Students & Technology

2014 Educause Center for Applied Research (ECAR) Study of Undergraduate Students
CORE DATA SERVICE
CDS SURVEY
institutional practices

ECAR FACULTY STUDY
faculty experiences

ECAR STUDENT STUDY
student experiences
Student Demographics

Survey Statistics:

- UNM ($n = 418$

- All US Institutions ($n = 65,630$)

  (Across 45 States & 15 Countries)
Demographics (Continued)

**Age**
- 18-24: 24%
- 25+: 76%

**Gender**
- Male: 61%
- Female: 36%
- Other / No Answer: 3%

**Class Standing**
- Freshman / 1st Year: 36%
- Sophomore / 2nd Year: 20%
- Junior / 3rd Year: 17%
- Senior / 4th Year: 25%
- Other:

*UNM (n = 418)*
Demographics (Continued)

Enrollment Status
- Full-Time: 86%
- Part-Time: 14%

On / Off Campus
- On Campus: 77%
- Off Campus: 23%

Ethnicity
- White: 44%
- Black/African American: 9%
- Hispanic: 32%
- Asian/Pacific Islander: 8%
- American Indian or Alaskan Native: 4%
- Other / No Answer: 3%

UNM (n = 418)
Device Ownership

- **Laptop**
  - Yes: 94%
  - No: 7%

- **Tablet**
  - Yes: 49%
  - No: 51%

- **Smartphone**
  - Yes: 86%
  - No: 14%

- **e-Reader**
  - Yes: 78%
  - No: 22%

*UNM (n = 418)*
Internet-Capable Device Usage

UNM

- 7% None
- 29% One
- 40% Two
- 13% Three
- 4% Four
- 6% Five

All US Institutions

- 7% None
- 35% One
- 33% Two
- 13% Three
- 4% Four
- 7% Five

UNM (n = 418); All US Institutions: 65,630
Experiences with IT

Students rate themselves positively on disposition, attitude and usage scales (tech inclination) and fall in line with National averages.

Disposition Towards IT
(Reluctant v. Enthusiast)
- UNM: 70.9%
- All US Institutions: 70.8%

Attitude Towards IT
(Dissatisfied v. Satisfied)
- UNM: 67.8%
- All US Institutions: 68.7%

Usage of IT
(Never v. Always Connected)
- UNM: 75.8%
- All US Institutions: 75.5%

UNM (n = 418); All US Institutions: 65,630
In-Class Experience

UNM (n = 418)
In-Class Experience (Continued)

“Wish instructors used…” (1/2)

UNM (n = 418)
### In-Class Experience (Continued)

“Wish instructors used…” (2/2)

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*UNM (n = 418)*
In-Class Experience (Continued)

“I get more actively involved in courses that use technology…”

UNM

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All US Institutions

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UNM (n = 418); All US Institutions: 65,630
In-Class Experience (Continued)

“I am more likely to skip classes when materials are available online…”

![Bar Chart](chart.png)

UNM (n = 418); All US Institutions: 65,630
More students than ever have experienced a digital learning environment.

UNM (n = 418); All US Institutions: 65,630
Technology & Connections

“Technology makes me feel more connected to…”

**Students**
- UNM: 49.6% Agree
- All US Institutions: 50% Agree

**Instructors**
- UNM: 53% Agree
- All US Institutions: 51.9% Agree

**Institution**
- UNM: 61.2% Agree
- All US Institutions: 64.1% Agree

*UNM (n = 418); All US Institutions: 65,630*
Key Findings

Learning Environments:

• More students than ever have experienced a digital learning environment. The majority say they learn best with a blend of online and face-to-face work.
• Today’s undergraduates want a mobile-friendly, highly personalized, and engaging LMS experience.
• Most students support institutional use of their data to advise them on academic progress in courses and programs.
• Students still view traditional college degrees as the gold standard for résumés. Few students would include digital badges, e-portfolios, or competency credentials on their résumés.
• Students still have a complex relationship with technology; they recognize its value, but they still need guidance when it comes to using technology in meaningful and engaging ways for academics.
Some Teaching and Learning Conclusions

• Although students are generally tech inclined, **they do not necessarily use technology to the full extent in supporting or enhancing their academic endeavors.**

• Students’ academic use of technology is **widespread but not deep.**

• Students look to diverse sources for technology support.

• Students operate in a diverse, consumer-oriented market for technology, and institutions must provide infrastructure for the **bring-your-own-everything culture**.
Faculty & Technology
2014 ECAR Study of Faculty Members
Faculty Demographics

Survey Statistics:
• UNM ($n = 333$)
• All US Institutions ($n = 15,160$)
  ➡️ (Across 39 States & 13 Countries)
Demographics (Continued)

Gender
- Male: 53%
- Female: 44%
- Other / No Answer: 3%

Full / Part-Time
- Full-Time: 73%
- Part-Time: 27%

Ethnicity
- White: 67%
- Black/African American: 14%
- Hispanic: 9%
- American Indian or Alaskan Native: 5%
- Asian/Pacific Islander: 3%
- Other / No Answer: 2%

UNM (n = 333)
Experiences with IT

Faculty have fairly positive dispositions and usage in regards to IT. Their attitude towards IT could be improved.

Disposition Towards IT
(Delugent v. Enthusiast)

UNM: 72.3%
All US Institutions: 74.2%

Attitude Towards IT
(Dissatisfied v. Satisfied)

UNM: 59.2%
All US Institutions: 68%

Usage of IT
(Never v. Always Connected)

UNM: 79.5%
All US Institutions: 81.2%

UNM (n = 333); All US Institutions (n = 15,160)
My Institution…

“Improves student outcomes through technology…”

- Agree: 49%
- Disagree: 17%
- Neutral: 35%

UNM (n = 333); All US Institutions (n = 15,160)
Experience with...

- **Classroom Technologies**
  - N/A: 7%
  - Poor: 10%
  - Fair: 21%
  - Neutral: 11%
  - Good: 42%
  - Excellent: 10%

- **Lab / Research Technology**
  - N/A: 30%
  - Poor: 7%
  - Fair: 15%
  - Neutral: 13%
  - Good: 30%
  - Excellent: 6%

- **Physical Collaborative Spaces**
  - N/A: 25%
  - Poor: 9%
  - Fair: 19%
  - Neutral: 16%
  - Good: 22%
  - Excellent: 10%

- **Online Collaborative Spaces**
  - N/A: 20%
  - Poor: 11%
  - Fair: 23%
  - Neutral: 20%
  - Good: 22%
  - Excellent: 5%

- **Reliable WiFi Access**
  - N/A: 3%
  - Poor: 20%
  - Fair: 21%
  - Neutral: 12%
  - Good: 33%
  - Excellent: 11%

- **Technology Support**
  - N/A: 6%
  - Poor: 12%
  - Fair: 24%
  - Neutral: 16%
  - Good: 31%
  - Excellent: 12%

*UNM (n = 333)*
Online Learning…

- Helps students learn more effectively:
  - Strongly Disagree: 16%
  - Disagree: 24%
  - Neutral: 31%
  - Agree: 18%
  - Strongly Agree: 7%

- Lead to pedagogical breakthroughs:
  - Strongly Disagree: 14%
  - Disagree: 19%
  - Neutral: 34%
  - Agree: 21%
  - Strongly Agree: 9%

- Will make higher ed. available to more students:
  - Strongly Disagree: 4%
  - Disagree: 6%
  - Neutral: 17%
  - Agree: 53%
  - Strongly Agree: 18%

*UNM (n = 333)*
Devices in Class…

In-class policy for devices

- Smartphone: 34% Banned, 10% Discouraged, 9% Neither Discourage / Encourage, 6% Encourage, 5% Require
- Tablet: 48% Banned, 48% Discouraged, 8% Neither Discourage / Encourage, 8% Encourage, 24% Require
- Laptop: 48% Banned, 32% Discouraged, 8% Neither Discourage / Encourage, 59% Encourage, 13% Require

UNM (n = 333)
Devices in Class… (Continued)

“Enhance learning…”

UNM

Don’t Know | Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree
--- | --- | --- | --- | --- | ---
11% | 13% | 26% | 38% | 10%

All US Institutions

Don’t Know | Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree
--- | --- | --- | --- | --- | ---
8% | 10% | 25% | 42% | 11%

UNM (n = 333); All US Institutions (n = 15,160)
Devices in Class… (Continued)

“(Mobile devices) are distracting…”

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UNM (n = 333); All US Institutions (n = 15,160)
Devices in Class… (Continued)

“I'd like more training on incorporating mobile devices intro my courses…”

Don’t Know | Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree
---|---|---|---|---|---
UNM | 7% | 17% | 26% | 37% | 9%
All US Institutions | 7% | 14% | 23% | 38% | 13%
“I create assignments that take advantage of mobile technologies…”

**UNM (n = 333); All US Institutions (n = 15,160)**

- **Don’t Know**
- **Strongly Disagree**
- **Somewhat Disagree**
- **Neutral**
- **Somewhat Agree**
- **Strongly Agree**
Mobile Devices for Academics

Issues

• Few instructors (30%) create assignments that incorporate mobile technology, suggesting there is **not a widespread strategy for leveraging personal mobile technology in the classroom.**

• Many instructors (67%) agree that **in-class use of mobile devices is distracting**, with over half (55%) banning or discouraging their use.

• About half of **undergraduates** (47%) are also concerned that in-class use of **mobile devices can be distracting.**

• Few undergraduates have experience using personal devices with regularity across courses (31% of laptop owners, 19% of smartphone owners, and 25% of tablet owners use their devices in most or all of their courses), suggesting either they are not allowed to use these in class or don’t see the value in using these devices.
Faculty recognize that online learning opportunities can promote access to higher education but are more reserved in their expectations for online courses to improve outcomes.

Faculty interest in early-alert systems and intervention notifications is strong.

The majority of faculty are using basic features and functions of LMSs but recognize that these systems have much more potential to enhance teaching and learning.

Faculty think they could be more effective instructors if they were better skilled at integrating various kinds of technology into their courses.

Faculty recognize that mobile devices have the potential to enhance learning.

UNM (n = 333); All US Institutions (n = 15,160)
Some Teaching and Learning Conclusions

Develop a targeted approach to professional development, including specific faculty and specific technologies, with the intent to integrate technology into coursework.

Assess your institutional capacity to support the proliferation of mobile devices from an infrastructure perspective and a teaching and learning perspective, and create specific strategies to achieve the desired outcomes for each.

Equip classroom and laboratory spaces with reliable, up-to-date software and hardware.

Reconcile your technology support offerings with faculty technology support needs (and satisfaction levels) to ensure that resources are expended wisely.
Top Motivators for Faculty to use Technology in Class

Evidence that students would **benefit**

**Release time** to redesign courses

Confidence that technology would **work** as planned

A better understanding of teaching and learning **relevant** technologies
Links

UNM CIO Website:  http://cio.unm.edu/evaluation/index.html

ECAR Student Survey Document:  

ECAR Faculty Survey Document:  

UNM (n = 333); All US Institutions (n = 15,160)