# 2023 UBIT Faculty IT Survey



**Executive Summary** 

6/14/2023

**UBIT Communication and Engagement** 

Office of the VPCIO

**UB Information Technology** 

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#### Introduction

Since completion of the 2019 UB Faculty IT Survey, instructors at the University at Buffalo have taught through a life-altering pandemic. As a result, the nature of academic work has evolved, leading to new challenges in both teaching and technology at UB.

The 2023 Faculty IT Survey was conducted to gather information on the technology needs of faculty at UB. The survey will help provide direction for UBIT in best serving those needs.

The survey results indicate that faculty members are heavily reliant on technology for their teaching and research activities. Most faculty members use a variety of devices, including desktops, laptops, tablets, and smartphones, for these purposes. They also use a variety of software applications and online platforms, such as learning management systems (UB Learns), communication tools, and research databases.

Not only are UB faculty dealing with ever-evolving technology to stay in line with hybrid learning and their students, they're also facing the challenges of artificial intelligence tools like OpenAl's ChatGPT and Google's Bard becoming more commonplace. According to the survey, more than half of UB faculty (64%) are not allowing the use of Al in their coursework. Conversely, nearly 34% of faculty members are teaching their students about the limitations of Al tools.

UBIT conducted a faculty webinar on ChatGPT during the spring semester and will offer other resources around Al going forward.

Furthermore, faculty are now expected to use a number of different software tools and devices to meet the needs of their students (see page 3).

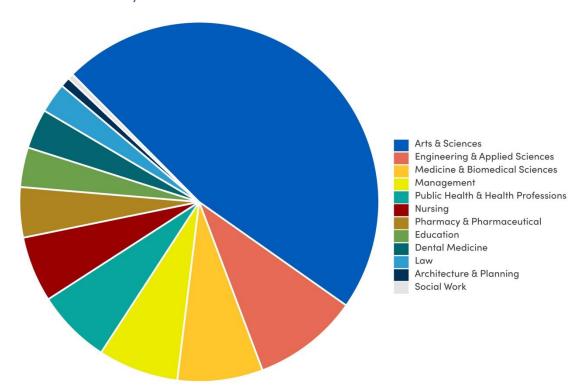
This presents an opportunity for IT to support faculty by providing the necessary resources and assistance to meet their evolving goals. UBIT has made significant efforts in recent years, such as enabling classroom recording on faculty devices through Panopto and implementing easy-to-use, institution-wide video conferencing with Zoom. These endeavors focused on creating a technology ecosystem that aligns with the dynamic nature of academic work.

However, it's crucial to recognize that each member of UB's faculty, spanning across various schools and colleges, has unique needs and preferences. Therefore, a one-size-fits-all technology solution is often not feasible. Nevertheless, the responses obtained in this survey allow UBIT to identify areas for improvement and foster collaboration with faculty members to make informed decisions on how to best support academic work throughout the institution.

In this report, we will highlight the varying perspectives shared by UB faculty with UBIT and UB's Faculty Senate IT Committee. This report will also explore future opportunities for UBIT to address common faculty concerns and enhance awareness of and support for our services.

We value any additional feedback and encourage UB faculty, staff and students to email comments to ubit-communication@buffalo.edu.

## About the Survey

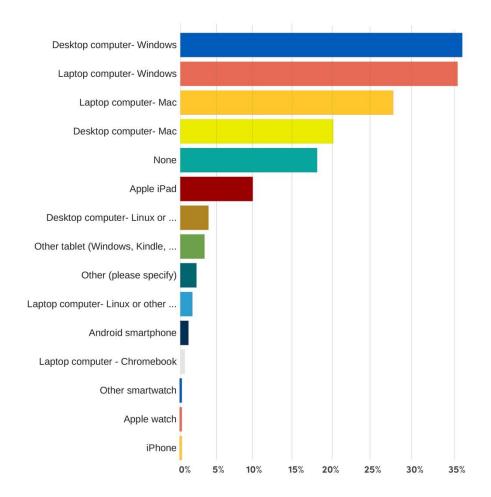


The 2023 Faculty IT Survey was open from March 9-14, 2023 and comprised of 28 questions designed in collaboration between instructional and IT support staff and UB's Faculty Senate IT Committee. Over 200 UB faculty members responded to the 2023 survey, with respondents from nearly every UB school or college. Over 47% of respondents said they were a member of UB's College of Arts and Sciences.

One of the goals of this survey was to build on the findings from the pre-pandemic 2019 Faculty IT Survey to determine the nature and extent of change in faculty attitudes and perspectives relating to technology. The instrument was designed to collect thorough and candid feedback from faculty.

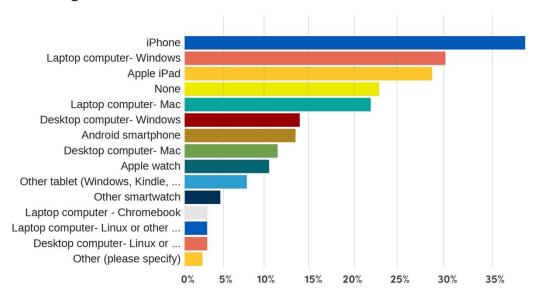
# Survey Highlights

Please indicate which devices you use for work that are purchased by the University or grant funding including UBF.



As expected, the majority of faculty use desktop or laptop computers in their teaching. Over 60% of faculty members said either the university or grant funding, including UBF, purchased a laptop (Windows, MacBook, Chrome, or Linux) for their UB work. Conversely, over 50% of respondents reported purchasing their own laptop (Windows, MacBook, Chrome, or Linux) for their teaching or research at UB.

Please indicate which devices you use for work that YOU have purchased with non-grant funding.

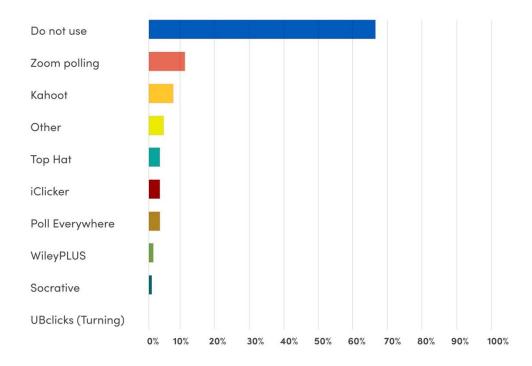


For their academic pursuits, some faculty members are also using self-procured technology such as iPhones (36%), iPads (27%), and Android devices (12%).

**Looking ahead:** The increasing dependence of faculty on mobile devices and tablets for classroom work is expected to have implications for information security and data privacy at UB.

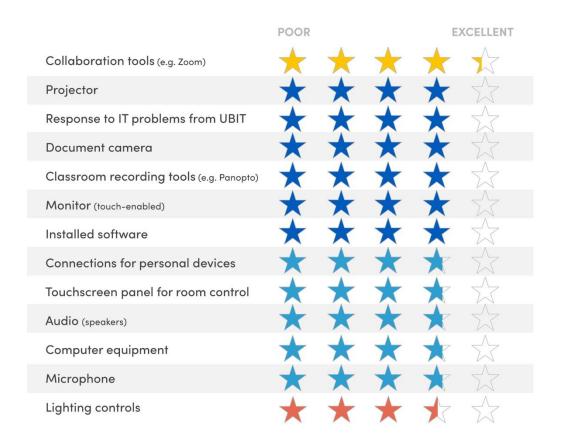
In 2019, UBIT deployed Jamf for mobile device management, making it easier for UB departments to remotely support dedicated Apple mobile devices (most popular among UB's faculty). Grant funding continues to be an option for some faculty purchasing technology.

If you use clicker/classroom response technology at UB, what tools(s) are you currently using?



66% of faculty said they are not using classroom response systems or clickers in the classroom. Nearly 11% are using Zoom polling, while 7% use Kahoot. Roughly 3% of responding faculty are using Top Hat, iClicker, and Poll Everywhere, respectively. Other products mentioned include WileyPLUS, Socrative, Discord, Perusall, freeonlinesurveys.com, and Slido.

Please rate the following aspects of teaching technology in UB classrooms with regard to your satisfaction in meeting your needs.



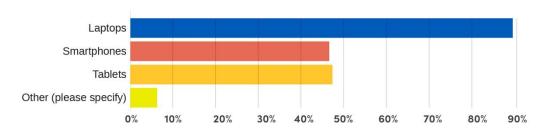
UB faculty are very satisfied with classroom technology overall, rating collaboration tools, like Zoom, over 4 out of 5 stars. They also rated 4 out of 5 stars on document cameras, classroom recording tools, touch-enabled monitors, installed software, projectors and response to IT problems from UBIT. Touchscreen panels for control rooms, audio, computer equipment, microphones and lighting controls received just under 4 out of 5 stars.

Faculty also had an opportunity to voice concerns over issues in the classrooms they teach in. A majority of comments mentioned audio, video, and lighting systems, specifically complaints about malfunctioning or unreliable equipment such as speakers, microphones, document cameras, projectors, and HDMI connections, as well other related issues, including poor acoustics, difficulty hearing, and inadequate lighting.

Some of the specific classrooms where problems were reported were NSC 201 and Farber 135 (audio system made it difficult to hear students). Also, the touchscreens in Baldy 108 were reported as not being responsive, and some problems were noted with computers not turning on in Diefendorf classrooms.

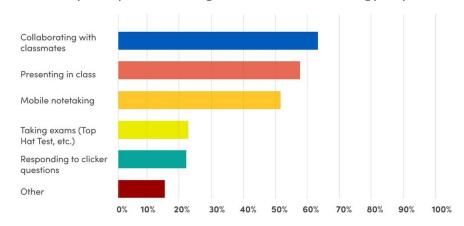
Survey results will be shared with Facilities and UBIT's Classroom Technology Services team to resolve reported problems associated with on-campus classrooms.





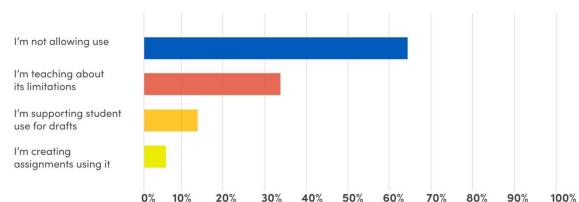
In terms of technology used by students in classrooms, 89% of instructors encouraged students to use their laptops. A smaller number of faculty encourage the use of smartphones (45%) and tablets (46%) in the classroom.

#### In what ways do you encourage the use of technology in your classes?



Faculty encourage the use of technology in the classroom in several ways. Over 62% of faculty said they encouraged collaboration between classmates, while 57% said they encouraged students to use technology in their in-class presentations. A lesser number of faculty reported allowing technology use during exams (Top Hat Test) and responding to clicker questions (both over 21%).

**Looking ahead:** As technology becomes more omnipresent in our lives, faculty will need to find ways to integrate it into their coursework. Many faculty members are already doing that and UBIT will support them in any way possible.

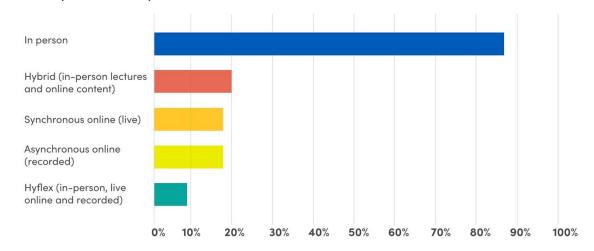


#### In what ways are you utilizing AI in your teaching or course work?

The use of AI tools and generators is a fairly recent development impacting university campuses. Despite that, however, UB faculty members have been preparing for the AI wave. For instance, 64% said they're not allowing the use of AI in their classes. 34% are already teaching students about the limitations of AI. Over 13% of faculty are supporting students who want to use AI to create drafts, while 6% are creating assignments using AI.

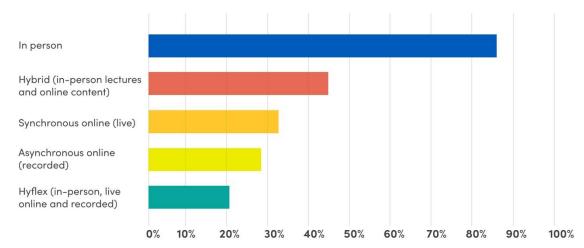
**Looking Ahead:** The use of Al is only going to increase going forward, and it's clear that UB faculty are aware of Al, understand its uses and issues, and are trying to get ahead of its proliferation. UBIT will continue to be a strong partner in this environment.

### How do you currently teach courses at UB?



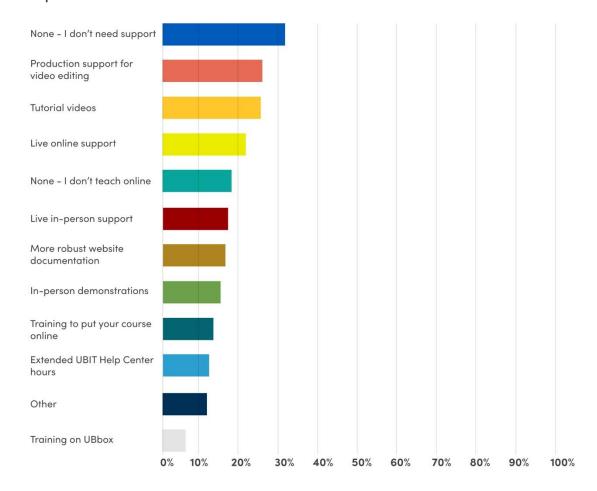
After teaching mostly online for nearly 18 months during the pandemic, most classes returned to normal, fully in-person activities by Fall 2022. That's reflected in the data, where 86% of responding UB faculty said they are teaching in-person. However, over 67% of faculty said they are teaching virtually in some capacity, whether it be hybrid (course includes both in-person lectures and online content), hyflex (course offers in-person, live online synchronous delivery, and recorded content), synchronous online (live), or asynchronous online (recorded).





Going forward, 86% of faculty said they expect to be teaching in-person in the next five years. Over 43% said they expected to be hybrid. Additionally, 32% expect to be teaching synchronous online, 28% asynchronous, and 21% hyflex.

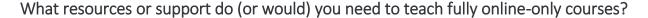
What resources or support do (or would) you need to teach courses with an online component?

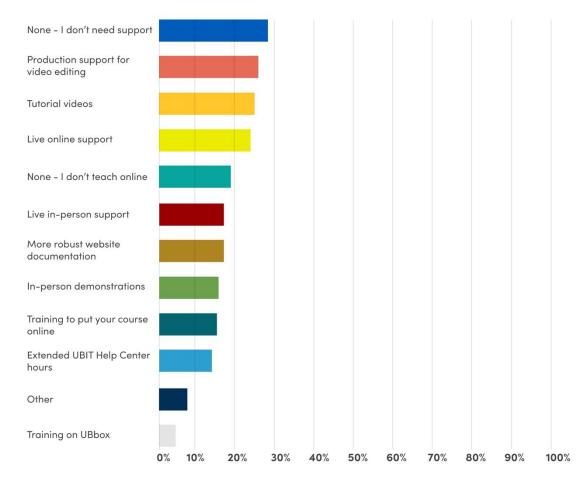


UB faculty were asked what resources or support they would need in order to teach courses with an online component. Over 31% of faculty said they did not need additional support. However, around 25% of respondents said they would like support in the form of tutorial videos and production support for video editing.

Furthermore, 21% of faculty would like live online support, while extended hours at the UBIT Help Center, in-person demonstrations, live in-person support, more robust website documentation, training on UBbox, and training to put a course online all earned responses from faculty.

In addition, faculty also outlined several services they would like to see, including help with exams, virtual and augmented reality devices, and possible use of AI in the future.





Faculty were also asked what resources or support they would need to teach a fully online-only course. Responses were similar to courses with an online component, with 28% of faculty saying they did not need additional support, 25% saying they would like tutorial videos and production support for video editing, and 24% of respondents interested in live online support.

Faculty also mentioned more up-to-date computers, support and permission from their Dean or department chair to teach online, and better features for the LMS going forward.

**Looking ahead:** It is clear faculty expect to be continuing aspects of online teaching in the future, and this survey helps identify the needs of faculty members teaching in multiple modes.

## Faculty Software and Tools

Faculty members provided a number of responses about the tools or software they use for teaching, research, and service that they either pay for or use free versions. For teaching, Kahoot!, Protege, Github Desktop, PDFPen, YouCanBookMe, Discord, and Google Suite products were frequently mentioned.

For research, Netdraw, Cystoscopy; Gephi, BBEdit, Slack, Bookends; Mellel, Scrivener, VoodooPad, OmniOutliner; AConCAT, and Ukulele were mentioned.

In terms of service, Signal, Topaz, Rev., MASV, Rendevr, and Doodle were noted for use. Adobe Acrobat also came up numerous times as a tool used for teaching, research and service.

Faculty were asked what tools they wish were available to faculty and students for free from the university in terms of teaching, research, and service. Adobe Creative Suite/Adobe Creative Cloud tools such as Photoshop, Illustrator, Acrobat Pro, and Premiere were frequently mentioned, as well as Kahoot!, Slack, Microsoft 365/Office, and Google Suite.

Free tools that faculty wanted available for research included Adobe Creative Suite/Adobe Creative Cloud, Stata, SPSS, Qualtrics, and NVivo.

Free tools that faculty requested to be available for service included Adobe Creative Suite/Adobe Creative Cloud, Slack, Google Drive, Survey Monkey, and Qualtrics.

**Looking Ahead:** Faculty use a wide variety of tools and platforms in their everyday teaching, and many are not UB-licensed. It's important for UBIT to continue outreach and education on UB-licensed products, in order to streamline processes, when applicable, and also investigate up and coming tools for faculty use.

Faculty also weighed in on ways for UBIT to improve the onboarding process for new faculty. Several ideas were mentioned repeatedly, including:

- Increasing availability of online tutorials and training videos
- Conducting in-person orientation and training sessions
- Improved communication and accessibility of contact information
- Early access to accounts and technology
- Tailored onboarding and training based on individual needs and skill levels
- Access to clear documentation and instructions for technology use
- Access to resources and assistance for specific technology needs
- Patience and understanding for individuals with varying technology expertise

When asked what they would change to improve the process, 38% of faculty reported being satisfied with current UB onboarding, while 7% of faculty specifically reported having a negative experience with their UB onboarding. Suggestions for improving the process included increasing the availability of online tutorials and training videos, conducting in-person orientation and training sessions, improved communication and accessibility of contact information.

A number of different challenges were identified when faculty were asked about security requirements at UB, such as the loss of administrative privileges, Duo two-step verification, and hardware restrictions. Many faculty mentioned that not having administrative access to their

computers hinders their ability to install or update software, causing delays and productivity issues.

While many faculty members recognize Duo two-step verification as necessary for security, some found Duo to be a hassle, especially if they did not remember their phone or experienced another glitch with the authentication process.

According to some faculty comments, limitations on software installation caused by the security requirements at UB restrict the installation of certain software, which can be problematic for research, teaching, and other work-related tasks.

Faculty included a number of suggestions to alleviate these issues, including:

- Providing more flexibility in security requirements to allow for easier software installation and updates
- Offering alternative authentication methods or addressing glitches with Duo authentication
- Allowing faculty to have administrative access to their computers for easier customization and software management
- Streamlining the process for granting temporary access to alumni or trusted individuals who need to use UB resources

**Looking Ahead:** While security resources like Duo and administrative access may be frustrating at times, they are also important in order to keep UB accounts, equipment and networks safe. UBIT will continue to communicate with faculty on how to best work with IT staff to accommodate their needs.

#### Conclusion

The full results from the 2023 Faculty IT Survey are available online at the UBIT website at buffalo.edu/ubit/about/strategic-initiatives/reports/faculty-survey.html

UBIT wishes to thank the faculty at the University at Buffalo for their ongoing involvement in the development of a more robust, modern and flexible technology environment. This survey is only the latest component of an ongoing collaboration between UB faculty and UBIT staff.

In consultation with faculty through the Faculty Senate IT Committee and ongoing UBIT-sponsored focus groups, UBIT will take the feedback from this survey and work to adapt our services and communications to better meet the needs of the faculty, whose dedicated work is tantamount to the continued success of the university.