](mailto:cjtong@uw.edu))**

UW Seattle | Junior | Computer Science

Colby Tong is a third-year student at the University of Washington in the Interdisciplinary Honors Program studying Computer Science and minoring in Entrepreneurship. Currently, he is serving as the Vice President of Husky Tennis Club and the Director of Technology for Startup UW. In the summer, he will be transitioning from a Software Engineering Internship developing ultrasound imaging tools at Philips to develop HR software for UKG as a Software Engineer Intern. In his free time, he enjoys sports (tennis, soccer, weight training), music (piano, guitar), and photography.



**Michael Guyumdzhyan ([mguyum01@uw.edu](mailto:mguyum01@uw.edu))**

School of Dentistry | First Year

Michael Guyumdzhyan is a first-generation Armenian American and a first-year dental student at the University of Washington School of Dentistry. Michael completed his undergraduate studies at Tufts University in Boston. During his time at Tufts, he was elected President of the Tufts Armenian Association and served as a youth group leader at his church. After returning to Seattle to study dentistry, Michael also got involved in research. Most recently, Michael was elected President of the School of Dentistry's Class of 2024, where he collaborates with the administration to represent the needs of the student body.



**Fatima Ali ([fatima5@uw.edu](mailto:fatima5@uw.edu))**

School of Medicine | Third Year

Fatima Ali is a rising fourth-year Medical Student at the University of Washington School of Medicine. For undergraduate work, she studied Chemistry at the University of Washington. After graduating college, she spent time working in clinical research before attending medical school. Her career interests include Primary Care Medicine and working with the urban underserved communities. Born and raised in Somalia, Fatima moved to the United States with her family in 2004. Growing up, she witnessed the importance of good health care, which inspired her to pursue a career in Medicine. Fatima recognizes the health disparities in our country and the gap in public health and hopes to work towards a more just and equitable health care.

# APPENDIX

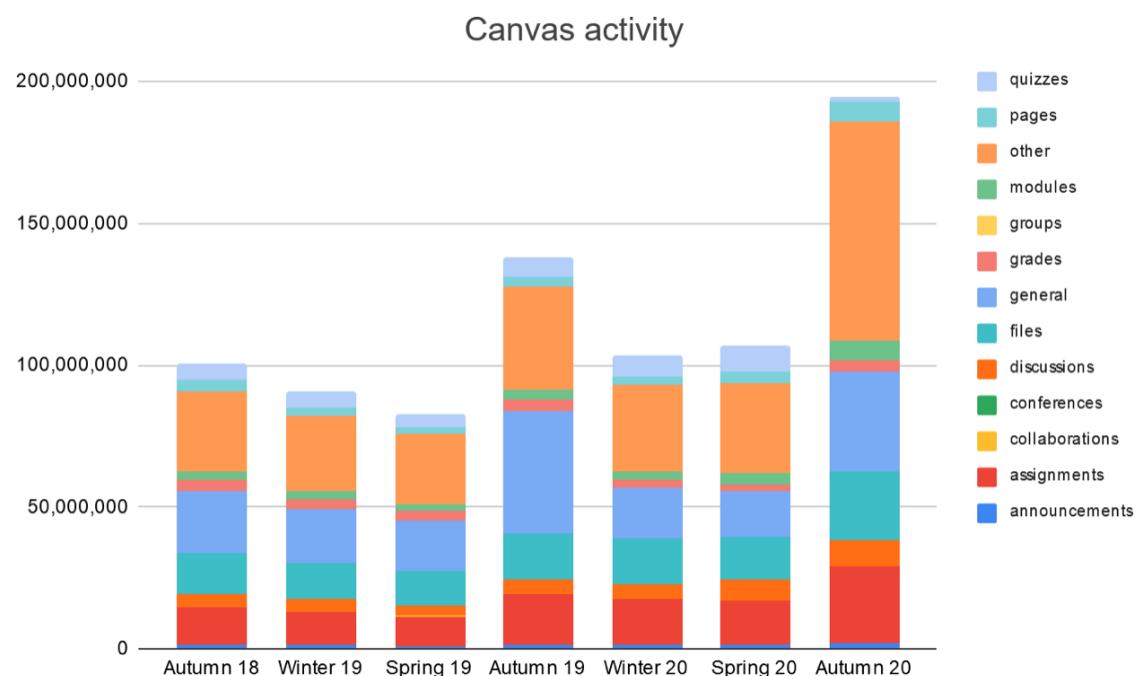
## APPENDIX A

### Data on the Use of Technology in the Classroom

The data in this section shows significant increases in use of three technological tools by UW faculty and students: Zoom, Canvas (UW's official learning management system), and Panopto (a software that provides lecture recording). It is provided to contextualize this study's findings on digital platforms and student preferences.

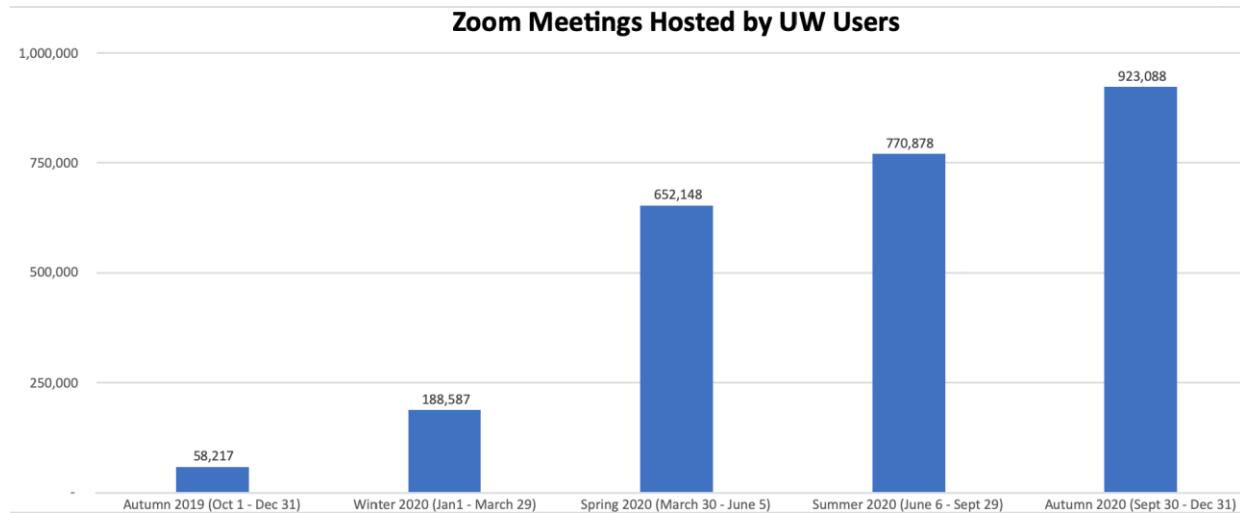
These data points indicate that faculty and students have been exposed to new teaching methods during the COVID-19 pandemic, and provides additional context for the analysis of what students and faculty would like to see continued earlier in the report. All data and graphs were provided by the Provost's Office.

#### Canvas

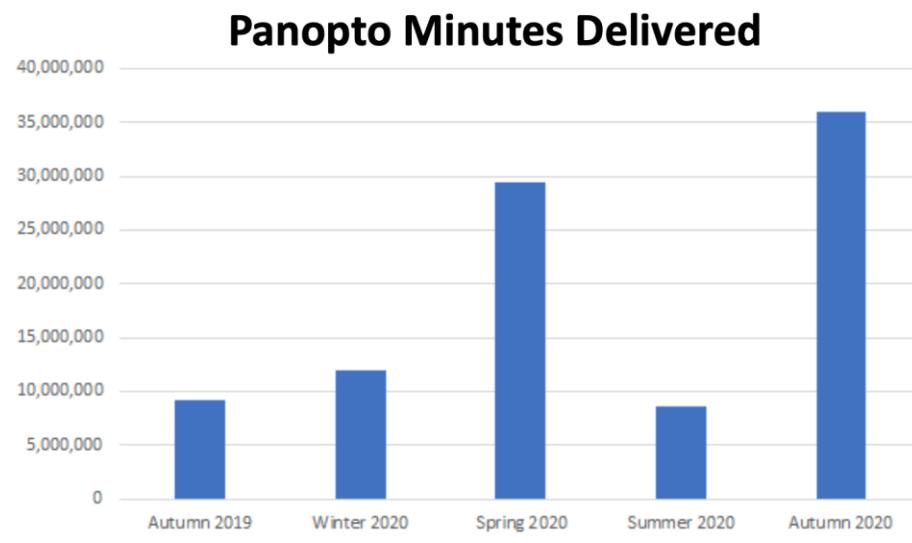


Aggregated views of content and activities in categories provided by Canvas.

## Zoom



## Panopto



## APPENDIX B

### Detailed Significance Tests and Analysis

#### **Differences by Degree Level: T-Tests**

To examine the relationships between the degree and student perceptions of online learning, we conducted t-tests that compare the perception of undergraduate and graduate students among all campuses, as well as on each campus. The following table shows the p-values from the t-tests.

Overall	Bothell	Seattle	Tacoma
0.000104 *	0.336	2.12e-8 *	0.104

There was a significant difference between the perceptions of online learning between undergraduate and graduate students on the Seattle campus. This suggests that Seattle graduate students have significantly more positive perceptions than undergraduate students.

#### **Differences by Campus: Kruskal Wallis H-Test and Dunn's Post-Hoc Test**

The first three questions of the survey asked respondents to indicate their campus, degree type, and overall experience with remote learning. To determine whether differences by campus and degree type are statistically significant, a series of tests were performed. This section overviews methods and results.

A score that describes the perception of remote learning for each campus and type of degree was computed, considering mostly positive as 1, a mix of positive and negative as 0, and mostly negative as -1. The following table shows the mean score with standard deviation. Score of perceptions (positive = 1, mix = 0, negative = -1), with standard deviations in parentheses.

	Undergraduate	Graduate	Total
Bothell	0.25638 (0.64959)	0.32075 (0.66971)	0.26316 (0.65170)
Seattle	-0.00768 (0.62683)	0.16034 (0.62764)	0.03288 (0.63101)
Tacoma	0.22801 (0.65689)	0.4 (0.68755)	0.25 (0.66238)
Overall	0.09469 (0.64889)	0.19835 (0.64131)	0.11483 (0.64864)

The score shows that students in Bothell campus have the most positive perception of remote learning, followed by Tacoma and Seattle. Generally, graduate students had a more positive perception than undergraduate students.

The Kruskal Wallis H Test was conducted to examine if there is a significance difference in the student perceptions between different campuses. It was found that there are significant differences in the perceptions between campuses for both undergraduate students ( $p = 2.98e-29$ ) and graduate students ( $p = 0.00283$ ).

To further explore differences between multiple groups, Dunn's Multiple Comparison Test was carried out as a post hoc. This gives all possible pairwise comparisons between the mean scores. The following tables show the p-value associated with each pair for undergraduate and graduate students.

#### **Dunn's Test for Undergraduate Students**

	Bothell	Seattle	Tacoma
Bothell	1	1.36e-23	5.07e-01
Seattle	1.36e-23	1	4.75e-09
Tacoma	5.07e-01	4.75e-09	1

#### **Dunn's Test for Graduate Students**

	Bothell	Seattle	Tacoma
Bothell	1	0.0298	0.4532
Seattle	0.0298	1	0.0298
Tacoma	0.4532	0.0298	1

Among the undergraduate students, there was a significant difference between the perceptions of Seattle students with both Bothell ( $p = 1.36e-23$ ) and Tacoma ( $p = 4.75e-09$ ) students. Similarly, for graduate students, there was a significant difference between the perceptions of Seattle students with both Bothell ( $p = 0.0298$ ) and Tacoma ( $p = 0.0298$ ) students.

This suggests that students in Seattle campus have significantly more negative perceptions of remote learning than students in other campuses for both undergraduate and graduate students. Students in Bothell and Tacoma campuses have similar perceptions.

A close-up, out-of-focus photograph of green foliage and sunlight filtering through leaves.

**Help us improve our analysis**

For questions, comments, and suggestions  
about the report methodology and structure,  
please write to Phillip Meng, [pmeng@uw.edu](mailto:pmeng@uw.edu).

# What COVID-19 Taught Us About Education

Regent Kristina Pogosian's Student Survey and Faculty Focus Groups on Education in a Post-Pandemic World

MAY 13, 2021  
BOARD OF REGENTS MEETING



# Agenda

- Student survey analysis
- Faculty perspectives
- Recommendations and current University initiatives
- Discussion with Regents and Administration
- Student panel





## OVERVIEW & OVERALL EXPERIENCES

“ Learning remotely as a single parent has made my dream of going back to school more accessible. I am able to work on school work in my own time and still provide supervision for my kids. ”

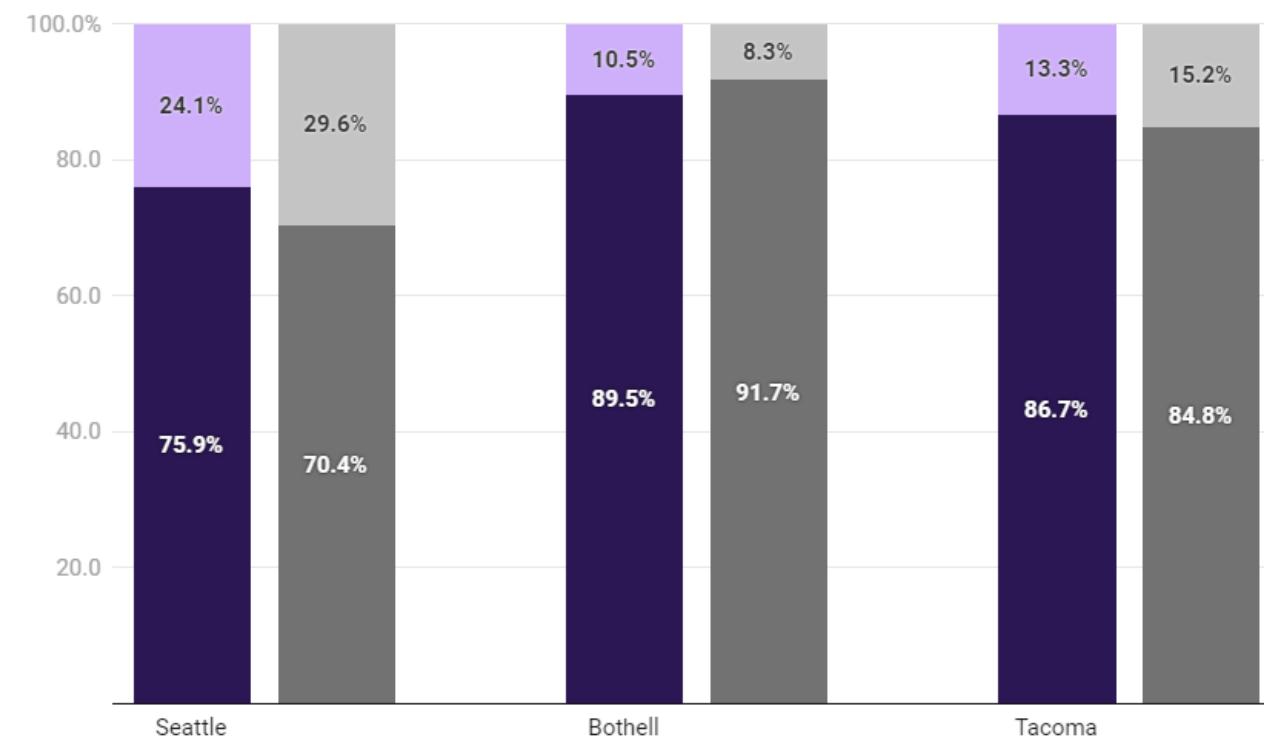
# SURVEY OVERVIEW

- 3,769 responses (7.3% response rate)
- 80% undergraduate and 20% graduate students
- 64% Seattle, 27% Bothell, 9% Tacoma
- Bothell students responded at 2.5x rate of the other two campuses

## Proportions of Undergraduate and Graduate Students in the Survey Sample are Similar to Proportions in the Population

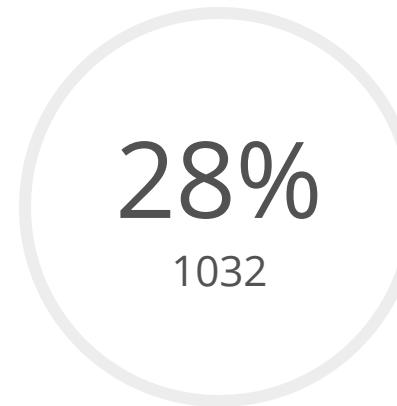
This chart shows the percentage of graduate and undergraduate respondents to the survey, compared to the percentage for all students as of Spring Quarter 2021.

■ Undergrad. (sample) ■ Grad. (sample) ■ Undergrad. (population) ■ Grad. (population)

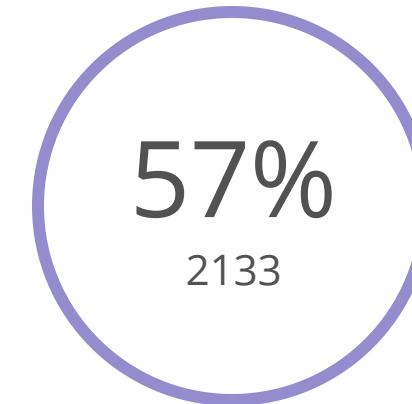


# OVERALL EXPERIENCES

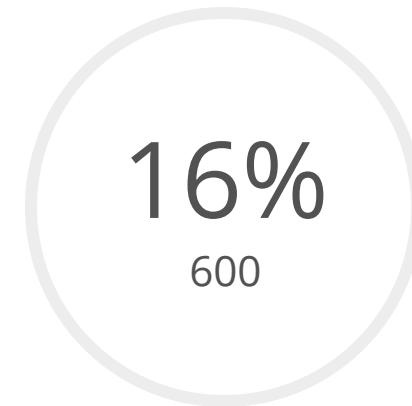
*Thinking about your remote learning experience overall, how would you describe it?*



Mostly positive



A mix of positive  
and negative



Mostly negative

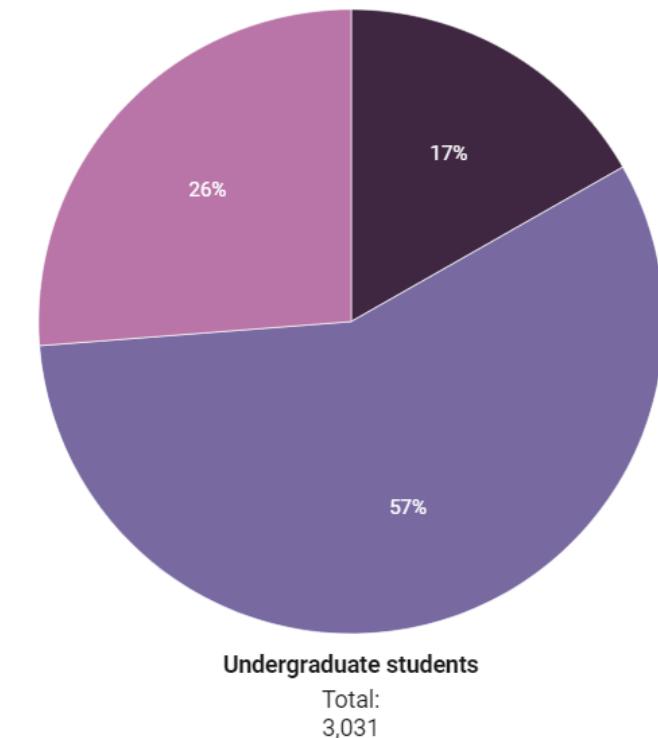
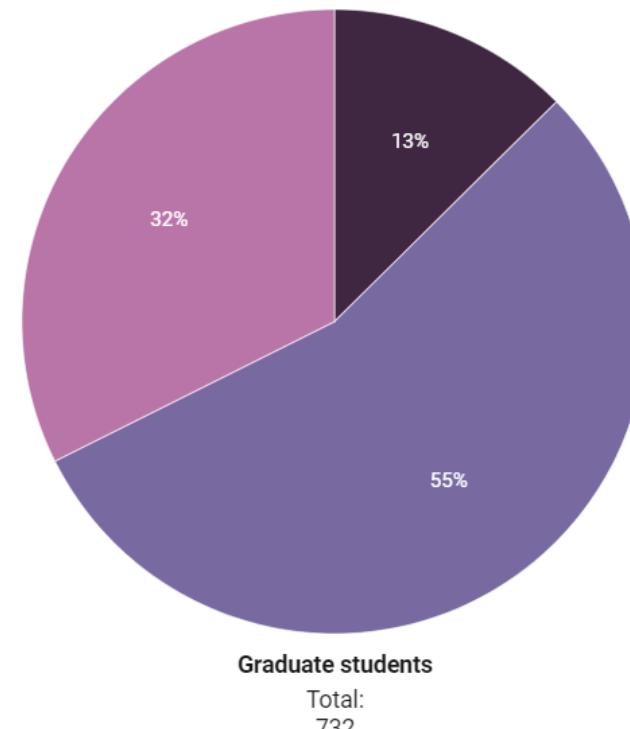
# EXPERIENCES BY DEGREE TYPE

- Graduate students reported more positive experiences at all three campuses
- Mention of 'commuting' also correlated with positive experiences

## Graduate Students Express More Positive Experiences With Remote Learning than Undergraduate Students

This chart shows how 732 graduate students and 3,031 undergraduate students rated their remote learning experience. Graduate students were more likely to report positive experiences and less likely to report negative experiences to remote learning.

■ Mostly negative ■ A mix of positive and negative ■ Mostly positive

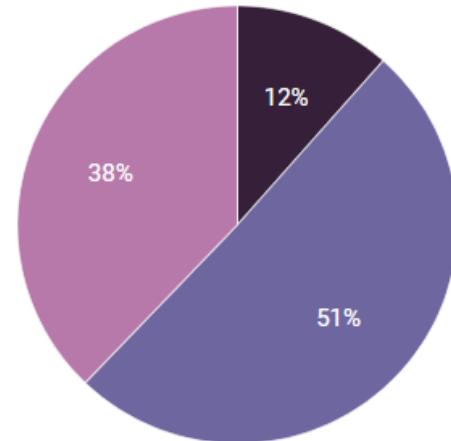


# EXPERIENCES BY CAMPUS

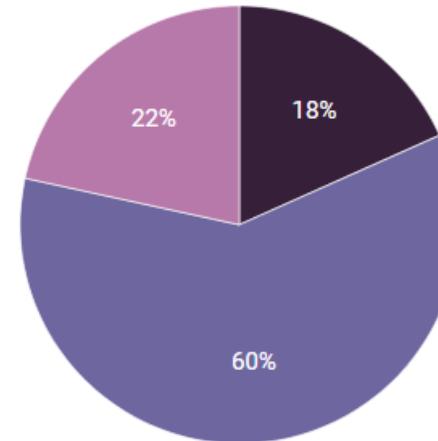
## While Responses at Bothell and Tacoma Were Nearly Identical, Seattle Students Reported Significantly Fewer Positive Experiences

This chart shows the distribution of sentiments on remote learning experience per campus. At all three campuses, a majority of respondents chose "A mix of positive and negative" to describe their remote learning experiences. At all campuses, fewer than one-fifth of students described their experience as "mostly negative."

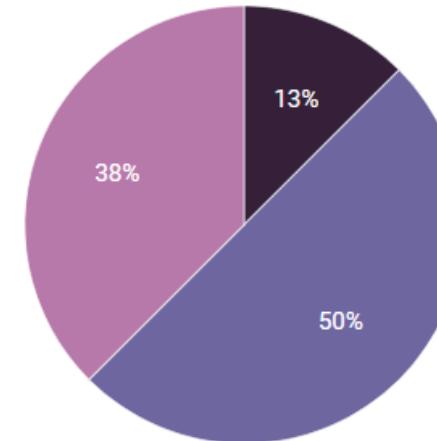
■ Mostly negative ■ A mix of positive and negative ■ Mostly positive



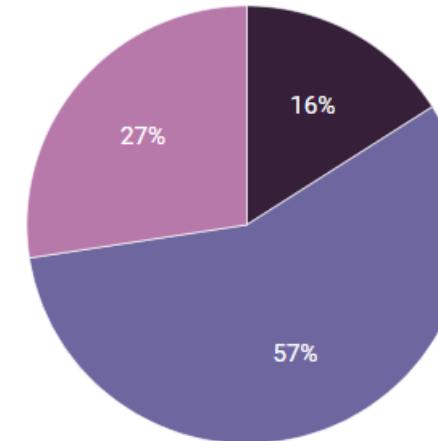
**Bothell**  
Total:  
1,007



**Seattle**  
Total:  
2,404

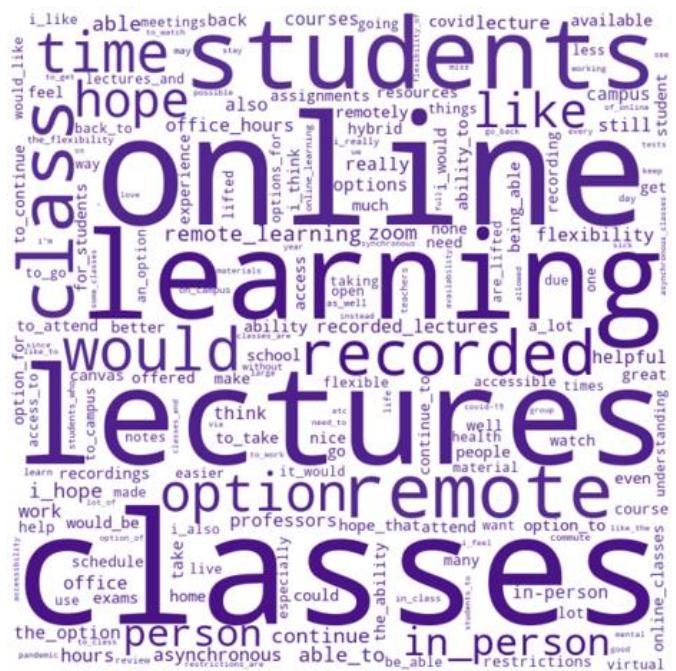


**Tacoma**  
Total:  
352



**All Campuses**  
Total:  
3,763

# WHAT STUDENTS WANT CONTINUED



## MOST COMMON KEYWORDS

classes	1260
online	1221
lectures	1023
learning	813
students	726
remote	721
class	720
recorded	608
would	562
time	516

# ACCESSIBILITY

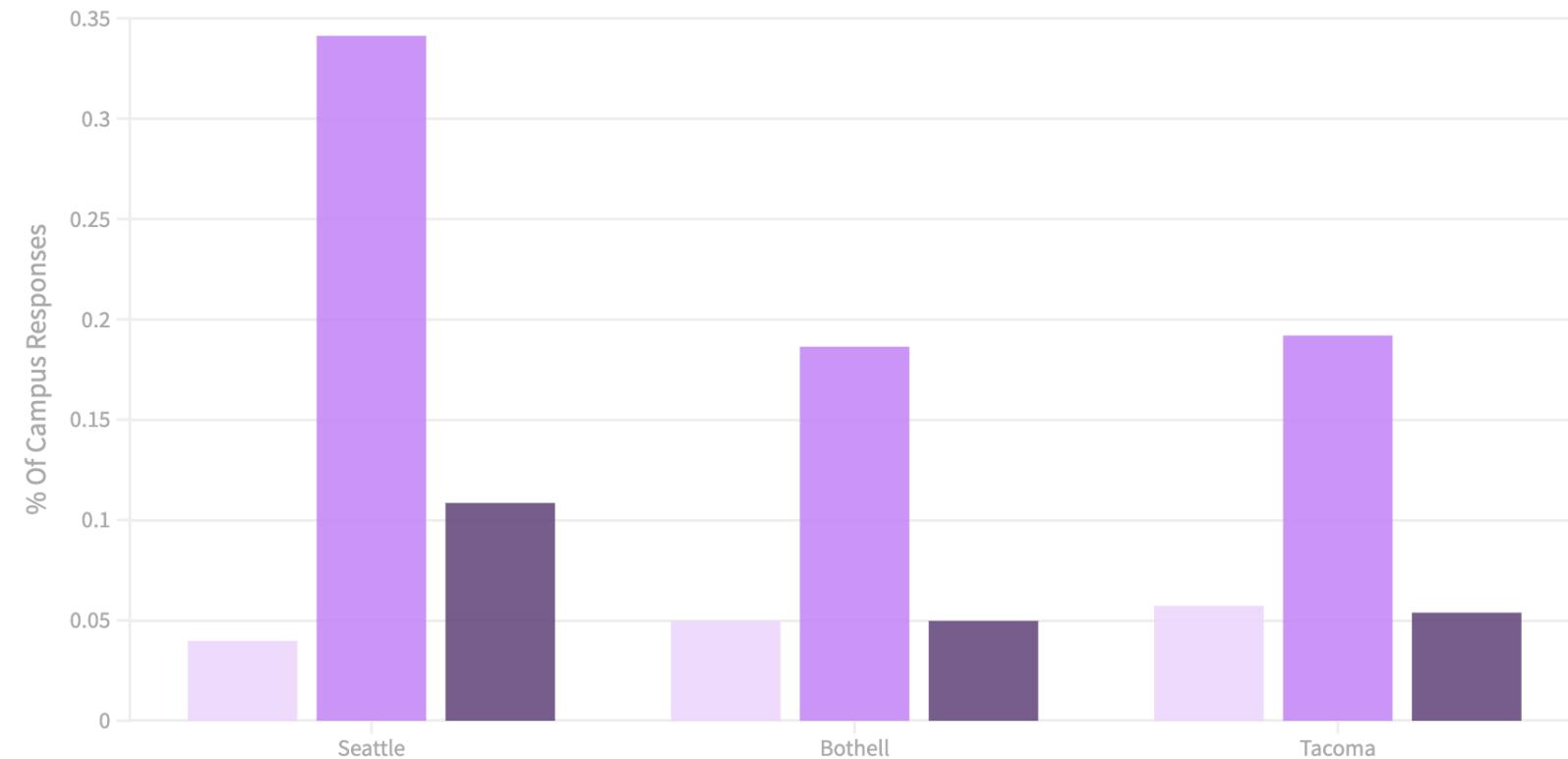
Common responses:

- **Recorded** courses, and lectures for all classes
- Virtual **office hours**
- Online accessibility of support staff and resource centers
- Closed captioning

## Proportion of Responses from Each Campus That Included Accessibility-Related Terms

Main identifying keywords were aggregated (per respective campus totals) to compare and highlight campus differences.

■ Commut(e/ing) ■ Record ■ Access(ibility)



# FLEXIBILITY

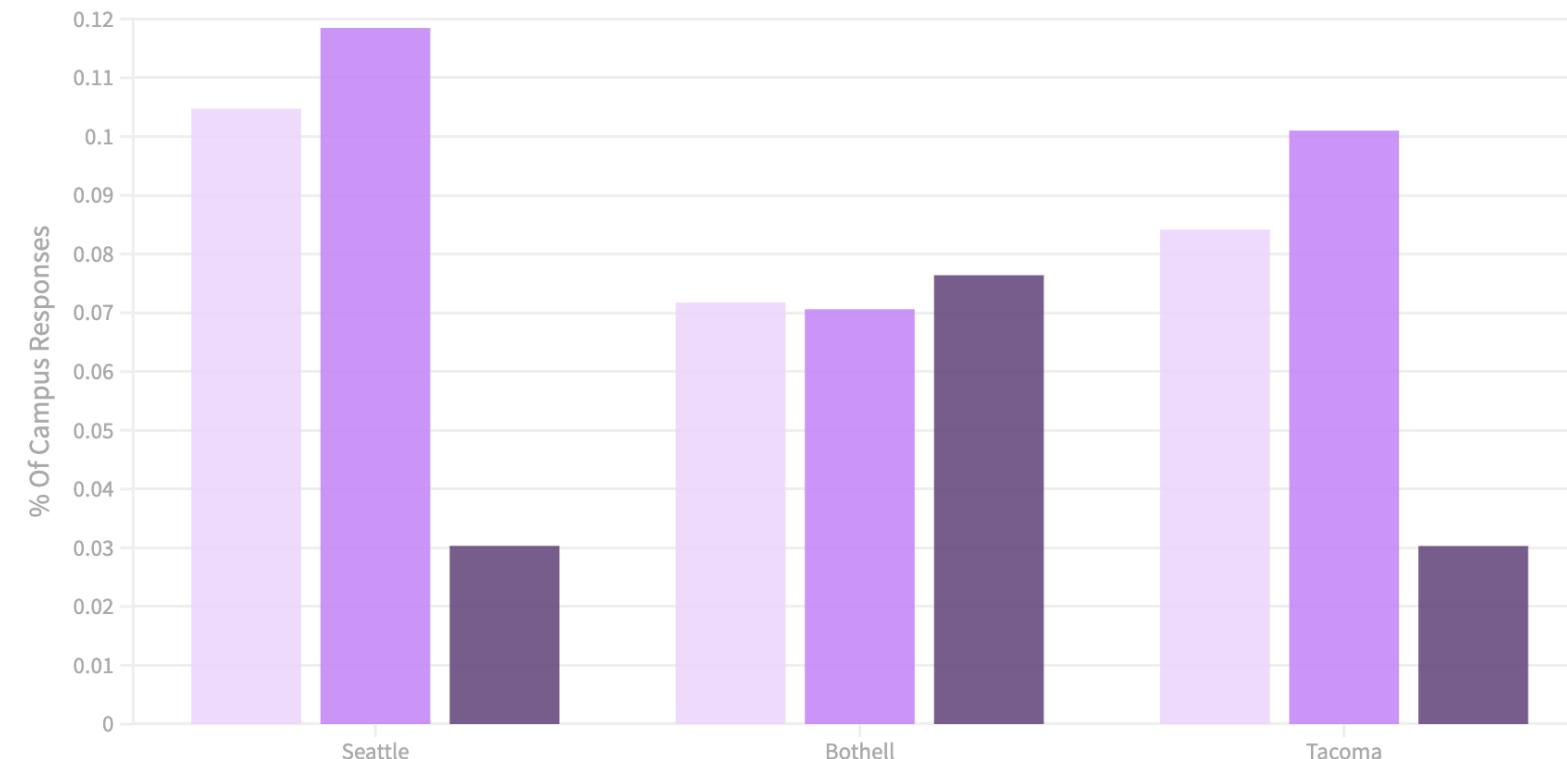
Common responses:

- **Asynchronous** learning options
- **Hybrid** formats
- Faculty and course leniency

## Proportion of Responses from Each Campus That Included Flexibility-Related Terms

Main identifying keywords were aggregated (per respective campus totals) to compare and highlight campus differences.

Flexibl(e/ity) Asynchronous Hybrid



# COURSE GUIDELINES & TOOLS

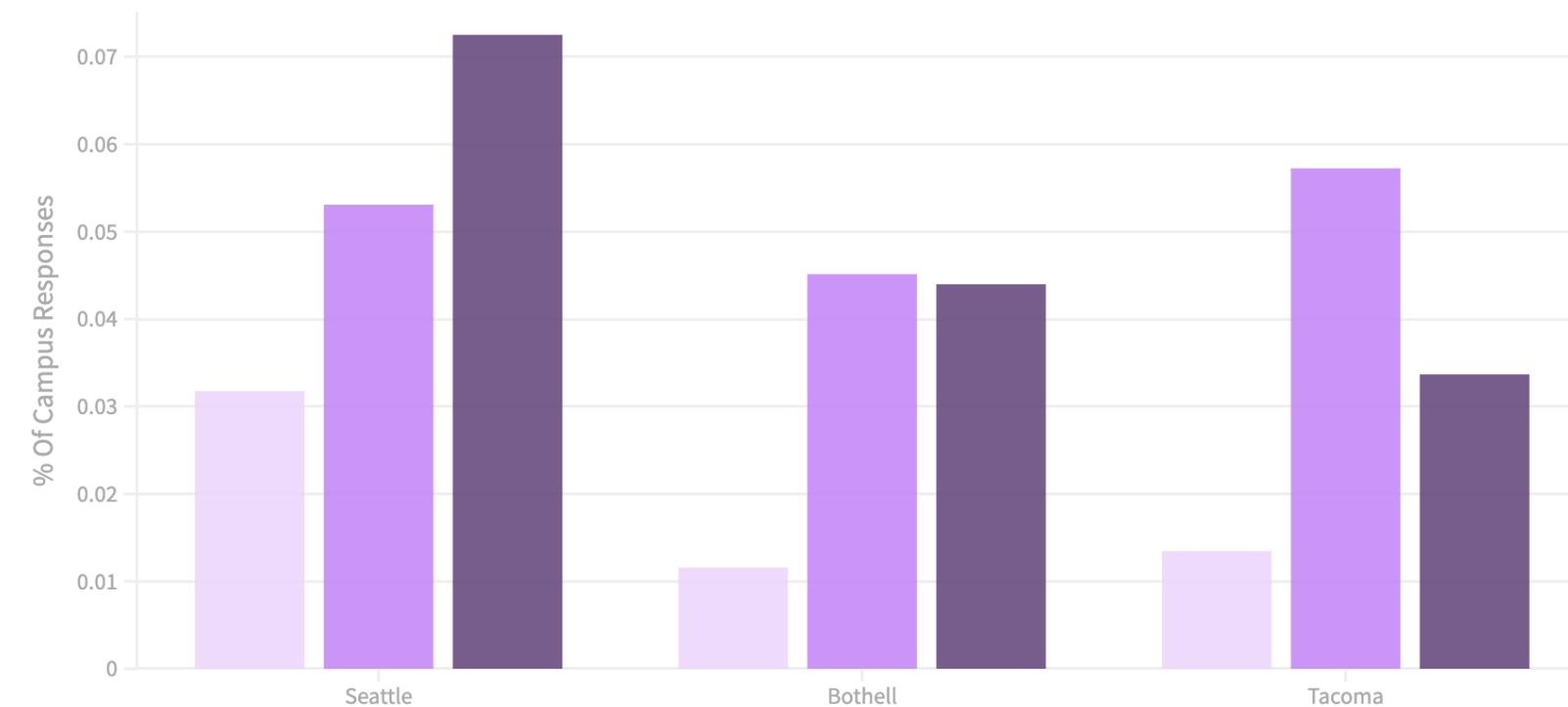
Common responses:

- **Open-note, open-book, and take-home exams**
- More **assignment-focused** course & grading structures
- Maintaining improvements to **online course organization**
- Use of platforms like **Panopto, Discord, and Slack**

## Proportion of Responses from Each Campus That Included Course Guidelines-Related Terms

Main identifying keywords were aggregated (per respective campus totals) to compare and highlight campus differences.

Quiz   Assignment   Exam



# FACULTY PERSPECTIVES

## **Beneficial practices:**

- Posting recorded lectures online
- Using Canvas to administer assignments and quizzes
- Offering some remote lectures, office hours, and course assignments
- Deadline extensions and other support
- Hybrid or online options

## **Concerns:**

- Students may be uncomfortable participating in discussions that are recorded
- Difficult to teach in both virtual and in-person formats
- Little to no compensation for new approaches
- Digital mandate might turn to “one-size-fits-all” approach
- Fear of losing human connection

# RECOMMENDATIONS AND CURRENT INITIATIVES

## Recommendations:

With study as starting point for further exploration:

- Further investigation of the central question (what should continue after remote learning?) at program and campus-specific levels
- Implementing pilot programs to further study the impacts of recorded lectures, virtual office hours, and use of online tools for course organization

## Current Initiatives:

- Ally
- Course Evaluations
- Center for Teaching and Learning
- Well-Being for Life and Learning (WBLL)

# Thank you!

## QUESTIONS FOR THE BOARD OF REGENTS AND ADMINISTRATION

- What is your vision for the University of Washington in a post-pandemic world?
- How does the University's economy shift in your vision of a post-pandemic world?