Students and Faculty on Their IT Experience and Expectations: 2015 ECAR Findings

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EDUCAUSE Live!
Roadmap

- Project overview
- Setting the context
- Mobile technologies
- Analytics
- Wireless infrastructure
- New models for education
- Future work
Project overview
Thanks to Our Sponsor

EDUCAUSE
thanks the 2015 student study sponsor!
A series of ECAR studies that research technology experiences and expectations among students, faculty, and other populations of the academic community.
How does this work?

- ECAR
  - Conceptualizes
  - Operationalizes
  - Invites
  - Facilitates
  - Returns
  - Analyzes
  - Reports

- Institutions
  - Volunteer
  - Implement
  - Remind
  - Utilize
2015 STUDENT AND FACULTY TECHNOLOGY RESEARCH STUDIES

ECAR RESEARCH HUB
This hub contains the 2015 student and faculty studies from the EDUCAUSE Technology Research in the Academic Community research series. In 2015, ECAR collaborated with 139 institutions to collect responses from 13,276 faculty respondents across 12 countries about their technology experiences. ECAR also collaborated with 161 institutions to collect responses from 50,274 undergraduate students across 11 countries about their technology experiences.

STUDY OF FACULTY AND INFORMATION TECHNOLOGY, 2015
Authors: D. Christopher Brooks
Publication Date: October 2015 (unlinked items are forthcoming)

Subscribe to receive all ECAR research and analysis about IT in higher education.
Poll Question 1

Has your institution participated in the ECAR Student Study or ECAR Faculty Study?

- Yes, both
- Yes, the Student Study only
- Yes, the Faculty Study only
- Neither (not yet!)
- Don’t know
Setting the context
Student study participation overview

50,274 respondents
11 countries
43 states
161 institutions
Faculty study participation overview

- 139 institutions
- 13,276 respondents
- 39 states
- 107,017 invitees
Student and faculty IT orientation

Disposition score: 64
Attitude score: 71
Usage score: 73

Disposition score: 65
Attitude score: 68
Usage score: 75
Mobile devices
Faculty device ownership

- Smartphone only
- Smartphone and tablet
- Tablet only
- Laptop and tablet
- Laptop only
- Laptop and smartphone
- All three
- None

= 1 percent
Faculty views on mobile technology in the classroom

- Distracting for students
- Can enhance learning
- Would like more training
- Distracting for me
- Security/privacy concerns
- Assignments take advantage of mobile technologies
- Mobile learning an institutional priority

Percentage of respondents

- Agree
- Strongly agree
Faculty in-class BYOD policies and practices

- Smartphone
  - Ban: 25%
  - Discourage: 25%
  - Neither discourage nor encourage: 25%
  - Encourage: 25%
  - Require: 25%

- Wearable technology
  - Ban: 25%
  - Discourage: 25%
  - Neither discourage nor encourage: 25%
  - Encourage: 25%
  - Require: 25%

- Tablet
  - Ban: 25%
  - Discourage: 25%
  - Neither discourage nor encourage: 25%
  - Encourage: 25%
  - Require: 25%

- Laptop
  - Ban: 25%
  - Discourage: 25%
  - Neither discourage nor encourage: 25%
  - Encourage: 25%
  - Require: 25%
How students claim to use mobile technology in the classroom (versus faculty perceptions)
Questions?
Wireless infrastructure
Student device ownership history, with 2016 projections

- Laptop/Smartphone
- Tablet
- Internet-connected gaming device
- Desktop
- Wearable

ECAR study vs. Adult population ownership, Pew study
Poll Question 2

How many devices do your students try to connect to your network at the same time?

- None
- One
- Two
- Three or more
Percentage of students trying to connect devices to the network *at the same time*

- None: 7%
- Just one: 32%
- At least two: 61%
- Three or more: 11%
Student ratings of campus network and Wi-Fi performance

Campus Wi-Fi performance

- Overall: 58%

Campus network performance

- Overall: 50%
Student ratings of campus network and Wi-Fi performance

Campus Wi-Fi performance
- Living on-campus: 46%
- Overall: 58%

Campus network performance
- Living on-campus: 36%
- Overall: 50%
Student ratings of campus network and Wi-Fi performance

- **Campus Wi-Fi performance**
  - Living off-campus: 46%
  - Living on-campus: 58%
  - Overall: 61%

- **Campus network performance**
  - Living off-campus: 36%
  - Living on-campus: 50%
  - Overall: 54%
Faculty evaluation of institutional bandwidth and data storage

- Adequate network bandwidth
  - Strongly disagree
  - Disagree
  - Neither agree nor disagree
  - Agree
  - Strongly agree

- Adequate data storage
  - Strongly disagree
  - Disagree
  - Neither agree nor disagree
  - Agree
  - Strongly agree
Faculty satisfaction with classroom technologies

Availability of classrooms with multimedia equipment
Computer projection
General ease-of-use of podium systems
**Overall satisfaction**
Wireless access
Reliability of equipment available
Computers in the podiums
Software on the podium computers
Variety of software
Variety of equipment available
Refresh/update frequency of software
Refresh/update frequency of equipment
Audience response system (e.g., clickers)
Technology that supports open-learning classrooms

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Satisfied | Very satisfied
Questions?
Analytics
Faculty opinion about using specific types of student data

**Academic data**
- Progress toward degree or certificate goal
- Performance in current courses
- Performance in past courses
- Performance in individual courses compared to the performance of other students in those courses

**Extracurricular data**
- Activity in a specific application or service provided by the college or university
- Activity on a college or university website
- Campus-based activities logged through student ID/smart cards
- Campus-based activities logged through smartphones
- Proximity to a college building, office, or resource
- Location on campus
- Social media activities

Percentage of respondents who say collecting these kinds of data is a good idea
Student opinion about using specific types of student data

- Progress toward your degree or certificate goal
- Performance in current courses
- Performance in past courses
- Performance in individual courses compared to the performance of other students
- Activity in a specific application or service provided by the college or university
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- Campus-based activities logged through your student ID/smart card
- Campus-based activities logged through your smartphone
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- Location on campus
- Social media activities

Percentage of respondents

Good idea
Very good idea
Student opinion about using specific types of student data

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Percentage of respondents

- Good idea
- Very good idea
Student opinion about using specific types of student data

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Helpful “big mother”

Percentage of respondents

- Good idea
- Very good idea
Student opinion about using specific types of student data

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Helpful “big mother”
Creepy “big brother”

Percentage of respondents

Good idea
Very good idea

ECAR
Faculty views on collecting and using student data

Use the data institutions collect from/about students to create individualized messages about academic progress, training, and guidance opportunities.

Combine the data institutions have about students' school-related activities with social-media and mobile-device data to enhance students' academic experiences, assess intervention strategies, or tailor offerings to meet student needs and expectations.
Faculty evaluation of the usefulness of interest in IPAS features

- Suggestions about new or different academic resources for your students
- 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
- Personalized support and information on your students’ progress toward their degree goals
- Personalized dashboards that give students real-time feedback about their progress in a course
- Personalized dashboards that give you real-time feedback about students’ progress in a course
- Guidance about courses students might consider taking in the future
- Personalized quizzes or practice questions oriented to your students’ strengths or weaknesses
- Automated tracking of your students' course attendance via college/university ID card scanners
### Student interest in IPAS features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Interest (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personalized support and information on degree progress</td>
<td>92%</td>
</tr>
<tr>
<td>Personalized dashboards that give you real-time feedback about your progress</td>
<td>89%</td>
</tr>
<tr>
<td>Suggestions for how to improve performance</td>
<td>88%</td>
</tr>
<tr>
<td>Personalized quizzes or practice questions</td>
<td>88%</td>
</tr>
<tr>
<td>Real-time feedback for your instructor about your performance or progress</td>
<td>88%</td>
</tr>
<tr>
<td>Guidance about courses you might consider taking</td>
<td>87%</td>
</tr>
<tr>
<td>Alerts if it appears your progress in a course is declining</td>
<td>86%</td>
</tr>
<tr>
<td>Suggestions about new or different academic resources</td>
<td>84%</td>
</tr>
<tr>
<td>Feedback about performance compared to that of other students</td>
<td>82%</td>
</tr>
</tbody>
</table>
Questions?
New models for education
Faculty experience teaching in technology-enhanced environments

Percentage of respondents

- **Blended**: None: 25%, A few: 50%, About half: 25%
- **Completely online**: None: 25%, A few: 50%, About half: 25%
- **Flipped**: None: 25%, A few: 25%, About half: 50%

Legend:
- None
- A few
- About half
- Nearly all
- All

ECAR
Students’ blended course experiences

How many of your courses/learning environments employed a combination of online and face-to-face interaction?

- None
- A few
- About half
- Nearly all
- All

Percentage of respondents
Students’ top 5 preferences for online or face-to-face assignments and activities

<table>
<thead>
<tr>
<th></th>
<th>Online</th>
<th>Face-to-face</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes and tests</td>
<td>33%</td>
<td>Lectures</td>
</tr>
<tr>
<td>Homework</td>
<td>25%</td>
<td>Discussions / Q &amp; A</td>
</tr>
<tr>
<td>Writing assignments</td>
<td>12%</td>
<td>Quizzes and tests</td>
</tr>
<tr>
<td>Discussions, group work</td>
<td>11%</td>
<td>Any/all activities</td>
</tr>
<tr>
<td>Paper/assignment submission</td>
<td>9%</td>
<td>Projects/group projects</td>
</tr>
</tbody>
</table>
Students’ experiences with MOOCs

- 74% of students don’t know what a MOOC is.
- 17% know what a MOOC is but haven’t taken one.
- 9% have taken a MOOC.
- 5% successfully completed the MOOC.

= 1 percent
Student intent for various credentials on their résumés

- Undergraduate degree or diploma: 100%
- Jobs worked during college: 80%
- Certificate from an accredited college or university program: 70%
- Major course projects: 50%
- Certificate from an industry-based training program: 40%
- Certificate of completion of freely available course content: 30%
- E-portfolio: 20%
- Digital (competency-based) badge: 10%
Questions?
Future work
A series of ECAR studies that research technology experiences and expectations among students, faculty, and other populations of the academic community.
Get involved in this UX research

Questions?
Thank you!

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