

UW-Madison Results

2009 ECAR Student Study

Prepared by Judy Borreson Caruso

The University of Wisconsin-Madison participated in the EDUCAUSE Center for Applied Research Study of Undergraduate Students and Information Technology, 2009. During the spring semester of 2009, 1000 UW-Madison freshmen and 1000 seniors were invited to participate. A total of 301 students responded to the study's survey. Other 4 year institutions include 27,793 student responses from 134 institutions in the U.S. and Canada. Term used in the survey is "handheld device capable of accessing the Internet (iPhone, Treo, BlackBerry, other Internet-capable cell phone, iPod touch, PDA, Pocket PC, etc.)"

This document presents UW-Madison results in this order:

- 1. Summary of: Ownership and Use of Handheld Internet-capable Devices**

- 2. Summary of: Experiences with Technology Use in Courses**

- 3. Detail responses for all questions for seniors and freshmen and detail responses comparing UW-Madison to other participating institutions, when the UW-Madison responses differ significantly from the other institution responses.**

Ownership and Use of Handheld Internet-capable Devices of UW-Madison Undergraduate Students

What is your opinion about the following statements?

AGREE and STRONGLY AGREE	Senior (N=144)	Freshman (N=117)	Other (N=40)	Total (N=301)
While I'm in class I regularly use my cell phone or handheld Internet device for course activities (texting, Internet access, etc.)	7.0%	7.7%	2.5%	6.7%
While I'm in class, I regularly use my cell phone or handheld Internet device for non-course activities (texting, Internet access, playing games, etc.)	35.0%	43.6%	25.0%	37.0%
Instructors should have the authority to forbid the use of cell phones and handheld Internet devices during class time.	42.4%	31.6%	52.5%	39.5%
In the next three years, I expect to do many things on a cell phone or handheld Internet device that I currently do on a laptop or desktop computer.	50.0%	43.5%	32.5%	45.2%

What keeps you from using the Internet, or using it more often, from a handheld device? Check up to 3.

Plenty of other ways to access the Internet	51.5%
Cost of the data service	48.8%
Cost of the handheld device	43.5%
Device usability issues (small screen, keyboard, etc.)	22.3%
No compelling reason to access the Internet	18.3%
Network connection too slow	16.3%
Limited access to the network (e.g., hot spots, wireless carrier coverage)	13.6%
Cost of applications that are useful to me	12.3%
Inadequate battery life	10.3%
Other	5.6%
Lack of applications that are useful to me	4.0%
Concern about the security/privacy problems of mobile technology	3.7%
Concern about the potential health problems of mobile technology	1.0%

- **Ownership of Internet-capable handheld device:** 46.5% of the freshmen and seniors own a handheld device that is capable of accessing the Internet. Another 11.3% of students plan to purchase one in the next 12 months. Freshmen (50.4%) are more likely to own the device than seniors (43.8%).

For those 140 respondents who own a handheld device:

- **Use of the Internet from handheld device:** 27.9% use the Internet from their handheld device daily; another 11.4% use it several times per week; 11.4% use it weekly. 33.6% do not use the Internet from their device. The net result is that, of the 301 respondents, only 93 respondents ever use the Internet from their handheld device (30.9%).

For those 93 respondents who own a handheld device and use the Internet (30.9% of all respondents):

- **Median hours of use:** For those who use the Internet from their handheld device weekly or more often (N=71), median use is 1 hour/week.

Which of these Internet activities do you do from your handheld device?

	Senior (N=47)	Freshman (N=37)	Other (N=9)	Total (N=93)
Instant message	38.3%	48.6%	33.3%	41.9%
E-mail	76.6%	67.6%	88.9%	74.2%
Report what you're doing on Twitter	6.4%	2.7%	0.0%	4.3%
Use social networking websites (Facebook, MySpace, Bebo, etc.)	70.2%	78.4%	44.4%	71.0%
Check information (news, weather, sports, specific facts, etc.)	89.4%	78.4%	88.9%	84.9%
Read or contribute to blogs	10.6%	10.8%	0.0%	9.7%
Use maps (e.g., find places, get directions or plan routes)	68.1%	56.8%	77.8%	64.5%
Conduct personal business (banking, shopping, etc.)	19.1%	13.5%	22.2%	17.2%
Use Internet photo sites	6.4%	10.8%	0.0%	7.5%
Watch mobile TV	10.6%	16.2%	22.2%	14.0%
Download/stream music	31.9%	21.6%	22.2%	26.9%
Download or watch videos online	14.9%	13.5%	11.1%	14.0%
Download or play games online	12.8%	21.6%	11.1%	16.1%

- **Expected growth in use:** Over 73% of handheld device student owners expect their use of the Internet from their device to increase or greatly increase over the next three years.
- **Use of the Internet from handheld device when a networked computer is available:** Only 10.7% of students said they often or very often use the Internet from their handheld device when a networked computer was easily available.

Which of your institution's IT services would you be most likely to use if they were available on your handheld Internet device? Check up to 3.

	Senior (N=47)	Freshman (N=37)	Other (N=9)	Total (N=93)
E-mail system	74.5%	67.6%	77.8%	72.0%
Campus information (news, events, map, directory, bus routes, handbook, etc.)	44.7%	35.1%	66.7%	43.0%
Student administrative services (official grades, registration, etc.)	31.9%	45.9%	33.3%	37.6%
Use as clickers for course polling and quizzing	25.5%	37.8%	22.2%	30.1%
Payment for things on campus (e.g., vending machines, food services)	23.4%	18.9%	55.6%	24.7%
Download/stream course lectures (podcasts)	21.3%	29.7%	11.1%	23.7%
Course or learning management system (Blackboard, WebCT, Desire2Learn, Sakai, an institution-specific system etc.)	23.4%	10.8%	22.2%	18.3%
Library services	10.6%	10.8%	11.1%	10.8%

Experiences with Technology Use in Courses of UW-Madison Undergraduate Students

What best describes your preference?

	UW-Madison Total
I prefer taking courses that use <i>no</i> information technology.	1.3%
I prefer taking courses that use <i>limited</i> information technology.	12.0%
I prefer taking courses that use a <i>moderate level</i> of information technology.	65.2%
I prefer taking courses that use information technology <i>extensively</i> .	19.7%
I prefer taking courses that use information technology <i>exclusively</i> .	1.7%

Are you using the following for any of your courses this quarter/semester?

	UW Total (N=301)
College/university library website	73.8%
Course or learning management system	70.4%
Presentation software (PowerPoint, etc.)	52.8%
Spreadsheets (Excel, etc.)	52.5%
Social networking websites (Facebook, MySpace, Bebo, LinkedIn, etc.)	26.9%
Wikis	22.9%
Instant messaging	17.6%
Podcasts	15.6%
Graphics software (Photoshop, Flash, etc.)	13.3%
Discipline-specific technologies (Mathematica, AutoCAD, STELLA, etc.)	11.6%
Blogs	11.6%
Simulations or educational games	9.0%
Programming languages (C++, Java, etc.)	6.6%
Video-creation software (MovieMaker, iMovie, etc.)	5.6%
Audio-creation software (Audacity, GarageBand, etc.)	4.0%
E-portfolios	3.7%
Online virtual worlds (Second Life, Foreterra, etc.)	0.0%

How many of your instructors:

How many of your instructors:	Almost none	Some	About half	Most	Almost all	Don't know
Use information technology (IT) effectively in courses	1.4%	22.9%	24.3%	31.9%	18.1%	1.4%
Provide students with adequate training for the IT the instructor uses in his or her course	15.4%	31.5%	13.3%	22.4%	11.2%	6.3%
Have adequate IT skills for carrying out course instruction	3.5%	23.8%	19.6%	31.5%	19.6%	2.1%

What is your opinion about the following statements?

	UW Total (N=299)
I get more actively involved in courses that use IT.	
Strongly disagree/disagree	15.7%
Neutral	47.5%
Strongly agree/agree	36.8%
The use of IT in my courses improves my learning.	
Strongly disagree/disagree	9.4%
Neutral	38.4%
Strongly agree/agree	52.2%
IT makes doing my course activities more convenient.	
Strongly disagree/disagree	5.0%
Neutral	21.2%
Agree	73.7%
By the time I graduate, the IT I have used in my courses will have adequately prepared me for the workplace.	
Strongly disagree/disagree	15.8%
Neutral	38.3%
Strongly agree/agree	45.9%
My institution's IT services are always available when I need them for my coursework.	
Strongly disagree/disagree	11.6%
Neutral	31.5%
Strongly agree/agree	57.0%
I skip classes when materials from course lectures are available online.	
Strongly disagree/disagree	62.1%
Neutral	21.8%
Strongly agree/agree	16.1%

Detail Responses

Age of Personal Desktop Computer

	UW Senior (N=144)	UW Freshman (N=117)	UW Other (N=40)	UW Total (N=301)
Don't own a desktop computer	73.6%	55.2%	72.5%	66.3%
Less than 1 year old	2.8%	1.7%	2.5%	2.3%
1 year old	2.1%	2.6%		2.0%
2 years old	1.4%	4.3%	7.5%	3.3%
3 years old	4.9%	6.9%	5.0%	5.7%
4 years old	9.0%	12.1%	2.5%	9.3%
More than 4 years old	6.3%	17.2%	10.0%	11.0%

Age of Personal Laptop Computer

Don't own a laptop computer	11.1%	1.7%	5.0%	6.7%
Less than 1 year old	19.4%	67.2%	12.5%	37.0%
1 year old	11.1%	12.9%	12.5%	12.0%
2 years old	14.6%	5.2%	12.5%	10.7%
3 years old	14.6%	3.4%	45.0%	14.3%
4 years old	25.7%	3.4%	7.5%	14.7%
More than 4 years old	3.5%	6.0%	5.0%	4.7%

Approximately how many hours each week do you spend actively doing Internet activities for school, work, or recreation? Categories.

	UW Senior (N=144)	UW Freshman (N=117)	UW Other (N=40)	UW Total (N=301)
0 to 5	5.6%	10.3%	5.0%	7.4%
6 to 10	13.3%	19.0%	20.0%	16.4%
11 to 15	22.4%	18.1%	27.5%	21.4%
16 to 20	16.1%	19.8%	10.0%	16.7%
21 to 25	14.0%	10.3%	2.5%	11.0%
26 to 30	13.3%	6.9%	10.0%	10.4%
31 to 35	2.1%	6.9%	5.0%	4.3%
36 to 40	6.3%	1.7%	2.5%	4.0%
More than 40	7.0%	6.9%	17.5%	8.4%
Total	100.1%	99.9%	100.0%	100.0%

How often do you do the following for school, work or recreation?

	Never	Once per year	Once per quarter or semester	Monthly	Weekly	Several times per week	Daily
Social networking websites (Facebook, MySpace, Bebo, LinkedIn, etc.)	3.7%	0.0%	0.3%	3.0%	5.3%	13.0%	74.7%
Text message	8.3%	1.0%	1.7%	3.3%	7.6%	14.6%	63.5%
Instant message	18.6%	2.7%	7.0%	11.0%	16.9%	19.6%	24.3%
Use the college/university library website	3.7%	1.3%	13.0%	29.7%	20.0%	11.7%	20.7%
Download web-based music or videos	17.5%	0.0%	10.0%	25.0%	17.5%	20.0%	10.0%
Spreadsheets (Excel, etc.)	11.0%	8.3%	17.3%	21.3%	21.9%	14.6%	5.6%
Social bookmarking/tagging (del.icio.us, etc.)	80.7%	2.3%	3.0%	3.7%	3.3%	2.0%	5.0%
Presentation software (PowerPoint, etc.)	10.0%	9.0%	28.6%	27.2%	14.0%	8.6%	2.7%
Podcasts	46.3%	6.3%	13.7%	17.7%	8.0%	5.3%	2.7%
Online multi-user computer games (World of Warcraft, Everquest, poker, etc.)	71.4%	5.3%	6.0%	7.3%	3.0%	4.7%	2.3%
Graphics software (Photoshop, Flash, etc.)	25.8%	13.7%	16.4%	23.1%	12.4%	6.7%	2.0%
Voice over Internet Protocol (VoIP) from your computer (Skype, etc.)	50.0%	7.0%	8.7%	15.3%	10.0%	7.0%	2.0%
Audio-creation software (Audacity, GarageBand, etc.)	66.8%	11.4%	8.1%	7.0%	4.0%	2.0%	0.7%
Video-creation software (MovieMaker, iMovie, etc.)	61.5%	15.3%	12.0%	6.6%	2.7%	1.3%	0.7%
Online virtual worlds (Second Life, Forterra, etc.)	94.4%	3.3%	0.7%	1.0%	0.3%	0.0%	0.3%

How often do you contribute content to the following for school, work, or recreation?

	Never	Once per year	Once per quarter or semester	Monthly	Weekly	Several times per week	Daily
Wikis	58.1%	5.3%	3.0%	9.6%	9.0%	9.6%	5.3%
Blogs	66.4%	3.3%	7.3%	11.3%	5.0%	3.0%	3.7%
Video websites	61.7%	5.3%	5.7%	8.3%	6.7%	6.7%	5.7%

Which best describes you?

	UW Senior (N=144)	UW Freshman (N=116)	UW Other (N=39)	UW Total (N=299)
I prefer taking courses that use no information technology.	0.7%	2.6%	0.0%	1.3%
I prefer taking courses that use limited information technology.	12.5%	11.2%	12.8%	12.0%
I prefer taking courses that use a moderate level of information technology.	61.8%	70.7%	61.5%	65.2%
I prefer taking courses that use information technology extensively.	25.0%	13.8%	17.9%	19.7%
I prefer taking courses that use information technology exclusively.	0.0%	1.7%	7.7%	1.7%

What is your skill level for the following?

	UW Senior (N=144)	UW Freshman (N=116)	UW Other (N=39)	UW Total (N=299)
Very skilled/expert				
Using the college/university library website.	39.6%	32.8%	35.9%	36.5%
Spreadsheets (Excel, etc.)	40.6%	24.1%	51.3%	35.6%
Presentation software (PowerPoint, etc.)	41.0%	50.0%	58.2%	46.8%
Graphics software (Photoshop, Flash, etc.)	11.1%	22.6%	20.6%	16.8%
Computer maintenance (software updates, security, etc.)	21.0%	20.2%	38.5%	26.8%
Using the Internet to effectively and efficiently search for information.	80.6%	76.4%	71.8%	77.9%
Evaluating the reliability and credibility of online sources of information	61.8%	54.9%	53.8%	58.1%
Understanding the ethical/legal issues surrounding the access to and use of digital information.	42.4%	45.7%	33.3%	42.5%

* Choices were not at all skilled, not very skilled, fairly skilled, very skilled, expert.

Are you using the following for any of your courses this quarter/semester?

	UW Senior (N=144)	UW Freshman (N=117)	UW Other (N=40)	UW Total (N=301)
College/university library website	72.2%	71.8%	85.0%	73.8%
Presentation software (PowerPoint, etc.)	63.9%	37.6%	57.5%	52.8%
Spreadsheets (Excel, etc.)	61.1%	43.6%	47.5%	52.5%
Social networking websites (Facebook, MySpace, Bebo, LinkedIn, etc.)	19.4%	39.3%	17.5%	26.9%
Wikis	18.8%	28.2%	22.5%	22.9%
Instant messaging	12.5%	25.6%	12.5%	17.6%
Podcasts	17.4%	16.2%	7.5%	15.6%
Graphics software (Photoshop, Flash, etc.)	14.6%	11.1%	15.0%	13.3%
Discipline-specific technologies (Mathematica, AutoCAD, STELLA, etc.)	13.2%	5.1%	25.0%	11.6%
Blogs	13.9%	11.1%	5.0%	11.6%
Simulations or educational games	7.6%	9.4%	12.5%	9.0%
Programming languages (C++, Java, etc.)	4.9%	4.3%	20.0%	6.6%
Video-creation software (MovieMaker, iMovie, etc.)	8.3%	1.7%	7.5%	5.6%
Audio-creation software (Audacity, GarageBand, etc.)	4.9%	2.6%	5.0%	4.0%
E-portfolios	4.9%	0.9%	7.5%	3.7%
Online virtual worlds (Second Life, Forterra, etc.)	0.0%	0.0%	0.0%	0.0%

	UW Total (N=301)	Other Total (N=27624)
College/university library website	73.8%	74.4%
Presentation software (PowerPoint, etc.)	52.8%	67.8%
Spreadsheets (Excel, etc.)	52.5%	47.5%
Social networking websites (Facebook, MySpace, Bebo, LinkedIn, etc.)	26.9%	28.6%
Wikis	22.9%	25.5%
Instant messaging	17.6%	18.7%
Podcasts	15.6%	5.8%
Graphics software (Photoshop, Flash, etc.)	13.3%	15.6%
Discipline-specific technologies (Mathematica, AutoCAD, STELLA, etc.)	11.6%	11.1%
Blogs	11.6%	11.6%
Simulations or educational games	9.0%	10.2%
Programming languages (C++, Java, etc.)	6.6%	11.4%
Video-creation software (MovieMaker, iMovie, etc.)	5.6%	6.2%
Audio-creation software (Audacity, GarageBand, etc.)	4.0%	5.1%
E-portfolios	3.7%	7.1%
Online virtual worlds (Second Life, Forterra, etc.)	0.0%	1.2%

How many of your instructors:

	UW Senior (N=144)	UW Freshman (N=117)	UW Other (N=40)	UW Total (N=301)
Use information technology (IT) effectively in courses				
Almost none	1.4%	8.5%	7.5%	5.0%
Some	22.9%	22.2%	22.5%	22.6%
About half	24.3%	19.7%	25.0%	22.6%
Most	31.9%	24.8%	30.0%	28.9%
Almost all	18.1%	17.1%	15.0%	17.3%
Don't know	1.4%	7.7%	0.0%	3.7%
Provide students with adequate training for the IT the instructor uses in his or her course				
Almost none	15.4%	19.7%	28.2%	18.7%
Some	31.5%	34.2%	25.6%	31.8%
About half	13.3%	7.7%	10.3%	10.7%
Most	22.4%	23.1%	23.1%	22.7%
Almost all	11.2%	7.7%	5.1%	9.0%
Don't know	6.3%	7.7%	7.7%	7.0%
Have adequate IT skills for carrying out course instruction				
Almost none	3.5%	10.3%	10.0%	7.0%
Some	23.8%	25.6%	25.0%	24.7%
About half	19.6%	12.0%	25.0%	17.3%
Most	31.5%	29.9%	25.0%	30.0%
Almost all	19.6%	13.7%	12.5%	16.3%
Don't know	2.1%	8.5%	2.5%	4.7%

Course Management Systems

Have you ever taken a course that used a course or learning management system (a system that provides tools such as online syllabi, sample exams, and gradebook)? Examples include WebCT, Blackboard, Desire2Learn, Sakai, or an institution-specific system.	UW Senior (N=144)	UW Freshman (N=117)	UW Other (N=40)	UW Total (N=301)
No	15.3%	28.2%	22.5%	21.3%
Yes	75.7%	63.2%	72.5%	70.4%
Don't know	9.0%	8.5%	5.0%	8.3%
How often do you use a course or learning management system? (Those who said Yes to taking a CMS course)				
Never	0.9%	9.5%	3.4%	4.2%
Once a year	1.8%	1.4%	0.0%	1.4%
Once a quarter/semester	1.8%	2.7%	0.0%	1.9%
Monthly	5.5%	8.1%	0.0%	5.7%
Weekly	36.7%	31.1%	31.0%	34.0%
Several times per week	39.4%	25.7%	48.3%	35.8%
Daily	13.8%	21.6%	17.2%	17.0%
Are you using a course or learning management system for any of your courses this quarter/semester? (Those who said yes to taking a CMS course)				
No	20.2%	33.8%	6.9%	23.1%
Yes	79.8%	66.2%	93.1%	76.9%
What is your skill level using course or learning management systems? (Those who said Yes to taking a CMS course)				
Not at all skilled	0.9%	2.7%	0.0%	1.4%
Not very skilled	4.6%	12.3%	3.4%	7.1%
Fairly skilled	45.9%	42.5%	48.3%	45.0%
Very skilled	43.1%	37.0%	37.9%	40.3%
Expert	5.5%	5.5%	10.3%	6.2%
Describe your overall experience using course or learning management systems. (Those who said Yes to taking a CMS course)				
Very negative	0.9%	0.0%	0.0%	0.5%
Negative	2.8%	1.4%	3.4%	2.4%
Neutral	28.7%	35.1%	24.1%	30.3%
Positive	52.8%	56.8%	58.6%	55.0%
Very positive	14.8%	6.8%	13.8%	11.8%

What is your opinion about the following statements?

	UW Senior (N=143)	UW Freshman (N=116)	UW Other (N=40)	UW Total (N=299)
I get more actively involved in courses that use IT.				
Strongly disagree/disagree	18.2%	14.6%	10.0%	15.7%
Neutral	45.5%	52.6%	40.0%	47.5%
Strongly agree/agree	36.4%	32.7%	50.0%	36.8%
The use of IT in my courses improves my learning.				
Strongly disagree/disagree	9.1%	12.2%	2.6%	9.4%
Neutral	38.5%	40.9%	30.8%	38.4%
Strongly agree/agree	52.5%	47.0%	66.7%	52.2%
IT makes doing my course activities more convenient.				
Strongly disagree/disagree	3.5%	8.6%	0.0%	5.0%
Neutral	19.1%	26.7%	12.5%	21.2%
Agree	77.3%	64.6%	87.5%	73.7%
By the time I graduate, the IT I have used in my courses will have adequately prepared me for the workplace.				
Strongly disagree/disagree	18.2%	11.3%	20.0%	15.8%
Neutral	37.8%	39.1%	37.5%	38.3%
Strongly agree/agree	44.1%	49.6%	42.5%	45.9%
My institution's IT services are always available when I need them for my coursework.				
Strongly disagree/disagree	10.6%	11.3%	16.4%	11.6%
Neutral	33.3%	32.2%	23.1%	31.5%
Strongly agree/agree	56.0%	56.5%	61.1%	57.0%
I skip classes when materials from course lectures are available online.				
Strongly disagree/disagree	57.2%	67.2%	65.0%	62.1%
Neutral	26.1%	19.0%	15.0%	21.8%
Strongly agree/agree	16.9%	13.8%	20.0%	16.1%

Which of the following best describes you?

	UW Senior (N=144)	UW Freshman (N=117)	UW Other (N=40)	UW Total (N=301)
I am skeptical of new technologies and use them only when I have to.	2.1%	3.4%	7.5%	3.3%
I am usually one of the last people I know to use new technologies.	11.8%	5.1%	5.0%	8.3%
I usually use new technologies when most people I know do.	52.8%	47.9%	52.5%	50.8%
I like new technologies and use them before most people I know.	28.5%	33.3%	17.5%	28.9%
I love new technologies and am among the first to experiment with and use them.	4.9%	10.3%	17.5%	8.6%

I like to learn through:

	UW Senior (N=144)	UW Freshman (N=117)	UW Other (N=40)	UW Total (N=301)
Text-based conversations over e-mail, IM and text messaging	41.4%	45.6%	27.5%	41.2%
Programs I can control, such as video games, simulations, etc.	49.6%	58.3%	57.5%	54.1%
Contributing to websites, blogs, wikis, etc.	28.8%	37.4%	30.0%	32.3%
Running Internet searches	77.8%	66.4%	85.0%	74.3%
Creating or listening to podcasts or webcasts	42.6%	37.4%	40.0%	40.2%

	UW Total (N=301)	Other Total (N=27449)
Text-based conversations over e-mail, IM and text messaging	41.2%	42.9%
Programs I can control, such as video games, simulations, etc.	54.1%	48.7%
Contributing to websites, blogs, wikis, etc.	32.3%	37.5%
Running Internet searches	74.3%	79.3%
Creating or listening to podcasts or webcasts	40.2%	31.1%

How would you like your institution to contact you in an emergency?

	UW Total (N=301)	Other Total (N=27449)
Text message	61.8%	56.0%
E-mail	22.9%	17.6%
Public-address systems (sirens, loudspeakers, intercoms, etc.)	9.0%	11.0%
Voice telephone call	3.3%	11.7%
Facebook	1.7%	1.0%
All others garnered less than 1%: Instant message, MySpace, Other social network sites (e.g. Bebo, LinkedIn, etc.), The institution's general information website, A special emergency website for the institution, Other.		