

Faculty Study, 2017

Note: The online version of this survey may be shorter due to question branching or question skipping.

Welcome to the 2017 ECAR Faculty Technology Survey!

Study Description

Technology is a critical part of all faculty roles. This study explores technology ownership, access, use patterns, and expectations as they relate to faculty roles. The results of this study can be used by colleges and universities to plan for technology shifts that influence faculty and better engage students in the learning process. Furthermore, institutions can use the data to improve IT services, increase technology-enabled productivity, prioritize strategic contributions of IT to higher education, and become more technologically competitive among peer institutions.

This survey asks questions about your experiences with and attitudes toward technology in the context of your faculty role. Your responses will help people on your campus and beyond understand how technology can benefit the academic community. There are no right or wrong answers; we would just like you to answer as honestly as you can. Participation in the survey is completely voluntary, and you can choose to exit the survey at any point. Your responses are anonymous. Required questions are indicated with an asterisk (*). This survey might take you up to 30 minutes to complete.

Please use the survey's navigation buttons below to go back or forward within the survey. Using your device or browser's navigation buttons may result in lost answers.

Conditions and Stipulations

1. I agree to complete this online survey for research purposes and that the data derived from this anonymous survey may be made available to my academic institution in individual response and aggregate summary formats and/or to the general public in the form of public presentations, reports, journals or newspaper articles, and/or in books.
2. I understand the online survey involves questions about my IT experiences and expectations in higher education. Beyond demographics, all questions will address IT-related issues.
3. I understand that this survey is expected to take up to 30 minutes to complete. I understand that my participation in this research survey is totally voluntary and that declining to participate will involve no penalty or loss of benefits. Choosing not to participate will not affect my college/university status in any way. If I choose, I may discontinue my participation at any time. I also understand that if I choose to participate, I may decline to answer any question that I am not comfortable answering.
4. I understand that I can contact the research team through ecarsurvey@educause.edu if I have any questions about the research survey and my rights as a participant. I understand that the survey does not contain any questions that are a foreseeable risk, nor any questions likely to create discomfort to participants. I am aware that my consent will not directly benefit me but will provide data to inform higher education institutions on how to best improve IT experiences for students and faculty.
5. I understand that my survey responses are anonymous; once all responses are submitted, all personally identifying data will be removed from the data set, prior to the researchers' conducting analysis; the researchers will not be able to identify me or remove anonymous data from the database should I wish to withdraw it. EDUCAUSE owns and maintains the data collected for the

project. Individual response data are stored on an EDUCAUSE server and in a cloud-based storage system indefinitely for use in longitudinal analysis. These data are contained in systems that are in password-protected commercial or cloud-based data centers that are SSAE 16 SOC certified. Only the account holder can access the data contained within the account.

6. By selecting "I agree" below I freely provide consent and acknowledge my rights as a voluntary research participant as outlined above and provide consent to EDUCAUSE to use my survey responses in the technology research in the academic community projects.

You must be an adult (at least 18 years old, in most jurisdictions) and currently employed as a faculty member or have emeritus status to participate in this survey. Indicate your agreement with the informed consent statement below. *Required.

- I agree.
 I do not agree. <<exit survey>>
If you choose this option, you will exit the survey.

About This Survey

This survey is about faculty members' experiences with technology in both teaching and research environments. In which of these areas do you have technology experience that you would like to tell us about? Select all that apply. *Required.

- Teaching and learning <<show sections 1, 2, 3, 4, 6>>
 Research <<show sections 1, 2, 5, 6>>
 I don't have adequate experience in either of these areas to comment. <<exit survey>>
If you select this option, you will exit the survey when you click Next below.

This survey is intended for active faculty members. Are you currently teaching or conducting research as a: *Required.

- Full-time faculty member
 Part-time faculty member
 Emeritus faculty member
 I am not part of the institution's faculty. <<exit survey>>
If you choose this option, you will exit the survey.

Section 1: About You

1.1 How many years of experience do you have in each of the following positions?

<<all respondents>>

Years in a full-time faculty position: _____

Years in a part-time faculty position: _____

1.2 Do you work with... (Select all that apply.)

<<all respondents>>

- Undergraduate students
 Graduate students
 Professional students
 I don't typically work directly with students.

1.3 I am currently:

<<full-time faculty members>>

- Tenured
 Not tenured, but on a tenure track
 Not on a tenure track (ongoing appointment)
 Not on a tenure track (temporary/fixed-term appointment)

1.4 Which of the following best describes your academic rank during the current academic year?

<<full-time faculty members>>

- Emeritus faculty
- Professor
- Associate professor
- Assistant professor
- Clinical professor
- Research professor
- Instructor
- Lecturer/senior lecturer
- Fixed-term adjunct
- Adjunct with continuing appointment
- Research associate
- Other academic rank; please specify: _____
- No academic rank

1.5 If you would like to be entered into a drawing for a \$100 or \$200 Amazon.com gift certificate, please provide your e-mail address here.

The drawing will be held by June 30, 2017. E-mail addresses will be permanently deleted from our database no later than July 31, 2017. Your e-mail address will be dissociated from the rest of the survey data after the survey window closes, keeping your responses anonymous. Your e-mail address will only be used for the purpose of this drawing. <<only visible if institution ops in to the ECAR-hosted incentive program>>

Section 2: Technology Ownership, Adoption, Attitudes, and Use

<<all respondents>>

2.1 Do you personally own—or does your institution provide you with—any of these devices?

Select all that apply.

	Personally own	Provided by my institution	Neither
Desktop			
Laptop			
Tablet			
Smartphone			

2.2a What type of operating system (OS) does your desktop have? <<show if Q2.1 indicates ownership or provision>>

If you have more than one desktop, please select the one you use most often for work.

- Windows
- Mac or OS X
- Chrome OS
- Linux
- Other
- Don't know

2.2b What type of operating system (OS) does your *laptop* have? <<show if Q2.1 indicates ownership or provision>>

If you have more than one laptop, please select the one you use most often for work.

- Windows
- Mac or OS X
- Chrome OS
- Linux
- Other
- Don't know

2.2c What type of *tablet* do you have? <<show if Q2.1 indicates ownership or provision>>

If you have more than one tablet, please select the one you use most often for work.

- iPad
- Windows tablet
- Android tablet
- Amazon Fire tablet
- Other
- Don't know

2.2d What type of *smartphone* do you have? <<show if Q2.1 indicates ownership or provision>>

If you have more than one smartphone, please select the one you use most often for work.

- iPhone
- Android phone
- Windows phone
- Other
- Don't know

2.3a Thinking about the past year, please rate your experiences with the following *technology-enabled learning/working spaces* provided by your institution:

	Service not offered	Haven't used in the past year	Poor	Fair	Neutral	Good	Excellent
Classroom-based technology resources (e.g., computers, projection systems, lecture-capture systems, SMART boards, etc.)							
Laboratory or research-based technology resources (e.g., computers, research equipment, etc.)							
Online collaborative spaces in which your students or colleagues can work synchronously or asynchronously on projects or assignments (e.g., the learning management system [LMS], Google Docs, Dropbox, OneDrive, Office 365, etc.)							
Physical collaborative spaces (e.g., computer labs, learning commons, testing centers, research labs, active learning classrooms, etc.)							
Access to institutional resources while working from home							

Access to institutional resources while traveling and/or living in other states or countries							
Ability to get my work done while working from home							
Ability to get my work done while traveling and/or living in other states or countries							

2.3b Thinking about the past year, please rate your experiences with the following *technology-enhanced connection and communication resources* provided by your institution:

	Service not offered	Haven't used in the past year	Poor	Fair	Neutral	Good	Excellent
Reliable access to Wi-Fi networks throughout campus							
Communication technologies (e.g., e-mail, instant messaging, social media, etc.)							
Videoconferencing technologies (e.g., Skype, Google Hangouts, Adobe Connect, other web-based conference services)							
Online or virtual technologies (e.g., network or cloud-based file storage system, web portals, etc.)							
Remote access (as opposed to locally installed) to commercial software applications (e.g., MATLAB, GIS applications, statistical software, graphics software, textual or image analysis programs, etc.)							

2.3c Thinking about the past year, please rate your experiences with the following *technology support services* provided by your institution:

	Service not offered	Haven't used in the past year	Poor	Fair	Neutral	Good	Excellent
Technology support (e.g., desktop support, classroom technology support, course media production support, etc.)							
Professional development around the integrated use of technology in your teaching, whether face-to-face or online (e.g., technology training opportunities, incentives, and professional advancement)							
Support for making courses accessible to students with disabilities							
Support for making teaching courses accessible to faculty with disabilities							
Professional development and training opportunities around the integrated use of technology in your research							
Individualized consultations for using technology in teaching (e.g., course design,							

assignment development, assessment and evaluation, etc.)							
Individualized consultations for using technology in research and scholarship (e.g., data analysis, management, and visualization; grantsmanship, etc.)							
Specialized teaching software							

2.3d Thinking about the past year, please rate your experiences with the following *other technology services* provided by your institution:

	Service not offered	Haven't used in the past year	Poor	Fair	Neutral	Good	Excellent
High-performance computing/research computing services (e.g., supercomputers and clusters)							
Access to data scientists, other data analysts, and visualization specialists to help with data analysis, management, and visualization							
Institutional repository of intellectual output (e.g., publications, presentations, posters, preprints, etc.)							
Digital preservation and curation of research data							
New models for global research collaborations							
Support for finding and using open content (course materials, texts, data sets, etc.)							

2.4 How would you describe your overall technology experience at your institution?

- Poor
- Fair
- Neutral
- Good
- Excellent
- Don't know

2.5 Please tell us how much you agree or disagree with the following statements about *data/information privacy and security*:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Don't know
I have confidence in my institution's ability to safeguard my personal information.						
I have confidence in my institution's ability to safeguard student information.						
I have confidence in my institution's ability to safeguard my research data.						
In general, I have confidence in my institution's information security practices.						

I understand relevant university policies about data use, storage, and protection.						
My institution's privacy and security policies impede my productivity.						

2.6 Does your institution provide *mandatory or optional* information security training?

- No
- Yes, mandatory training
- Yes, optional training
- Don't know

2.7 In the past 12 months, have you participated in your institution's information security training?

<<if 2.6 = Yes>>

- No
- Yes
- Don't know

2.8 How useful was the information security training? <<if 2.7 = Yes>>

- Not at all useful
- Not very useful
- Moderately useful
- Very useful
- Extremely useful

2.9 How can your institution make information security training more useful? <<if 2.8 = Not at all useful, Not very useful>>

Section 3: Teaching and Learning

<<teaching faculty only>>

3.1 To what extent do you agree with the following statements about online learning?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Don't know
Online learning helps students learn more effectively.						
Online learning will lead to pedagogical breakthroughs.						
Online learning will make higher education available to more students.						
Online learning will make higher education more affordable for students.						
Online learning will reduce the numbers of faculty and teaching positions in higher education.						

3.2 What is ONE thing that your institution can do with technology to better facilitate or support your faculty *teaching* role?

3.3 When you need technology support or assistance for work-related activities, what do you typically do? Choose up to three items.

- Ask your friends
- Ask your family
- Ask your peers or colleagues
- Ask teaching or research assistants
- Ask your students
- Search Google, YouTube, or another online source
- Contact the company or vendor
- Use the college/university help desk services
- Figure it out on your own
- Other

3.4 To what extent do you agree with the following statements?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	N/A
My students are prepared to use institutionally specific technology (e.g., the course registration system, the LMS, the library search system).						
My students are prepared to use basic software programs and applications (e.g., MS Office, Google Apps, etc.).						
My students look to me or my teaching assistants for technology support to fulfill course requirements.						

3.5 How useful do you find these online services provided by your institution for your teaching and advising?

	Service not provided	Don't use service	Not at all useful	Not very useful	Moderately useful	Very useful	Extremely useful
Guidance about courses students might consider taking in the future, (e.g., "other courses you might like" or "we recommend" suggestions)							
Alerts if it appears a student's progress in a course is declining							
Suggestions for how to improve performance in a course if a student's progress is substandard							
Suggestions about new or different academic resources for your students (e.g., tutoring, skills-building opportunities, etc.)							

3.6 I could be a more effective instructor if I were better skilled at integrating this technology into my courses:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	N/A
LMS (e.g., Blackboard, Moodle, Sakai, D2L Brightspace, Canvas, etc.)						
Online collaboration tools to communicate/collaborate						
E-portfolios						
E-books or e-textbooks						
Free, web-based content to supplement course-related materials (e.g., OpenCourseWare, Khan Academy, iTunes U, YouTube, etc.)						
Simulations or educational games						
Lecture capture (i.e., recording lectures for later use/review)						
Students' <i>laptops</i> as a learning tool for course-related activities						
Students' <i>tablets</i> as a learning tool for course-related activities						
Students' <i>smartphones</i> as a learning tool for course-related activities						
Social media as a teaching and learning tool for course-related activities						
Software to create videos or multimedia resources as a learning tool in class or assignments						
Early-alert systems designed to catch potential academic trouble as soon as possible						
Search tools to find references or other information online for class work						
Publisher electronic resources (e.g., quizzes, assignments, tutorials, homework, practice problems)						
In-class polling tools (e.g., clickers, Poll Everywhere, SMS-based tools)						

3.7a Select up to three factors that would motivate you to integrate more or better technology into your teaching practices or curriculum:

- More/better technology-oriented professional development opportunities
- A monetary or other value-oriented incentive
- Tenure decisions and other professional advancement considerations
- Release time to design/redesign my courses
- Direct assistance from an instructional design expert to design/redesign my courses
- Direct assistance from IT staff to support the technology I choose to implement
- Assigning me a classroom that matches my educational technology needs
- Working in a faculty cohort or community that is adopting the same types of practices
- A better understanding of the types of technologies that are relevant to teaching and learning
- A better understanding of how to use student-owned technology during class for teaching and learning
- Confidence that the technology will work the way I plan
- Increased student expectations of technology integration

- Increased institutional expectations of technology integration
- Clear indication/evidence that students would benefit
- Other; please specify: _____

Section 4: Learning Environments

<<teaching faculty only>>

4.1 In what type of learning environment do you prefer to teach?

- One with no online components
- One with some online components
- About half online and half face-to-face
- One that is mostly but not completely online
- One that is completely online
- No preference

4.2a In the past 12 months, including the current term, how many for-credit *course sections* have you taught or are you currently teaching? <<dropdown max 20+>>

4.2b In the past 12 months, including the current term, how many for-credit *course sections* have you taught or are you currently teaching *in each of the following categories*? Please ensure the total matches your answer to 4.2a.

- _____ No online components, completely face-to-face components
- _____ Some online components, mostly face-to-face components
- _____ About half online and half face-to-face
- _____ Mostly online, some face-to-face components
- _____ Completely online, no face-to-face components

4.3a What types of activities or assignments do you prefer to have students do *online*? Why?

<<open-ended question>>

4.3b What types of activities or assignments do you prefer to have students do *face-to-face*? Why?

<<open-ended question>>

4.4 Which of the following best represents your opinion of the following instructional approaches in higher education?

	Completely opposed	Generally opposed, but willing to consider its place in higher education	Neutral	Generally supportive, but somewhat skeptical about its place in higher education	Completely supportive	Don't know
Competency-based education						
Badges or digital credentials						

Online degree programs						
Gamification						
Open educational resources (OER)						

4.5a Rate your satisfaction with the following classroom technologies at your institution:

	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	N/A
Availability of classrooms with multimedia equipment						
Reliability of equipment available						
General ease of use of instructor stations						
Computers in the instructor stations						
Software on the instructor-station computers						
Computer projection						
Audience response systems (clickers)						
Wireless access						

4.5b Rate your overall satisfaction with classroom technologies at your institution:

- Very dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very satisfied

4.6a What LMS do you typically use?

- I don't use an LMS at all.
- Blackboard Learn
- Canvas
- D2L Brightspace
- Moodle (Moodle Trust)
- Moodlerooms Joule
- Pearson eCollege
- Sakai
- Homegrown/locally developed LMS
- Other product; please specify: _____
- Don't know

4.6b Please indicate how you use the LMS. Select all that apply.

<<only ask if respondent uses an LMS>>

- To post a syllabus
- To push out information, such as handouts
- To push out and collect assignments and/or assessments
- To promote interaction outside the classroom by using discussion boards
- To teach partially online courses
- To teach completely online courses
- For the gradebook
- For committee work

4.7a Please indicate your satisfaction with the following aspects of the LMS:

<<only ask if respondent uses an LMS>>

	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	N/A
Ease of use in general						
Ease of use from a mobile device						
Engaging in meaningful interactions with students (e.g., via discussion boards, direct contact, or social-media connections)						
Initial use training						
Ongoing training/professional development						
Creating or posting content (e.g., syllabus, recorded lectures, supplemental learning materials, e-texts, podcasts, blogs)						
Importing content from a previous offering of the same course						
Managing assignments (e.g., due-date notifications, progress notifications, time-management tips)						
Monitoring or managing enrollments						
Entering student progress information (e.g., assignment grades/points, to-date cumulative grades/points)						
Receiving course assignments reliably						
Giving feedback on course assignments						
Integrating third-party content (e.g., reusable learning objects, materials from publishers)						
Integration with other institutional systems (e.g., for populating classes, gradebook use)						

4.7b Please indicate your overall satisfaction with the LMS: <<only ask if respondent uses an LMS>>

- Very dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Very satisfied

4.8 Please indicate your level of agreement with the following statements about the LMS:

<<only ask if respondent uses an LMS>>

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Don't know
The LMS is critical to my teaching.						
The LMS is a critical tool to enhance student learning.						

4.9 What is your typical in-class policy for the following mobile devices?

	Ban students from using it in the classroom	Discourage students from using it in the classroom	About equally discourage and encourage its use in the classroom	Encourage students to use it in the classroom	Require students to use it in the classroom
Smartphone					
Tablet					
Laptop					
Wearable technologies (e.g., fitness device, smart watch)					

Section 5: Technology for Research and Scholarship

<<research faculty only>>

5.1 To what extent do you agree with the following statements about your institution’s support for your research?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Not applicable to my research	Don't know
I receive adequate and appropriate support from IT staff to conduct my research.							
I have access to IT staff with specialized knowledge about research computing in support of my academic discipline.							
I have access to the specialized software/applications I need to conduct my research.							
I have access to the high-performance computing/research-computing services I need to conduct my research. (e.g., supercomputers and clusters).							
I receive adequate support for federally funded IT and cyberinfrastructure resources (e.g., Open Science Grid, XSEDE, iPlant, EarthCube, NCBI, etc.).							
My institution makes electronic laboratory notebooks (ELNs) available to those whose projects require them.							
I receive timely support from IT staff to conduct my research.							
My institution has appropriate procedures in place to ensure that faculty doing research are provided ongoing technology support throughout the promotion and tenure process.							

My institution provides effective technology support for grant-funded projects (e.g., data management, data security, etc.).							
My institution provides adequate technological resources to support cross-institutional research collaborations (e.g., Electronic Laboratory Network, Globus).							
My institution provides adequate technological support for depositing materials in an institutional repository.							
My institution provides adequate technological support for data curation.							
In general, I am satisfied with my institution's technological support for my research needs.							

5.2 What is ONE thing that your institution can do with technology to better facilitate or support your faculty *research* role?

5.3 Do you conduct what you consider to be data-intensive research?

- No
- Yes

5.4 How much data do you generate per year?

<<only ask if respondent conducts data-intensive research>>

- Don't know
- <1 terabyte (TB)
- 1–10 TB
- >10–100 TB
- >100 TB–1 petabyte (PB)
- >1 PB

5.5 To what extent do you agree with the following statements about your institution's support for your data-intensive research? <<only ask if respondent conducts data-intensive research>>

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Not applicable to my research	Don't know
I have adequate network bandwidth available to conduct my research activities.							
I have adequate data storage for my research initiatives.							
Most of my research data are stored in a cloud-based/virtual environment.							

IT professionals are proactive rather than reactive in responding to my research computing needs.							
The wait time for research computing consultation assistance is satisfactory.							
IT professionals play an integral part in providing research computing services for me/my research team.							
I have enough computational resources at my disposal to conduct my research.							
My institution provides adequate resources for data backup and data restore in the event of loss or corruption.							
I am generally satisfied with the provision of research computing technologies at my institution.							

Section 6: Demographic Questions

<<all respondents>>

6.1 How do you identify?

- Male
- Female
- Other
- Prefer not to answer

6.2 What is your age?

_____ Prefer not to answer

6.3 In what area(s) are the courses included in your current faculty load? Select all that apply.

- Agriculture and natural resources
- Biological/life sciences
- Business, management, marketing
- Communications/journalism
- Computer and information sciences
- Education, including physical education
- Engineering and architecture
- Fine and performing arts
- Health sciences, including professional programs
- Humanities
- Liberal arts/general studies
- Manufacturing, construction, repair, or transportation
- Physical sciences, including mathematical sciences
- Public administration, legal, social, and protective services
- Social sciences
- Other; please describe: _____

6.4 What is your ethnic background? Select all that apply. <<U.S. institutions only>>

- White
- Black/African American
- Hispanic/Latino
- American Indian/Native American/Alaskan native
- Asian/Pacific Islander
- Other
- Prefer not to answer

6.5 May we share your open-ended, written responses with your institution?

If you have included information in your written responses that could identify you, we suggest choosing "No."

- No <<preselected>>
- Yes

Please click the "Submit" button below to submit your survey. <<if desktop or laptop>>

Please tap the right arrow below to submit your survey. <<if phone or tablet>>

Thank you for responding to the 2017 ECAR faculty technology survey!