



UC SANTA CRUZ

Information Technology Survey - 2023 Report of Findings

Information Technology Services

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Background

ITS launched its first-ever campus wide survey in 2023 to better understand the technology needs of the UCSC community, how well IT Services (ITS) is meeting those needs, how to prioritize improvements, and to establish benchmarks to measure IT performance over time. This survey is part of ongoing efforts by ITS to obtain and respond to feedback from students, faculty, and staff.

The total number of survey respondents was 2,020. The survey was open from April 17 to May 5, 2023. Emails were the primary recruitment method and were sent to all students, staff, and faculty from the Vice Chancellor for Information Technology. Additional recruitment methods included targeted email reminders, presentations, social media channels, shuttle bus posters, and a Tuesday Newsday article. Participants were incentivized to participate via a drawing to win one of twenty \$50 Amazon gift cards. Qualtrics was used to administer and analyze the survey.

Response Rate Table

Population Type	Population Size ¹	Response Count	Response Rate
Undergraduate Students	17,502	775	4.4%
Graduate Students	1,976	117	5.9%
Non-Academic Employees	4,825	837	17.3%
Academic Employees / Faculty	3,172	264	8.3%

Notes on response rates:

- Response rates for undergraduate students were slightly lower than expected (4.4%). UCSC IRAPS usually has a student response rate between 5-10%. The [2020 University of California Undergraduate Experience Survey \(UCUES\)](#) had an 8% response rate, and surveys administered by the EDUCAUSE Academic Technology Experience had response rates from 5% to 9%.²
- The Faculty and Academic Employee rate was 8.3%. As a comparison, the 2022 UCSC Academic Senate Committee on Information Technology (CIT) Survey response rate was 27%, and the most recent [EDUCAUSE Study of Faculty and Information Technology](#) had an 11% response rate.
- Non-academic employees had an excellent 17% response rate.
- ITS will explore strategies to boost faculty and undergraduate student engagement in future surveys. The survey response rate may be reflective of limitations on the frequency of email reminders.

¹ Population size sources: [Students, Fall 2022 IRAPS](#); [UCOP Employees Headcount 2020](#).

² Undergraduate student response rate for Educause surveys: [University of Maryland 2022 EDUCAUSE Student Survey](#).

Key takeaways

With this inaugural survey, ITS set out to address the four research objectives listed below. While we found a number of areas for additional research, we were largely successful in answering these objectives:

1. Understand customer expectations for IT services, support, and quality.
2. Understand the customer view of the campus IT experience and satisfaction with ITS.
3. Get insight into which areas to prioritize for further investigation and improvement.
4. Develop benchmarks against which we can measure progress, longitudinally, over time.

In answer to the first two and fourth objectives above, we concluded two seemingly contradictory findings.

On the one hand, students, faculty and staff were generally favorable in their rating of IT services and support. A large majority rated UCSC's technology-related services and support as Very Good, Good, or Acceptable (84%). Further, large majorities of students and staff reported having the technology they needed to be successful. Even when respondents had less positive experiences, many expressed appreciation for and understanding that ITS staff seemed to be doing the best they could in spite of limited resources.

On the other hand, though, UCSC's overall approach to using technology was overwhelmingly described as "average" rather than ahead of or behind the times. This theme was underscored throughout the survey, where respondents often rated their experiences with technology-related services and support as "acceptable" (rather than very good or good), described technology at UCSC as a commodity rather than an amplifier or differentiator, and did not often describe ITS as an integral, strategic partner.

Together, these two takeaways point to opportunities for ITS to better understand both how we might improve the quality of foundational IT services and also set a higher bar for improvement based on what excellence looks like for our customers. And, the survey helps to establish key measures to benchmark and track improvements over time.

In answer to the third objectives noted above—how to prioritize improvements—respondents aligned around a number of areas for improvement which are noted below in order of frequency of mention. One area, in particular, was so widespread and so frequently mentioned that it rose to an urgent level—improving campus wifi coverage, connectivity, and reliability.

Highest priority areas for improvement

1. Campus wifi coverage, connectivity, and reliability.

2. The end-to-end IT support experience, from initial intake (via the ticketing system and/or Support Center) to triaging to satisfactory and timely resolution of a support need.
3. The ability to liaise effectively with the university to understand both common and specialized needs (particularly in the learning and research technology spaces), share what is already available, find opportunities to standardize approaches, and coordinate the purchase and usage of new platforms and services.
4. The usability of individual systems and the experience of navigating across and through different processes and systems.
5. The opportunity to leverage what's working well with local IT support in a way that scales equitably across the needs of the university community.

The remainder of this report includes a deeper exploration of the survey research questions and supporting data. For information on how the survey was structured and administered, see [Summary: ITS Annual Survey Research Plan](#).

ITS will prepare and share a plan for how to address the areas for improvement soon. Based on the experience of the 2023 ITS Survey, ITS intends to field a similar survey every 1.5-2 years to reassess key measures, gather additional and timely data, and align with other instruments used in higher education IT contexts. Additionally, ITS will continue to implement and continuously monitor user satisfaction data for IT services from real-time feedback channels such as feedback forms, surveys, usability testing, support channels, and social media and discussion forums.

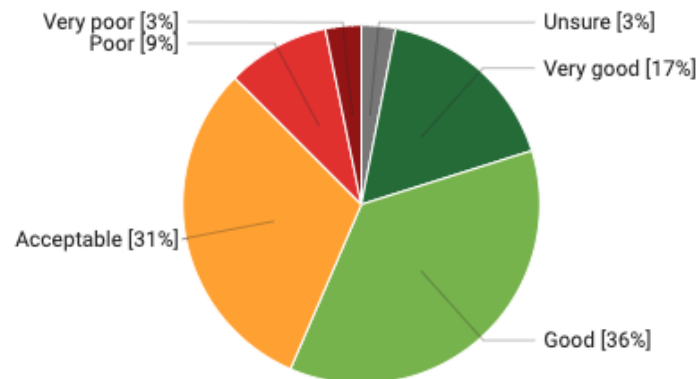
Research questions and insights

To answer the research objectives outlined previously, the survey questions were structured around seven high-level research questions. This section of the report delves more deeply into what the data indicated for each research question.

1. What is the perception of ITS and IT services at UCSC?

Understanding how ITS and IT services are currently perceived by students, faculty, and staff helps establish a high-level benchmark for our current state and against which to measure improvement over time. In the inaugural year of this survey, 53% of respondents rated UCSC's technology-related services and support (Q13) as either "very good" or "good", and 31% rated them as "acceptable". These ratings were lower, however, for both undergraduate students and faculty respondents, however, indicating populations to target for further research and improvement.

Q13 - In my experience, UCSC's technology-related services and support are:
1915 Responses



In another question, respondents were asked whether they thought UCSC's overall approach to technology was cutting edge, average, or behind the times (Q46). A majority (59%) of respondents described the environment at UCSC as average. Perhaps unexpectedly, faculty and non-academic staff were more likely to describe UCSC technology as "behind the times" than student populations. When asked to use their own words to describe UCSC's technology-related services and support, respondent sentiment was more negative, using words like "chaotic" and "inconsistent".

One additional way ITS sought to understand perceptions of IT was to ask how experiences at other universities compared to UCSC (Q44). Of those that worked or studied at another university in the past five years, faculty were more likely to rate UCSC as "much worse" (21%) than other groups indicating that the quality of technology services support may not be competitive with other institutions.

2. How satisfied are customers with IT customer service and support?

High-quality customer service and technology support are cornerstones for IT in higher education and a key priority for UCSC. In fact, in the CIT 2022 survey, 88% of faculty respondents said that access to IT support staff was either essential, very important or important.³

A majority of respondents who had contacted ITS Support directly in the past year either strongly agreed or agreed that the ITS employee(s) they worked with made an attempt to understand their needs (82%, Q37), addressed their needs in a timely manner (73%, Q38), and demonstrated expertise in addressing their needs (77%, Q39). There was slightly less confidence that their needs would be addressed when they contacted ITS Support in the future (68%, Q41). Further, a majority reported that their needs were resolved satisfactorily (73%, Q40).

³ [CIT 2022 Survey Results](#).

One area where the scores dropped somewhat was when respondents were asked whether they had access to technology support *when* they needed it (Q26). Here, a smaller majority of 65% strongly agreed or agreed that they did, and this number dropped notably for undergraduate students to just 52%. As noted previously, lower levels of access and satisfaction were notable amongst undergraduate students throughout the survey and warrant additional investigation.

Interspersed throughout survey responses were numerous positive comments about ITS staff, with specific employees mentioned by name. Related to this sentiment, some respondents noted that staff seemed to be doing the best they could, referencing the perception of limited resources and other challenges.

“Don't blame the employees. They are all decent and knowledgeable. It is the system that is difficult. it is like going through a maze.”

Still, within open-ended questions, respondents emphasized that IT support was a top priority (771 mentions) and offered recommendations for how to improve support, including:

- Knowing who and/or how to contact IT for support, along with requests for improved responsiveness.
- Easier to use support ticket experience and better triaging to minimize awkward handoffs and/or getting stuck.
- Better training and access to information for support agents to ensure speedier and more complete resolution.

“I would like to experience faster, more readily accessible staff. I have experienced ridiculous wait times when seeking help from ITS, especially since the start of the pandemic. It has almost been like a fend for yourself type of situation.”

3. How satisfied are customers with IT platforms, services, and tools?

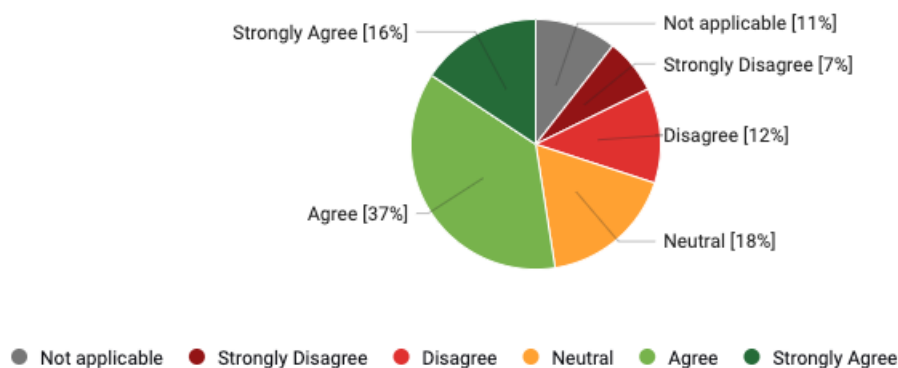
Moving from satisfaction with IT customer service and support, ITS hoped to better understand whether customers were satisfied with the technology platforms and tools at UCSC. There are far too many individual IT tools and platforms to ask about all of them in a single survey so, instead, the survey focused on capturing areas of dissatisfaction.

Widespread wifi dissatisfaction, impacts for learning, teaching and work

One of the most confounding findings was how relatively favorably respondents rated the sufficiency of internet connectivity on campus (only 19% disagreed or strongly disagreed), contrasted with how frequently and passionately dissatisfaction with internet connectivity was mentioned in open-ended comments (nearly 1,000 times). This dissonance may point to a key, and meaningful, difference between *sufficiency* and *satisfaction* to take forward and inform future strategies assessments. Note that some respondents may have answered this question even if they don't often or ever study or work on campus, potentially skewing the results for this question more positively.

Q18 - How strongly do you agree with the following statement: The internet connectivity on campus is sufficient to do my studies and/or work.

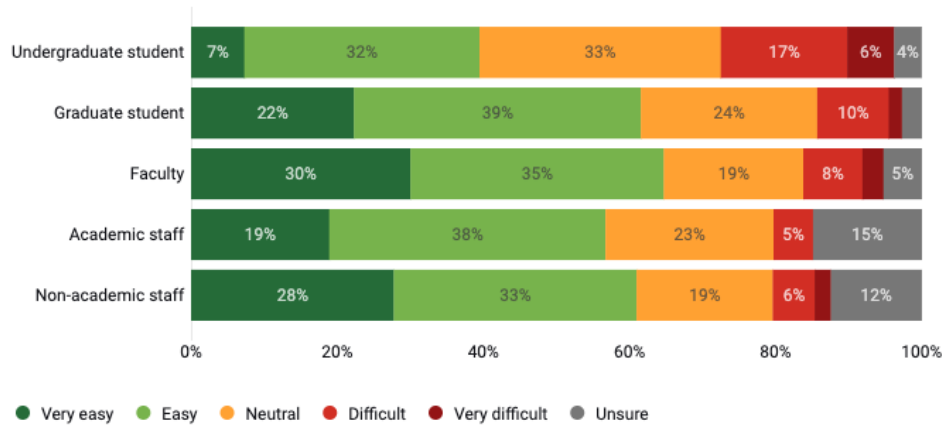
1873 Responses



The impacts of wifi challenges were widespread—ranging from irritation and frustration to loss of in-classroom learning time to a lack of confidence in completing and submitting assignments on time. Poor wifi was also noted as an impediment to effective and creative use of academic technology in the classroom. Wifi impediments were also more acute for undergraduate students, who were especially less likely to agree that their internet connectivity was sufficient (only 31%, Q18), and were significantly more likely to have a difficult or very difficult experience with getting access to reliable internet connectivity in a typical week than other populations (23%, Q19).

Q19 - During a typical school week, how difficult or easy is it for you to get access to a reliable internet connection when you're on campus?

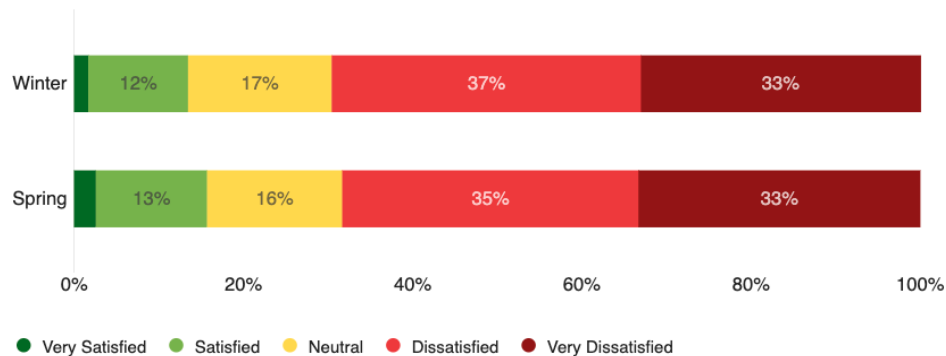
1842 Responses



Frustration with campus wifi was also a common theme in the 2022 CIT survey⁴ and two recent surveys of ResWiFi (residential housing wifi) users.

How satisfied are you with the ResWiFi services?

2114 Responses



Data and graph from a prior survey⁵

Classroom and learning technology

Respondents reported challenges in navigating variation in equipment and software in different classrooms. They asked for clearer instructions on how to connect to and use equipment (projectors, screens, audiovisual panels, etc.). Many respondents asked for consistent lecture capture software across all classrooms. Both faculty and students requested more Canvas training for instructors, noting a desire for a more predictable and user-friendly experience. Many respondents did not know who to contact for support.

⁴ [CIT 2022 Survey Results](#)

⁵ [ITS Residential Wifi Survey Findings Winter vs. Spring 2022](#)

"I wish I knew exactly whom to call about what. I got great help from Media Services when my course was in-person. At the beginning of COVID, I got excellent advice when reconstructing my course for online delivery from the Online Education Office. But if I have a Canvas question now, I'm not sure whom to call! I usually just bother a friend."

Additional areas of dissatisfaction and opportunity are noted later in this report.

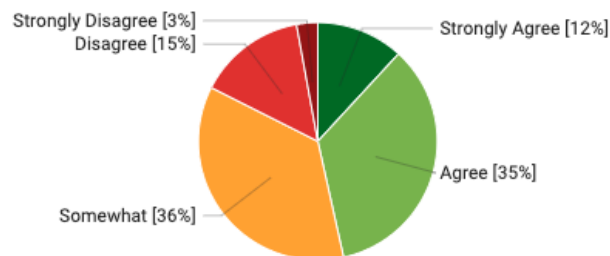
4. What challenges do customers have in finding and using IT services?

Ensuring that students, faculty, and staff at UCSC can both *find* and *use* the technology they need is a crucial measure of effectiveness.

Findability

A majority of respondents expressed some uncertainty when asked whether they can find what they need when they need it (54%, Q27). This sentiment was relatively consistent amongst different populations, and points to opportunities to improve awareness and findability of IT tools and services.

Q27 - When I have a new technology need, it is easy for me to find what I need at UCSC.
1820 Responses



Open-ended responses throughout the survey provide insight into some of the challenges students, faculty, and staff experience. Many comments noted the need for improved resources to ease onboarding for new students, faculty, and staff.

"...my biggest challenge has been gaining access to the various data and storage spaces I need to do my job. There are so many different systems and locations, and it's often not clear whom to contact or where to find things."

Improved usability and integration across systems

Usability challenges were mentioned frequently (379 times) in all open-ended comments throughout the survey. Pain points included needing to use a number of different and poorly integrated systems to accomplish tasks, and inefficient and frustrating experiences with the tools

themselves. Respondents described cumbersome, unnecessarily complex, and repetitive experiences that resulted in lost time, mistakes, and missed opportunities to focus on higher value activities like learning, teaching, advising, and research.

“None of the systems we use is intuitive. Every time we need to do something, it is like doing it for the first time...the software issues are costing everybody a huge amount of time and money that would be better spent doing other things if the software systems were the slightest bit user friendly.”

The desire for better integrations of data and systems, and more seamless and hub-like experiences were frequently noted (nearly 80 mentions), along with requests for improvements to the user interfaces of specific tools like MyUCSC, UCPATH, and other campus systems.

Easier access to clear documentation

Respondents expressed a desire for clearer information, including documentation and self service, noting how challenging it can be to navigate disparate sources of information, lengthy copy, and unclear calls to action.

“Sometimes trying to find the right information needed for access to certain platforms can be difficult. Trying to support my faculty with technology in the classroom or find information or a place for them to get the answers has been challenging.”

“Answers to information are commonly buried in paragraph text, sometimes lengthy academic jargon that is more challenging for our international, multilingual, and first-gen students and parents to navigate.”

In particular, respondents wanted clearer information about specific services such as:

- Data hosting
- Software and applications
- Training

Communication and collaboration

Many comments asked whether ITS could facilitate better cross-campus collaboration and partnership to minimize duplicative or unnecessary efforts.

“We can collaborate across teams more to reduce working on redundant communications or documentation. For example, the teams at University Extension are happy to collaborate on best practices with main campus ITS teams that support the same area of IT, such as Canvas, lecture capture, desktop equipment, ergonomic standards, etc. Then, documentation can be more standardized and useful to all. We are moving in this collaborative direction but have more room to grow.”

When asked “what is the one technology improvement that would most improve your life (Q14), one respondent wrote:

“Having a liaison to go to first before units go out and buy third-party services that won't actually meet their needs. We may already have solutions available. It would also be nice to have a campus-wide roadmap for how all units can interface with ITS... in a way that works for everyone.”

Outages

Power outages, weather events, and other impacts to IT services can be very disruptive to the work of the university. Many respondents noted that when campus systems and websites went offline, there was no place to get information about the outages. Respondents requested more consistent updates on system status during outages, and a source for information that would be consistently available.

5. What is most important to our customers? How might we prioritize our efforts to support these needs?

Improved wifi coverage, connection, and reliability

When asked what one technology change would most improve their lives, by far the most common answer was improving wifi, with 35% of comments mentioning it (Q14). Improved wifi wasn't just mentioned most often in this question, it was mentioned frequently in every open-ended question throughout the survey (957 mentions). This is in alignment with findings from the CIT 2022 Survey⁶, where wireless connectivity was both *the* top priority and had a lower satisfaction rate (only 54% were satisfied or completely satisfied).

Wifi connectivity was reported as a barrier to learning at UCSC. Students reported being unable to connect to wifi to complete assignments, access class materials, and join Zoom meetings.

⁶ [CIT 2022 Survey Results](#).

“Bad wifi in libraries is very inconvenient as people are often there to study. I rented a room to take my midterm as people were in my dorm room, and the wifi went out and messed up my midterm.”

Inconsistent wifi (and cell service) on campus was also a safety concern.

“I would see if there is a way to make the school Wi-Fi and [cell] service more accessible to secluded parts of the campus. It would just make me feel safer if I know I can call someone when walking back from the arts center.”

Opportunities for improvement included:

- Better connectivity in the libraries, housing, and classrooms.
- Better cell and wireless connectivity in secluded areas, bus stops and parking lots.
- Troubleshooting Eduroam connections to phones and computers, especially Chromebooks and Lenovos.
- Troubleshooting Reswifi going out in the evening.
- Investigating reinstating ethernet ports.

More responsive tech support

The second most commonly requested improvement was tech support (21%, Q14). Comments centered along a few themes:

- Students and faculty were not able to resolve their tech problems during evenings and weekends. More research is warranted on the need for after-hours support, whether a working hours model is still best for the campus, and if there might be bridge strategies for support even when staff aren't present.
- Many respondents indicated a desire for an on-site help desk which would provide real-time, walk-in or telephone support. Students in particular asked that there be a campus resource to assist students with common tech issues.
- ITS was asked to consider the use of Zoom or screen sharing for tech support.

A commonly mentioned source of frustration was having to work with the ticketing system. Some respondents mentioned that it didn't seem like people were reading their tickets carefully, their request was lost or neglected, they got canned and unhelpful responses, or that the ticket was closed without the issue being resolved.

"I usually avoid submitting tickets because it's confusing and sometimes annoying to do. So I wait until it's unavoidable."

6. Are we meeting the needs and expectations of ITS customers? What are their unmet needs?

Respondents indicated that their fundamental technology needs were generally well met. For example, 84% of student respondents indicated that they had access to the technology needed to make the most of their UCSC experience (Q24). Similarly, 82% of faculty and staff respondents said the same about technology for their work (Q25).

Most have a laptop or computer that meets their needs

A vast majority of respondents (91%) had access to a laptop or computer that met their needs, and students rated even higher (93%) (Q16). There was no significant difference between answers from international, transfer, and first generation student populations, or between faculty and adjunct faculty. However, individual comments showed that some students were struggling with inadequate personal technology.

"I do not have a working laptop, which makes it harder for me to complete assignments in class."

Finding and acquiring software can be challenging

Many mentioned needing help with navigating processes for using and purchasing new software. Others pointed out that campus could do a better job of scaling technology and software.

"There is a lot of duplication of technologies and solutions... this might be affecting the overall technical debt and budget spent on licensing, purchase and support of the wide variety of technologies."

Relatedly, there were numerous mentions of paying for tools "out of pocket" with personal funds, research funds, or via individual licenses when an enterprise license would be preferable.

"I have to buy qualitative software management and transcription tools. I would like UCSC to provide these programs as it provides SPSS for quantitative research."

Respondents also requested enterprise licenses for specific tools—Slack was frequently mentioned—as were specific tools for research, qualitative analysis, data visualization, and statistical analysis.

UCSC's websites and web support are a source of frustration

Many respondents noted that UCSC's overall web presence could use improvement. As with usability considerations noted earlier, many noted the challenge not only of using specific sites but especially in navigating across the university's websites to find answers and complete tasks.

"UCSC's websites are a hot mess of obfuscated information. Categorizing information flows based on user experience could help, or at least changing the web UI to be more mobile-friendly."

Faculty and staff asked for more help and support with their websites. Many asked for a dedicated and expert staff to support their web needs.

"Our department's presence on the web is insufficient. We have to rely on non-technical staff to create and maintain these pages. The outdated and under optimized web presence hurts our ability to attract graduate students to our programs."

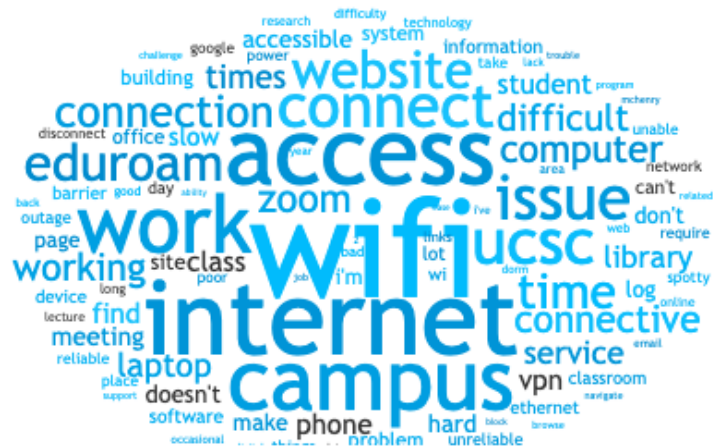
7. Is access to services, technology and connectivity equitable?

Access vs. accessibility

Nearly a third of respondents reported encountering accessibility barriers using websites and/or technology at UCSC (30%, Q21). However, the survey left the definition of an accessibility barrier quite broad—"anything that gets in the way of someone being able to fully use or engage with a digital experience". As a result, most open-ended responses noted wifi access or website usability challenges. While these responses provided useful information, in the future, survey questions will more carefully tailor accessibility-related questions to ensure that we're more accurately capturing disability-related technology needs.

Q22 - Please tell us more about any accessibility barriers. (optional)

446 Responses

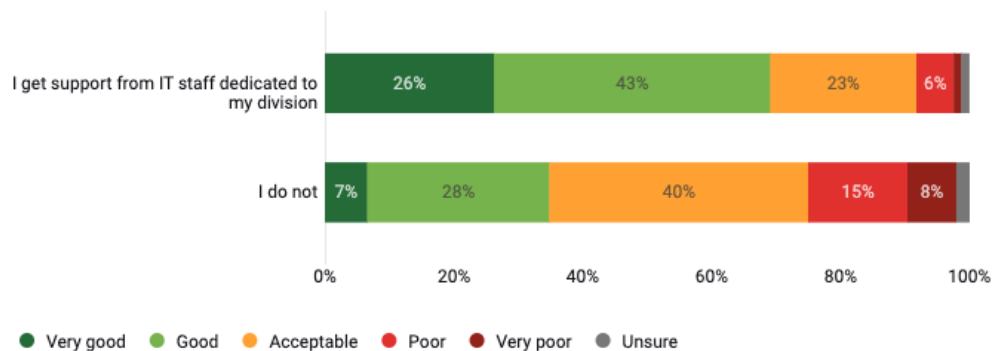


Access to dedicated IT support is a positive, not available for most

Those with dedicated IT staff expressed more positive experiences than those without dedicated staff. These respondents were nearly twice as likely to rate UCSC’s technology related-services and support as “very good” or “good” (69% compared to 35%, Q13).

Q13 - In my experience, UCSC's technology-related services and support are:

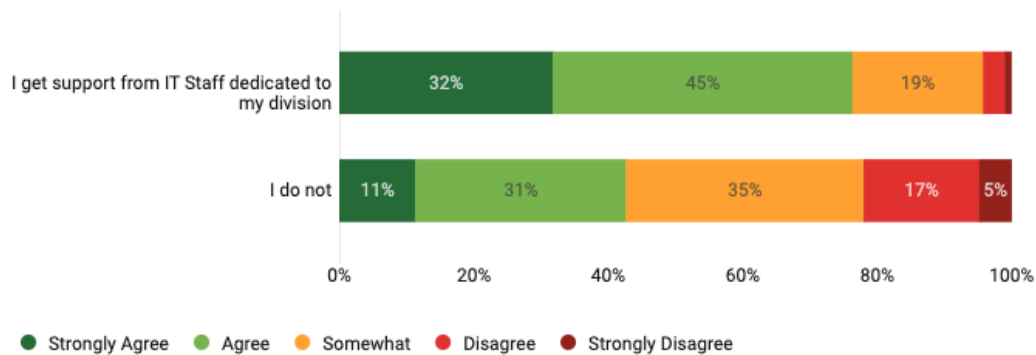
1814 Responses



Respondents with dedicated IT staff were also more likely to indicate that they had access to technology support when they needed it (77% compared to 42%, Q26). Open-ended comments also noted appreciation for having dedicated IT staff.

Q26 - I have access to technology support when I need it.

1809 Responses



Impacts of unreliable internet access

Inconsistent access to wifi (and cell reception) in different locations on campus caused hardship for many respondents.

"I'm a Sr Custodian employee. I work swing shift and have very little access to wifi. Most of the time I need to do my training on my time at home or before or after work due to poor wifi in my working areas."

We know from a recent EDUCAUSE survey on students and technology that unreliable technology, especially poor wifi connectivity, can be very stressful.⁷ As a workaround to wifi issues at UCSC, students mentioned the need to purchase phone hotspots and routers to improve the speed and reliability of their wifi. Purchasing additional equipment and services for network access can pose financial hardship, and the need for these solutions wasn't equitable as some had poorer access than others depending on their location.

"I would make Res Wifi reach Kresge, otherwise the UC should not have students to live in Kresge and thus force them to purchase a router with money they may not have. Internet access should be expanded and strengthened across campus."

Many comments noted a pattern of being dropped from Zoom meetings, which was frustrating and they felt reflected poorly on UCSC and themselves.

⁷ [2022 Students and Technology Report: Rebalancing the Student Experience](#), EDUCAUSE, Oct 3, 2022.

“These drops in connectivity can be from 5-60 minutes at a time (on occasion they've lasted longer), and interrupt our ability to perform our routine work duties and - worse - disappear from important Zoom meetings... This is terribly embarrassing and reflects poorly on our campus, limiting our ability to successfully recruit excellent staff, faculty, and students.”

Areas for additional research

There are many more insights to be uncovered in the data. ITS welcomes inquiries.

ITS could seek to better understand the unique and specific needs of populations such as undergraduate students and faculty in order to identify and implement more tailored improvements.

Information security and data privacy are important topics and were not explicitly included in the survey, nor was information security mentioned often in open-ended comments. In the future, ITS should develop explicit strategies to gather information security related information and may consider leveraging some of the questions from a recent [EDUCAUSE Student Data Privacy and Security survey](#).

Likewise, usability of systems came up many times in the open-ended comments, although we did not ask explicitly about them. The usability of different campus systems is information that should be gathered through more targeted surveys and research.

Acknowledgments

Thank you to the UCSC Academic Senate, the Committee on Information Technology (CIT), and to Institutional Research, Assessment, and Policy Studies (IRAPS) for their invaluable feedback.

Additional information

Survey Information

- Research Plan: [Summary: ITS Annual Survey Research Plan](#)
- Results
 - [Demographic Information](#)
 - [Survey results](#)

Related Research

- [CIT Survey](#)
- [UC Undergraduate Experience Survey](#) (UCUES)