

JMU Technology Satisfaction Survey, 2011

Students

Key Findings

1. Eighty-four percent report overall satisfaction with technology at JMU.
2. Ninety-six percent of Microsoft Live@Edu users express overall satisfaction with the percentage forwarding their email to another provider dropping fifteen percent from 2010.
3. Sixty-one percent indicate satisfaction with campus bandwidth, up twenty percent from 2010 as IT continues to make improvements to meet the growing bandwidth demands of video.
4. Satisfaction with Official Wireless shows significant increase in satisfaction with only eight percent of students indicating no basis to judge.
5. Streaming video shows a dramatic increase with forty-six percent expressing satisfaction, up from twenty-four percent in 2010.
6. Ninety-one percent report overall satisfaction with Blackboard.
7. Forty-one percent own smartphones and thirty-eight percent currently use an iPod Touch, up thirteen percent from the 2010 survey.

Background

Since 2004, the Technology Satisfaction Survey strives to shed light on the student satisfaction with technology at JMU. The survey also looks at the use of technology and other factors that may contribute to the levels of satisfaction. The annual survey is a joint effort of Information Technology (IT) and Libraries and Educational Technologies (L&ET). The survey continuously evolves as the technologies impacting students at the University change. Gathering data annually provide IT and L&ET an opportunity to explore trends in the use of technology at JMU. Some survey findings remain consistent year after year. Others point to potential changes that IT and L&ET will use to inform decisions relating to technology and related services. For example, increased use of video and other bandwidth intensive applications led to a major network upgrade in 2011.

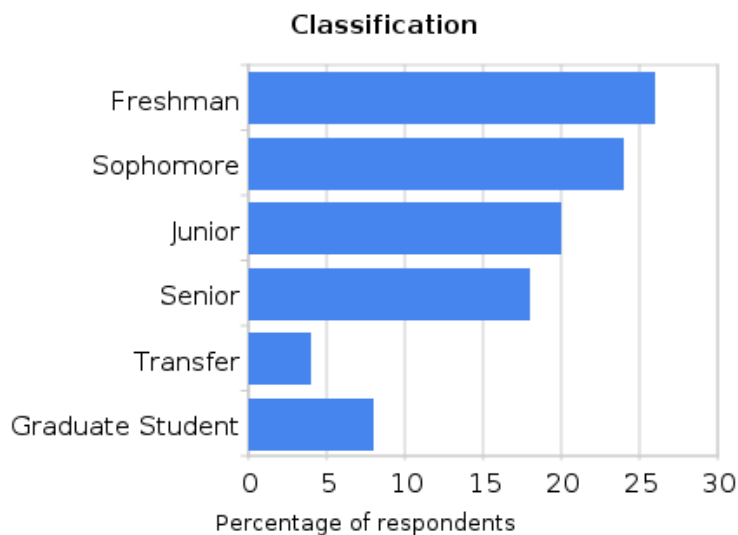
Reviewing the results of 2011 survey provides insight into the level of satisfaction with IT initiatives including the switch to Microsoft Live@Edu for student email, improvements to wireless network access, and the University's enhanced Internet connection via National Lambda Rail (NLR). L&ET uses the survey to monitor satisfaction with services including the Blackboard course management system as well as to track trends on student use of technology.

Methodology

The JMU Technology Satisfaction Survey builds on the surveys from the previous years. All full and part time undergraduate and graduate students receive e-mail invitations to participate in the web-based quantitative survey. The report of the survey uses comments from the open-ended survey questions to illustrate discussions of the findings. The tables included in the report provide longitudinal data from 2011, 2010, and 2009 where available.

The response rate is six percent for the survey. Fifty-six percent of the 1,196 respondents live off-campus; forty-four percent reside on-campus (Table 1). The following chart illustrates the classifications of the respondents.

Diagram: Table 2

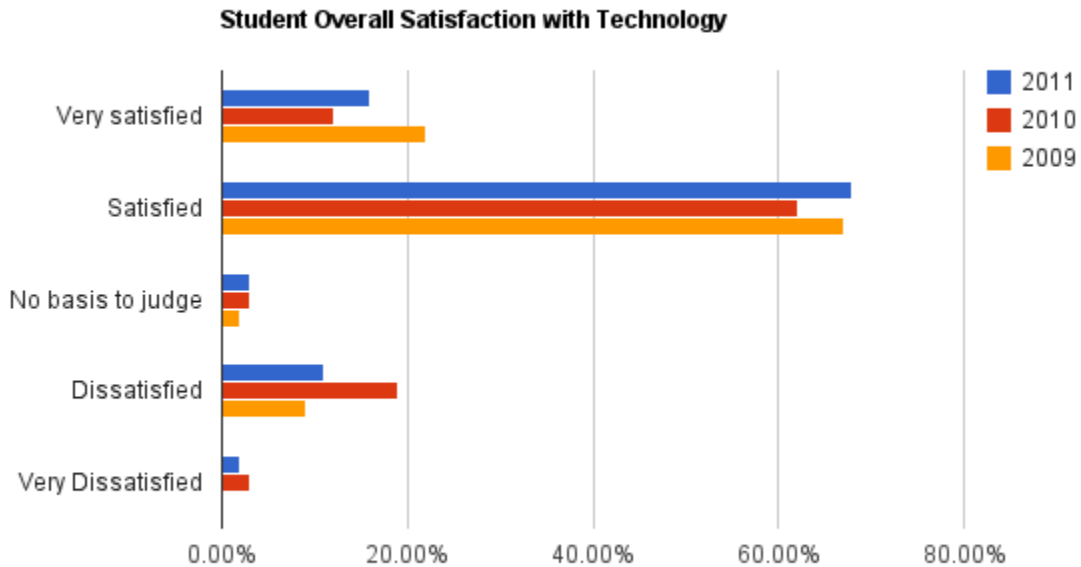


Findings

Eighty-four percent report overall satisfaction with technology at JMU (up ten percent from 2010).

Sixteen percent state very satisfied overall with technology at JMU with an additional sixty-eight percent responding satisfied (Table 4). Only thirteen percent express dissatisfaction (Table 4). Comments include: "I am honestly VERY satisfied with the technology through JMU. I use the computers and printers several times a week. I also use Blackboard daily and am happy with that."

Diagram: Table 4

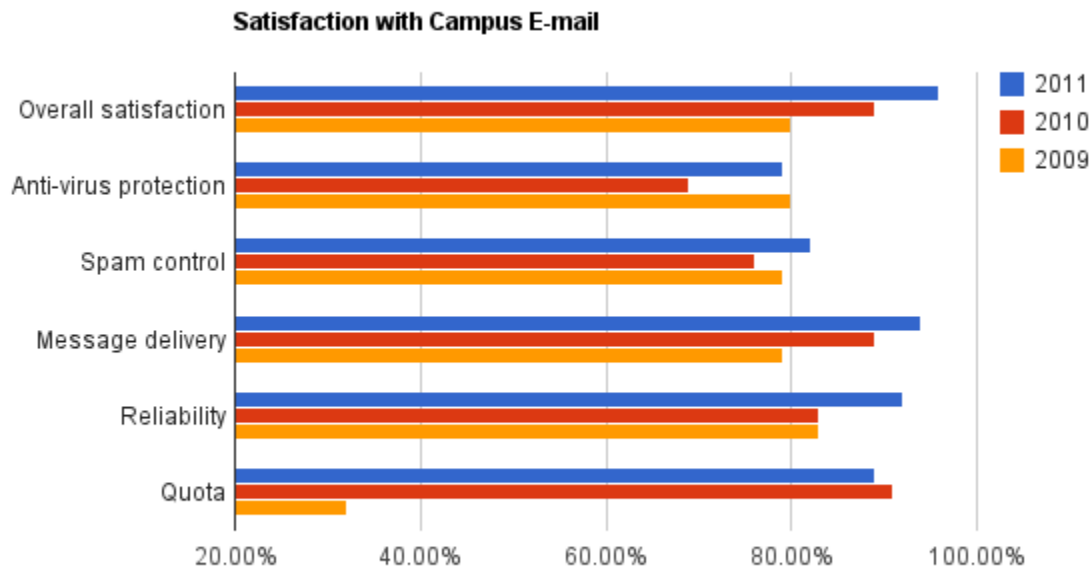


Ninety-six percent of Microsoft Live@Edu e-mail users express overall satisfaction with the service (up seven percent from 2010).

The University moved to Microsoft Live@Edu in Spring 2010. Ninety-six percent of the users of the Microsoft Live@Edu e-mail express satisfaction with the service. Students report satisfied/very satisfied with anti-virus protection (79%), spam control (82%), speed of message delivery (94%), reliability (92%), and e-mail quota (89%) [Table 11].

Nearly three-quarters use Microsoft Live@Edu for their email (Table 8). The percentage of student electing to forward their email to another service provider drop to twenty-seven percent, down from forty-two percent in 2010 (Table 8).

Diagram: Table 11



Satisfaction with E-Campus, Computer Security, and Computing Lab Facilities remains high. Nearly ninety percent report overall satisfaction with E-Campus (Table 6).

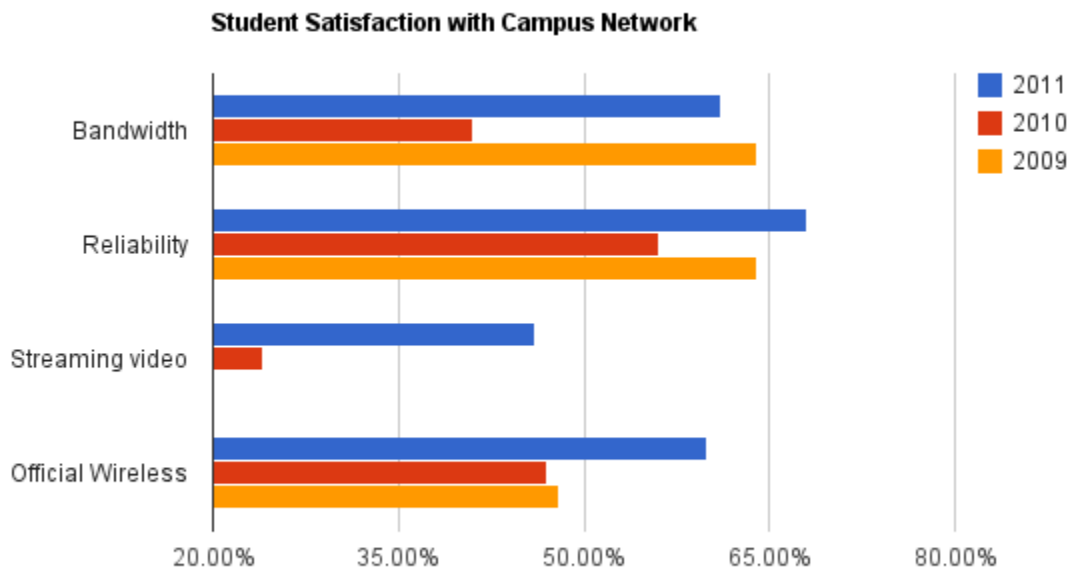
Satisfaction with computer security and the confidentiality and security of the JMU networks also remains high with nearly ninety percent expressing satisfaction (Table 12). Eighty percent indicate satisfaction with the ease of understanding, timeliness, and amount of computer security information (Table 14). E-mail remains the preferred method for receiving information on computer security with sixty-one percent stating interest (Table 13).

Students remain satisfied with the Computing Lab Facilities with eighty-six percent reporting satisfied/very satisfied (Table 25). Eighty-seven percent report satisfaction with the computers in the labs (Table 25). The Computing Lab in Carrier Library 101 continues to be the facility students cite as the one that they use most often (Table 24).

Sixty-one percent express satisfaction with network bandwidth (up twenty percent from 2010).

While IT continues to make improvements to the campus network, meeting the increased bandwidth demands of video remains a challenge. Students acknowledge the improvements made to the campus network with sixty-one percent reporting satisfaction with the bandwidth (Table 7). Streaming video shows a dramatic increase with forty-six percent expressing satisfaction, up from twenty-four percent in 2010 (Table 7). Satisfaction with the Official Wireless also shows an increase to sixty percent, up from forty-seven percent in 2010 with only eight percent of the students indicating no basis to judge (Table 7). Comments include: “Bandwidth on campus, despite being improved in the past year, is still behind what it could be. I would also like to see campus become fully wireless, as there are many inconvenient blind spots for wireless internet on campus.”

Diagram: Table 7



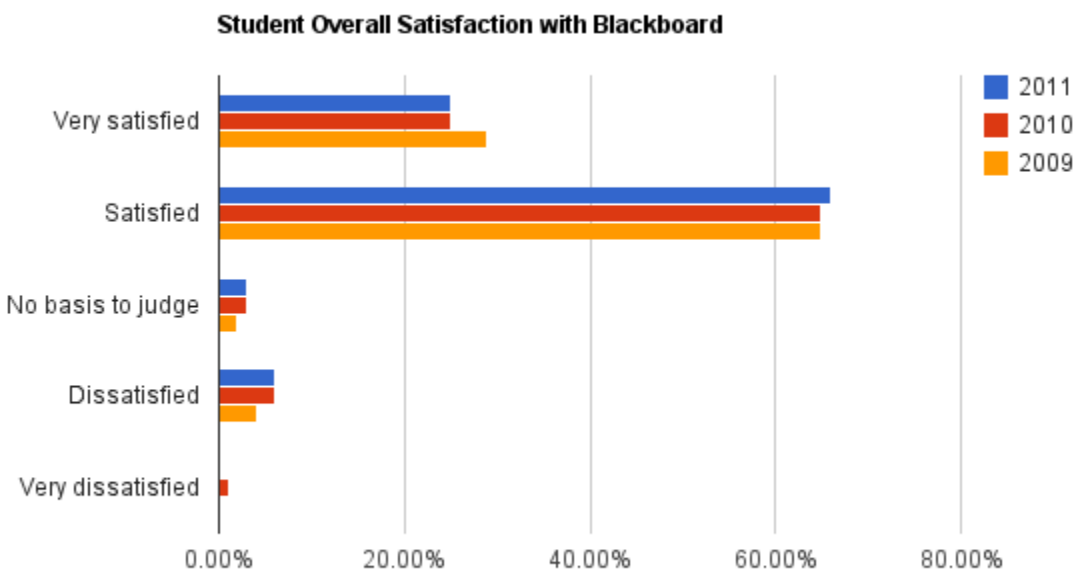
Overall satisfaction with Computing HelpDesk and other IT services including warranty repair and software downloads continue to be consistent with findings from previous surveys.

Overall satisfaction with the Computing HelpDesk and software downloads from the Computing web site remains at fifty percent with forty-six percent indicating no basis to judge (Table 16 and Table 17). One-third report satisfaction with warranty repairs with sixty percent stating no basis to judge (Table 17).

Over ninety percent of students continue to express overall satisfaction with Blackboard.

Overall satisfaction for Blackboard remains high (Table 21). Student satisfaction with the following Blackboard functionalities remain consistent with previous surveys: syllabus (97%), online readings and links to text-based materials (93%), links to video and other media including PowerPoint and Presenter (89%), online discussion boards (75%), exam and quizzes (80%), sharing materials (85%), and grades (82%) [Table 21]. Comments include: “Blackboard and e campus are wonderful.” “The ability to create your own discussion groups on blackboard designed just for a group project. It would be great to have the ability to do this without the instructor having to create the group. Shared dropbox accounts are used frequently for sharing documents in group projects. It would be helpful if a smart phone app were developed to access blackboard from your phone.”

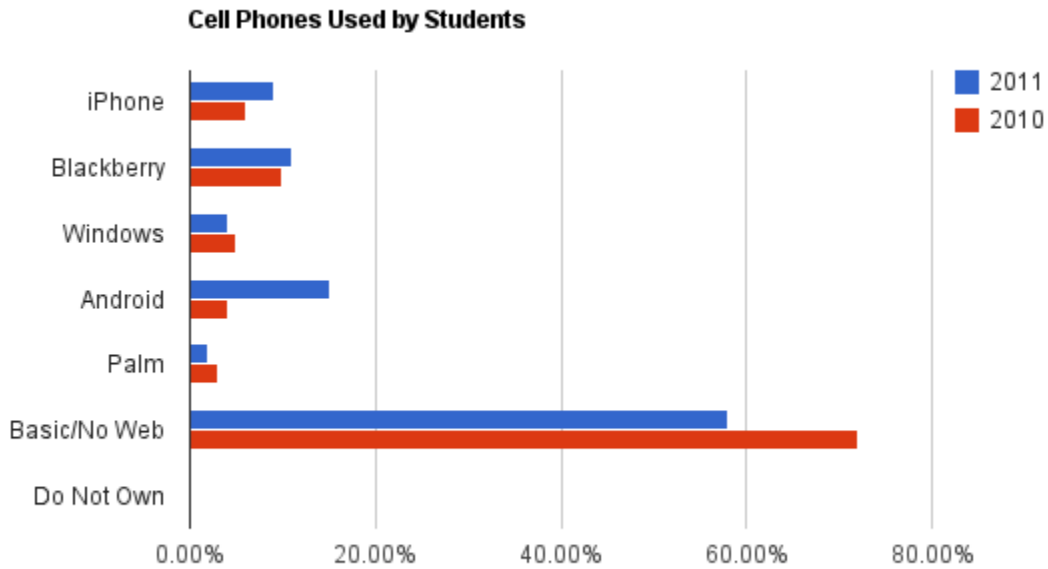
Diagram: Table 21



Forty-one percent own smartphones and thirty-eight percent currently use an iPod Touch; ownership of these devices is up thirteen percent from 2010.

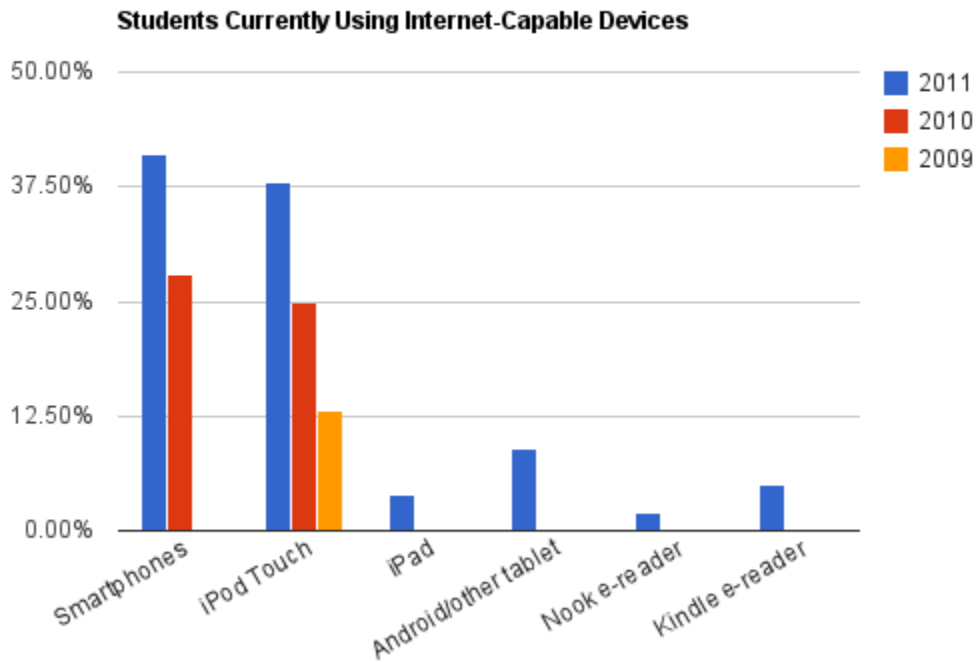
All students report owning a cell phone (Table 27). Forty-one percent own Smartphones, up from twenty-eight percent in 2010 (Table 27). Students with smartphones report using the following: Google Android (15%), Blackberry (11%), iPhone (9%), Windows Mobile (4%), and Palm OS (2%) [Table 32]. This year’s survey shows sixty-one percent interested in conducting University business via web browser on the cell phone, up from forty-nine percent in 2010 (Table 30).

Diagram: Table 27



Four percent currently use iPads with an additional nine percent looking to purchase (Table 26). Thirty-eight percent currently use the iPod Touch, up thirteen percent from 2010 (Table 26). Five percent use the Kindle with two percent using the Nook e-book reader (Table 26).

Diagram: Table 26

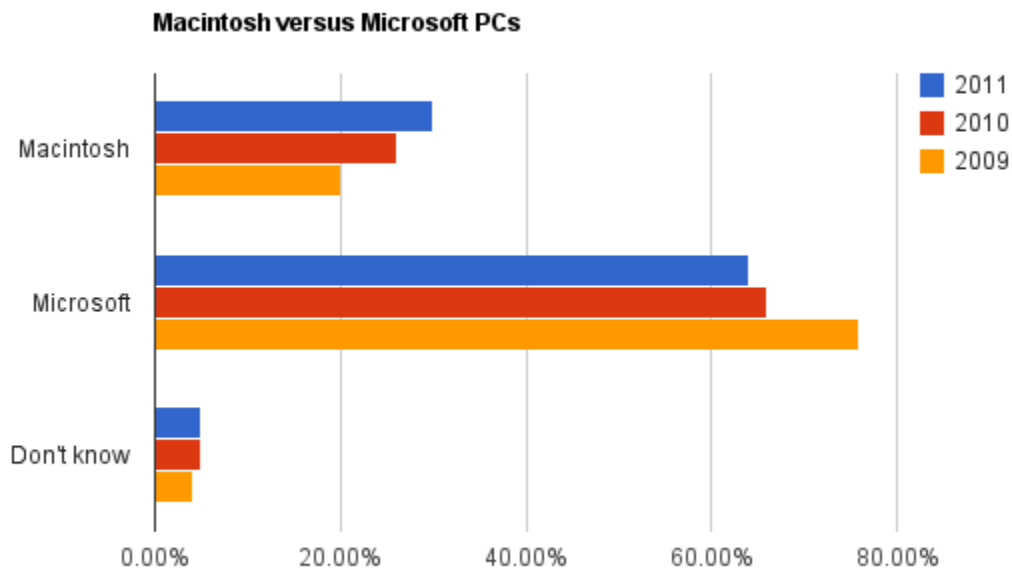


Students report doing the following activities on their phones: web browsing (42%), texting (97%), checking e-mail (39%), checking personal calendar (53%), using map software such as Google maps (26%), playing games (34%), social networking (40%), listening to audio (28%), and watching video (22%) [Table 28].

Nearly one-third of the student use Apple computers while two-thirds use Microsoft PCs.

Thirty percent own Apple computers (Table 31). Sixty-four percent use a version of Microsoft Windows: Windows 7 (31%), Vista (23%), Windows XP (10%) [Table 31]. Although more students own Windows computers, only twenty-one percent list Microsoft Internet Explorer as the browser used most frequently (Table 34). Students report the following browsers: Firefox (34%), Safari (24%), Chrome (21%), and Internet Explorer (21%) [Table 34].

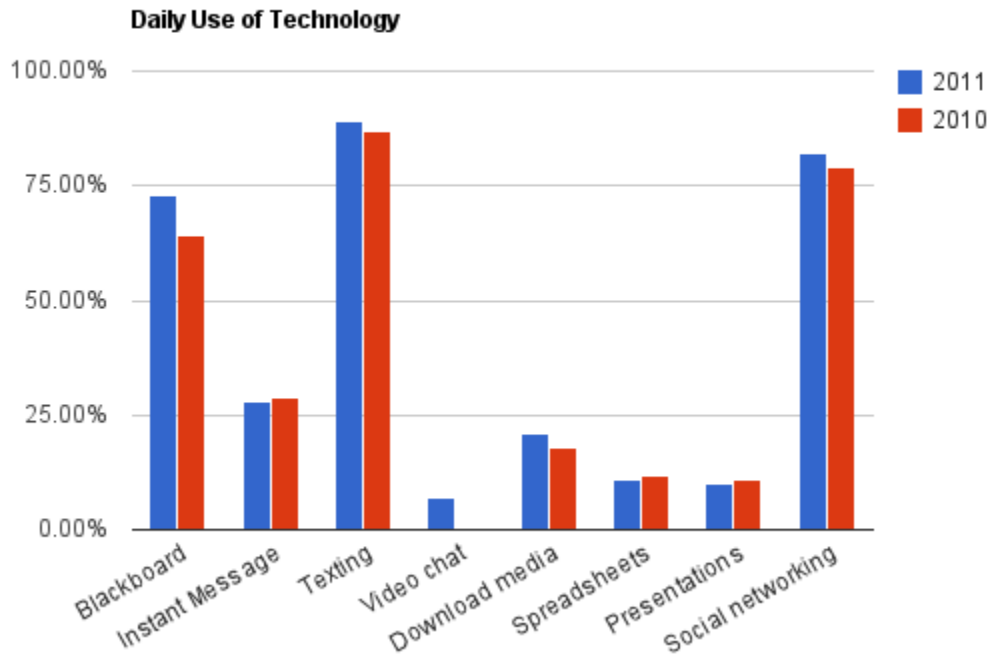
Diagram: Table 31



Daily use of technology includes texting, social networking, and Blackboard.

Students report regularly using a variety of technologies. Technologies used daily by a majority of students include: text messaging (89%), social networking such as Facebook (82%), and Blackboard (73%) [Table 38]. Additional technologies used on a weekly or more frequent basis by over a quarter of the respondents include downloading web-based music or videos, instant messaging, spreadsheets, presentation software such as PowerPoint, and video chat (Table 38).

Diagram: Table 38



Surveys Returned	1,196	(1,419 1,417)
Surveys Distributed	18,835	(18,163 17,699)
Return Percentage	6%	(8% 8%)

Note: 2010 and 2009 Survey Results are Shown in Parenthesis.

On-campus	44%	(46% 43%)
Off-campus	56%	(54% 57%)

Freshman	26%	(30% 29%)
Sophomore	24%	(18% 23%)
Junior	20%	(19% 17%)
Senior	18%	(19% 20%)
Transfer	4%	(4% 3%)
Graduate Student	8%	(10% 8%)

Don't Know	9%	(7%)
None	17%	(15%)
Dial-up Access	1%	(2% 2%)
Wireless Card (Verizon, Sprint AT&T, etc)	9%	(10% 11%)
High Speed Access (Comcast Cable, Verizon DSL, Ethernet through your apartment complex, etc.)	63%	(66% 62%)

Very Satisfied	16%	(12% 22%)
Satisfied	68%	(62% 67%)
No Basis to Evaluate	3%	(3% 2%)
Dissatisfied	11%	(19% 9%)
Very Dissatisfied	2%	(3% 1%)

	Very Satisfied/ Satisfied	Very Dissatisfied/ Dissatisfied
Overall satisfaction with technology services and support in learning	81% (74% 84%)	9% (13% 8%)

	Very Satisfied/ Satisfied	No Basis to Judge
E-Campus Overall Satisfaction	88% (90% 93%)	2% (2% 2%)

	Very Satisfied/ Satisfied	No Basis to Judge
Campus network bandwidth	61% (41% 64%)	13% (15% 9%)
Campus network reliability	68% (56% 64%)	7% (8% 9%)
Streaming Video	46% (24%)	16% (18%)
Official Wireless	60% (47% 48%)	8% (12% 17%)

JMU new e-mail Live@Edu (e-id@dukes.jmu.edu)	73%	(58% 60%)
JMU student (Live@Edu) account to another service provider (e.g. AOL, Yahoo, Gmail)	27%	(42% 40%)

Already using another e-mail account	12%	(20%)
Want all e-mail consolidated into one account	56%	(47%)
Use for personal mail	6%	(2%)
Additional Quota	3%	(6%)
Other	24%	(26%)

Gmail	86%	(87% 87%)
AOL Mail	1%	(1% 1%)
Yahoo Mail	3%	(4% 5%)
Windows Live Hotmail	4%	(2% 3%)
Other	6%	(5% 5%)

	Very Satisfied/ Satisfied	No Basis to Judge
Anti-virus protection on e-mail system	79% (69% 80%)	18% (29% 16%)
Spam control on e-mail system	82% (76% 79%)	7% (15% 10%)
Speed of message delivery	94% (89% 79%)	3% (5% 6%)
Reliability of e-mail	92% (83% 83%)	3% (5% 7%)
E-mail quota	89% (91% 32%)	9% (6% 5%)
Overall satisfaction	96% (89% 80%)	2% (3% 5%)

	Very Satisfied/ Satisfied	No Basis to Judge
Balance between security and ease of use	87% (85% 89%)	8% (9% 7%)
Confidentiality of information (SSN, grades)	89% (84% 91%)	10% (14% 8%)
Security of JMU network	88% (91% 90%)	10% (13% 7%)

	Very Interested	Somewhat Interested	Not Interested	
Facebook	13% (9%)	24% (23%)	18% (19%)	45% (49%)
Twitter	3% (2%)	10% (6%)	11% (12%)	76% (79%)
Blog	3% (2%)	11% (8%)	14% (15%)	73% (74%)
Podcast	2% (2%)	8% (6%)	12% (13%)	78% (79%)
RSS Feed	2% (2%)	10% (7%)	13% (16%)	75% (76%)
E-mail	23% (22%)	38% (36%)	23% (22%)	16% (20%)
Online Video Tutorials	8% (8%)	22% (21%)	23% (24%)	46% (48%)
Instructor-led one hour session	5% (4%)	13% (10%)	14% (15%)	68% (70%)
Other	2% (2%)	5% (2%)	4% (4%)	89% (92%)

	Very Satisfied/ Satisfied	No Basis to Judge
Ease of understanding	82% (80%)	15% (16%)
Timeliness	78% (76%)	16% (19%)
Amount of information	79% (77%)	16% (18%)

Note: 2010 and 2009 Survey Results are Shown in Parenthesis.

Table 15 How Frequently do you see Virus Warnings/Evidence on your Computer?

	Daily	Weekly	Occasionally	Never	Do Not Use
Windows	7% (6%)	12% (13%)	37% (39%)	21% (21%)	23% (22%)
Macintosh OS	2% (2%)	4% (3%)	9% (9%)	32% (28%)	53% (57%)
Linux	<1% (<1%)	1% (1%)	3% (2%)	11% (10%)	84% (87%)

Table 16 Computing HelpDesk

	Very Satisfied/ Satisfied	No Basis to Judge
HelpDesk promptness	46% (39% 44%)	50% (54% 51%)
Professionalism of staff	48% (43% 46%)	49% (54% 51%)
HelpDesk-Self-help and FAQ found on web	42% (36% 39%)	54% (58% 55%)
HelpDesk overall satisfaction	50% (44% 48%)	46% (51% 47%)

Table 17 Information Technology Services

	Very Satisfied/ Satisfied	No Basis to Judge
Software downloads found on Computing web site	49% (46% 52%)	47% (46% 43%)
Warranty repair for personally-owned Dell/Apple computers	34% (29% 33%)	60% (63% 61%)

Table 18 For the academic year, how many online classes were you enrolled in?

None	84% (82% 78%)
One	11% (13% 15%)
Two	3% (3% 3%)
Three	2% (1% 1%)
More than Three	1% (1% 3%)

Table 19 Class Meeting Replaced with Online Activities

None	47% (49%)
One	31% (28%)
Two	13% (11%)
Three	4% (5%)
More than Three	5% (6%)

Table 20 Do You Use Blackboard?

Yes	99% (99% 99%)	No	1% (1% 1%)
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Table 21 Satisfaction with Blackboard

	Very Satisfied/ Satisfied	No Basis to Judge
Overall, as a teaching and learning tool	91% (90% 94%)	3% (3% 2%)
Syllabus	97% (96% 97%)	1% (2% 2%)
Online readings and links to text-based materials	93% (92% 93%)	2% (4% 4%)
Links to video, audio and other media (eg Presenter, Powerpoint)	89% (85% 89%)	6% (8% 8%)
Online discussion boards	75% (72% 73%)	16% (18% 19%)
Access to sample exams and quizzes	85% (84% 85%)	10% (11% 13%)
Taking exams and quizzes	80% (76% 80%)	10% (11% 12%)
Sharing material among students, faculty, staff	85% (84% 88%)	6% (9% 6%)
Keeping track of grades	82% (83% 89%)	3% (3% 2%)

Table 22 Blackboard Support

	Very Satisfied/ Satisfied	No Basis to Judge
Self-help and FAQ's found on the web	30% (26% 28%)	67% (70% 69%)
Help via e-mail	27% (25% 25%)	71% (73% 73%)

Table 23 Libraries & Educational Technologies Services

	Very Satisfied/ Satisfied	No Basis to Judge
Off-campus access to on-line library resources	59% (59% 62%)	26% (30% 27%)
Streaming technology-upload/download video, sound files	54% (41% 49%)	35% (41% 41%)
Media Resources software checkout (SAS)	41% (33% 35%)	56% (65% 64%)
Media Resources equipment checkout (video cameras, audio recorders)	39% (31% 33%)	59% (66% 65%)

Table 24 Computing Labs Usage

Chandler 134	1%	(2% 3%)
Godwin 342	2%	(1% 2%)
Hillside Basement (24 hrs)	7%	(9% 8%)
Showker 206-208	9%	(9% 11%)
Carrier Library 101	22%	(22% 20%)
Maury 203	1%	(1% 2%)
Harrison 111	1%	(2% 2%)
Johnston J7	0%	(1%)
Memorial 3245	2%	(2%)
Harrison 117	1%	(1% 1%)
Duke 110 (Mac lab)	1%	(2% 1%)
Moody 203 (Mac lab)	0%	(1% 0%)
Harrison 103	2%	(2% 1%)
Carrier 119 (assistive technology)	2%	(2% 0%)
Music Library B59	2%	(2% 2%)
ETMC (Educational Technology & Media Center) in Memorial Hall	2%	(3% 3%)
East Campus Library 1204 (Assistive Technology)	6%	(1% 1%)
East Campus Library 1310 (24 hours)	11%	(15% 14%)
Miller 2101	4%	(4% 4%)
Forbes 1203-Theatre	1%	()
Forbes 2137 - Music	1%	()
Other	20%	(19% 18%)

Table 25 Satisfaction with Computing Labs Facilities Chosen Above

	Very Satisfied/ Satisfied	No Basis to Judge
Computers	87% (86% 90%)	9% (9% 6%)
Scanners	27% (23% 20%)	69% (74% 78%)
Software	69% (66% 68%)	29% (31% 28%)
Wireless Remote Printing	47% (36% 35%)	47% (59% 61%)
Printing	73% (69% 68%)	20% (24% 24%)
Lab availability for course assignments	69% (64% 68%)	21% (25% 20%)
Lab availability for 24-hour lab	50% (41% 41%)	41% (48% 44%)
Overall satisfaction	86% (85% 88%)	10% (11% 8%)

Table 26 Intent to use the following devices

	Currently Using	Looking to Purchase	Not Interested in Using
Desktop	22% (19% 24%)	3% (4% 2%)	65% (64% 50%)
Laptop	93% (85% 86%)	2% (2% 3%)	2% (3% 3%)
iPod Touch	38% (25% 13%)	7% (8% 10%)	37% (79% 39%)
iPad	4% ()	9% ()	54% ()
Netbook	4% (3%)	3% (4%)	80% (79%)
Android/Other OS Tablet	9% ()	5% ()	66% ()
Nook Reading Device	2% ()	2% ()	79% ()
Kindle Reading Device	5% ()	6% ()	68% ()

Note: 2010 and 2009 Survey Results are Shown in Parenthesis.

Table 27 Which Type Cell Phone Do You Use?

iPhone	9%	(6%)
BlackBerry	11%	(10%)
Windows Mobile	4%	(5%)
Google Android	15%	(4%)
Palm OS	2%	(3%)
Basic Cell Phone (can't access e-mail/web)	58%	(72%)
Do Not Have Cell Phone	0%	(0%)

Table 28 How Do You Use Your Cell Phone?

Make and receive calls	97%	(98%)
Web browser	42%	(29% 25%)
Texting	97%	(96% 88%)
E-mail	39%	(27%)
Personal calendar	53%	(51%)
Map software (e.g. Google Maps)	26%	(17%)
Games	34%	(27%)
Social Networking (e.g. Facebook/Twitter)	40%	(27%)
Listen to audio	28%	(20%)
Watch videos	22%	(13%)
Read books	5%	(3%)
Other	4%	(5%)

Table 29 Text Messages from JMU Beyond Emergency Notifications

Yes	44%	(41%)
No	35%	(38%)
Not Sure	21%	(20%)

Table 30 Conducting University Business via Web Browser on Cell Phone

Yes	61%	(57%)
No	19%	(21%)
Not Sure	20%	(22%)

Table 31 What operating system do you use most often?

Macintosh OS 10.6 Leopard	16%	(13%)
Macintosh OS 10.5 Leopard	11%	(9% 12%)
Macintosh OS 10.4 Tiger	3%	(4% 7%)
Microsoft Windows 7	31%	(14%)
Microsoft Vista	23%	(35% 40%)
Microsoft Windows XP	10%	(17% 36%)
Linux	0%	(1% 1%)
Don't Know	5%	(5% 4%)
Other	1%	(1% 1%)

Table 32 How old is the computer you use most often?

Less than a year	30%	(35% 33%)
1-3 years	53%	(49% 49%)
More than 3 years	16%	(15% 15%)
Don't know	1%	(1% 2%)

Table 33 How many hours a week do you spend on your computer?

0-5	3%	(2% 4%)
6-10	13%	(14% 18%)
11-15	29%	(27% 26%)
16-20	26%	(25% 24%)
more than 20	29%	(31% 28%)

Table 34 Internet Browser Used Most Often

Internet Explorer	21%	(21% 35%)
Firefox	34%	(41% 45%)
Safari	24%	(22% 16%)
Chrome	21%	(15%)
Other	1%	(1% 3%)

Table 35 Using Web to Find Information On

	Very Satisfied/ Satisfied	No Basis to Judge
Computing	77% (69% 66%)	18% (25% 30%)
JMU Libraries	87% (83% 85%)	10% (13% 11%)
Overall experience with JMU web	87% (80% 87%)	7% (11% 9%)

Table 36 How useful do you find the information on the JMU web?

	Very Useful/ Useful	Slightly/Not Useful
	83% (80% 86%)	16% (20% 14%)

Table 37 How useful have the following technologies been in your coursework?

	Very Useful	Moderately Useful	Slightly Useful	No Basis To Judge	Not At All
E-mail	76% (73%)	23% (25%)	<1% (<1%)	<1% (<1%)	<1% (<1%)
Instructor's lecture notes or Powerpoint slides online	67% (68%)	27% (26%)	1% (2%)	4% (4%)	<1% (<1%)
Audio or video Capture of an instructor's lecture	22% (19%)	26% (20%)	5% (4%)	46% (55%)	2% (2%)
Threaded discussion board	16% (17%)	38% (35%)	15% (16%)	26% (27%)	5% (5%)
Clicker/student response system	14% (13%)	25% (22%)	12% (8%)	43% (50%)	6% (7%)
Online availability of videos or video clips	22% (20%)	41% (35%)	8% (8%)	28% (34%)	1% (3%)
Video creation	8% (7%)	14% (10%)	4% (3%)	72% (76%)	3% (3%)
Web Conferencing (Elluminate)	9% (9%)	15% (14%)	3% (4%)	69% (70%)	3% (4%)
Collaboration Tools (e.g. Live@edu, Google Docs)	22% (21%)	29% (27%)	6% (5%)	42% (45%)	1% (2%)

Note: 2010 and 2009 Survey Results are Shown in Parenthesis.

Table 38 How often do you do the following (for school, work, or recreation)?

	Daily	Weekly	Occasionally	Never
Blackboard	73% (64%)	24% (30%)	2% (6%)	<1% (<1%)
Instant Message	28% (29% 41%)	15% (15% 16%)	21% (24% 25%)	37% (33% 19%)
Text Message	89% (87% 86%)	4% (6% 5%)	4% (4% 5%)	3% (4% 4%)
Video Chat	7% ()	20% ()	40% ()	32% ()
Use the internet from cell phone	30% (22% 14%)	8% (7% 4%)	13% (11% 13%)	48% (60% 69%)
Download web-based music or videos	21% (18% 17%)	26% (26% 26%)	34% (39% 39%)	19% (17% 17%)
Spreadsheets (Excel, etc.)	11% (12% 12%)	28% (23% 27%)	42% (44% 46%)	19% (21% 15%)
Presentation Software (Powerpoint)	10% (11% 9%)	34% (30% 30%)	52% (54% 59%)	4% (5% 3%)
Graphics Software (Photoshop, Flash)	5% (5% 6%)	12% (11% 13%)	42% (39% 45%)	41% (45% 36%)
Audio-creation Software (Audible, GarageBand)	3% (2% 2%)	6% (5% 3%)	21% (22% 22%)	70% (71% 73%)
Video-creation Software (Director, iMovie)	2% (2% 2%)	4% (3% 3%)	25% (23% 23%)	68% (72% 73%)
Social networking Websites (Facebook, MySpace, Bebo, LinkedIn)	82% (79% 79%)	10% (11% 12%)	5% (5% 5%)	3% (4% 4%)
Online multiuser computer games (World of Warcraft, Everquest, Poker)	5% (4% 5%)	6% (3% 4%)	13% (13% 12%)	77% (79% 79%)
Online virtual worlds (Second Life)	2% (1% 1%)	3% (2% <1%)	5% (4% 4%)	91% (93% 94%)
Podcasts	2% (3% 3%)	6% (5% 5%)	17% (19% 23%)	75% (73% 70%)
Webcasts	1% (1% 2%)	3% (3% 2%)	13% (14% 17%)	83% (82% 79%)
Social bookmark/Flagging (del.icio.us)	3% (2% 3%)	4% (4% 3%)	8% (8% 9%)	86% (86% 84%)