All U.S. Institutions

Colleges and universities use the EDUCAUSE Technology Research in the Academic Community (ETRAC) data to develop and support their strategic objectives for educational technology. With ETRAC data, institutions can understand and benchmark what students and faculty need and expect from technology. Institutions can use data to improve IT services, prioritize strategic contributions of IT to higher education, and become more technologically competitive among peers. There is no cost to participate, and campuses will have access to all research publications, the aggregate-level summary/benchmarking report, and the institution’s raw (anonymous) response data. Learn more at http://www.educause.edu/etrac.

DEVICE OWNERSHIP

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>48%</td>
<td>Own a desktop</td>
</tr>
<tr>
<td>69%</td>
<td>Own a laptop</td>
</tr>
<tr>
<td>65%</td>
<td>Own a tablet</td>
</tr>
<tr>
<td>93%</td>
<td>Own a smartphone</td>
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TECHNOLOGY SPACES, CONNECTIONS, AND SUPPORT SERVICES

Rate as good or excellent—technology-enabled learning/working spaces:
- Classroom-based technology resources (67%)
- Laboratory or research-based technology resources (61%)
- Physical collaborative spaces (68%)
- Online collaborative spaces (67%)

Rate as good or excellent—technology-enhanced connection and communication resources:
- Reliability of access to Wi-Fi networks throughout campus (66%)
- Communication technologies (e-mail and instant messaging) (80%)
- Videoconferencing technologies (59%)

Rate as good or excellent—technology support services:
- Technology support (72%)
- Technology support making courses accessible for faculty with disabilities (69%)
- Individualized consultations for using technology in teaching (67%)
- Professional development for integrating technology in teaching (58%)
- Professional development for integrating technology in research (54%)

Rate as good or excellent—other technology services:
- Support for finding and using open content (51%)
- High-performance computing/research-computing services (40%)
- Access to data scientists, analysts, and visualization specialists (35%)
- Digital preservation and curation of research data (43%)

PRIVACY AND SECURITY

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>74%</td>
<td>Have confidence in their institution’s ability to safeguard student information</td>
</tr>
<tr>
<td>65%</td>
<td>Have confidence in their institution’s ability to safeguard research data</td>
</tr>
<tr>
<td>76%</td>
<td>Understand relevant university policies about data use, storage, and protection</td>
</tr>
<tr>
<td>27%</td>
<td>Report that their institution provides mandatory information security training</td>
</tr>
<tr>
<td>14%</td>
<td>Report that their institution provides optional information security training</td>
</tr>
<tr>
<td>86%</td>
<td>Report that information security training was at least moderately useful</td>
</tr>
</tbody>
</table>

TEACHING AND LEARNING

Agree that online learning will:
- Help students learn more effectively (22%)
- Lead to pedagogical breakthroughs (36%)
- Make higher education available to more students (79%)
- Make higher education more affordable for students (44%)
- Reduce the numbers of faculty and teaching positions in higher education (43%)

Agree that students:
- Are prepared to use basic software programs and applications (67%)
- Are prepared to use institutionally specific technology (51%)
- Look to them or their teaching assistants for technology support to fulfill course requirements (59%)

Find the following online services at least moderately useful for teaching and advising:
1. Suggestions about new or different academic resources for your students (82%)
2. Alerts if it appears a student’s progress in a course is declining (77%)
3. Guidance about courses students might consider taking in the future (71%)
4. Suggestions for how to improve performance in a course if a student’s progress is substandard (71%)
Agree they could be more effective instructors if better skilled at integrating these technologies into their courses:
1. Software to create videos or multimedia resources as a learning tool in class or assignments (69%)
2. Free, web-based content to supplement course-related materials (64%)
3. Learning management system (64%)
4. Online collaboration tools to communicate/collaborate (64%)

Would be motivated to integrate more technology by these factors:
1. Clear indication/evidence that students would benefit (37%)
2. Release time to design/redesign my courses (34%)
3. Confidence that the technology will work the way I plan (28%)

Support these instructional approaches:
• Competency-based education (66%)
• Badges or digital credentials (35%)
• Online degree programs (48%)
• Gamification (40%)
• Open educational resources (64%)

LEARNING ENVIRONMENTS

Typically use the LMS:
1. To post a syllabus (88%)
2. To push out information, such as handouts (82%)
3. For the gradebook (78%)

Are most satisfied with these LMS aspects:
1. Creating or posting content (83%)
2. Receiving course assignments reliably (81%)
3. Managing assignments (75%)
4. Entering student progress information (75%)

Are most dissatisfied with these LMS aspects:
1. Ease of use from a mobile device (35%)
2. Initial use training (21%)
3. Integration with other institutional systems (20%)

Typically have this smartphone policy:
52% Ban or discourage students from using it in the classroom
21% Require or encourage students to use it in the classroom

Typically have this tablet policy:
24% Ban or discourage students from using it in the classroom
41% Require or encourage students to use it in the classroom

Typically have this laptop policy:
20% Ban or discourage students from using it in the classroom
48% Require or encourage students to use it in the classroom

RESEARCH AND SCHOLARSHIP

Among faculty conducting what they consider to be data-intensive research:
65% Have adequate network bandwidth to conduct research activities
58% Have adequate data storage for research initiatives
38% Agree most research data are stored in a cloud-based/virtual environment
45% Are generally satisfied with the provision of research-computing technologies

In 2017, ECAR collaborated with 157 institutions to collect responses from 13,451 faculty about their technology experiences. The research can catalyze conversations among IT professionals about how to better serve their constituents; among institutional leaders about how to use technology strategically; and among faculty about how to articulate their technology needs and expectations.

ECAR research on faculty and IT is conducted every other year, and all institutions are invited to participate for free. Participating institutions receive the annual research report; an aggregate-level summary/benchmarking report that compares the institution’s responses with other institutions’; and the raw (anonymous) data of the institution’s responses, allowing institutions to conduct further analyses.

For more information, or to confirm your intent to participate in the next survey, contact the EDUCAUSE research team at ecarsurvey@educause.edu.