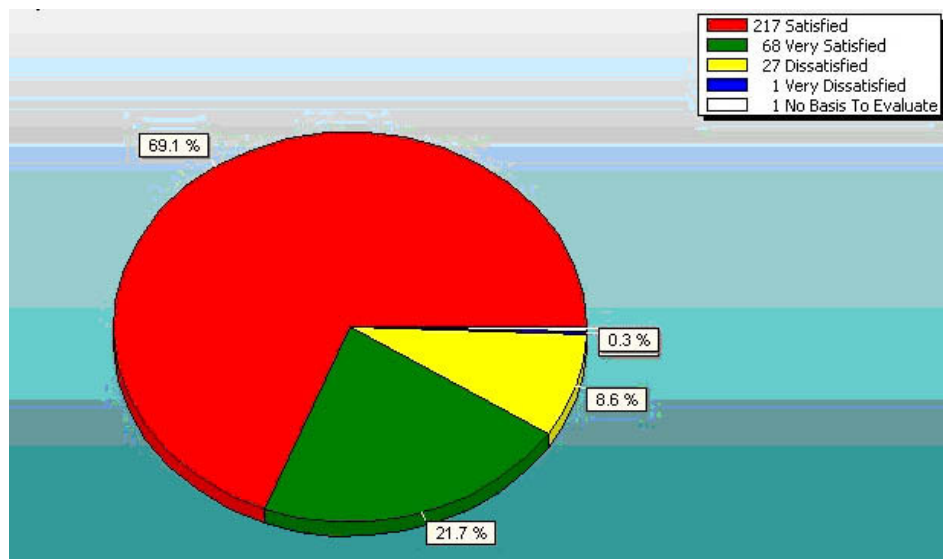


## 2007 Technology Satisfaction Survey Student Responses

The 2007 Technology Satisfaction Survey marks the fourth year that Information Technology (IT) and the JMU Libraries and Educational Technologies (L&ET) collaborated to study satisfaction with technology at James Madison University. A web-based survey was sent to a random sampling of 3500 graduate and undergraduate students in March, 2007. The response rate for the 2007 survey was nine percent with freshman accounting for thirty-one percent of the responses, sophomores for eighteen percent, juniors for eighteen percent, seniors for twenty percent, and graduate students for fourteen percent (Table 2). Forty-five percent of the students responding to the survey live on-campus; the remaining fifty-five percent live off-campus (Table 1).

### **Ninety-one percent of the students report satisfaction with technology at JMU**

Ninety-one percent of students report very satisfied/satisfied overall with technology at JMU down from ninety-five percent in 2006 (Table 4). For overall satisfaction with technology services and support in their learning experience, eighty-seven percent of students indicated very satisfied/satisfied down from ninety-two percent in 2006 (Table 4). Survey comments include: "Very satisfied with technology at JMU!" "Overall, excellent job."



### **Ninety-five percent express overall satisfaction with Blackboard**

The percentage of students expressing satisfaction with Blackboard remains high with ninety-five percent reporting very satisfied/satisfied overall with Blackboard as a teaching and learning tool (Table 14). The survey asks about satisfaction with specific Blackboard functionality. The following are the most commonly used Blackboard functionalities: syllabus, online readings and links to text-based materials, and keeping track of grades. Ninety-nine percent express satisfaction with the syllabus; ninety-three percent indicate satisfaction with online readings. Eighty-seven percent report satisfaction with keeping track of grades.

Eight out of ten students indicate satisfaction with Blackboard for links to video, audio, and other media as well as access to sample exams (Table 14). Nearly three-quarters express satisfaction using Blackboard for online discussion boards and taking exams and quizzes.

Two-thirds or more state “no basis to judge” regarding Blackboard support (Table 14). For Blackboard support on the web, sixty-six percent indicate “no basis to judge.” For Blackboard support via e-mail the percentage increases to seventy percent.

### **Students maintain a positive perception of many Information Technology services**

Satisfaction with network security continues to remain high. Nine out of ten students report very satisfied/satisfied with the balance between security and ease of use, confidentiality of information, and security of the JMU network (Table 10).

Students appear aware of wireless access on-campus. Less than one-third of the students indicate “no basis to judge” for wireless access down from nearly seventy percent in 2004 (Table 6). Comments include: “Make the whole campus wireless.” “Work is very difficult to get done in the room and Internet cannot be used in the resident hall study lounges, so either provide Ethernet in the study lounges or allow wireless in the basements.”

Eighty-five percent indicate very satisfied/satisfies overall with WebMail (Table 9). Nine out of ten students express satisfaction of the speed and reliability of the JMU e-mail system (Table 9). Three-quarters of the students report satisfaction with e-mail spam control down from eighty-seven percent in 2006 (Table 9).

### **One-quarter of the students report forwarding their e-mail to another service provider**

This year’s survey saw an increase in the number of students forwarding their JMU e-mail to another service provider such as Gmail or Yahoo! Nearly one-quarter indicate that they forward their JMU e-mail up from five percent in 2006 (Table 8). Sixteen percent of the students who responded indicated they forward their e-mail to another account to have their e-mail consolidated into one account and for additional quota.

As of mid-August 2007, eighteen percent of students are forwarding their e-mail to another service provider.

### **Eighty-six percent express satisfaction with General Computing Labs**

Eighty-six percent report very satisfied/satisfied in overall satisfaction with computer lab facilities (Table 18). Carrier Library 101 continues to be the general computer lab used most frequently with twenty-eight percent listing this facility down from thirty-eight percent in 2006 (Table 17). The second most popular computing labs are HHS (A2) Building 2037 with fifteen percent and “other,” which also received fifteen percent of the responses (Table 17). The facilities specified under “other” suggest that students make no distinction between departmental labs and General Computing Labs.

Eighty-five percent indicate very satisfied/satisfied with hardware and software in the labs (Table 17). Seventy percent express satisfaction with lab availability and printing facilities (Table 18).

### **Campus network, e-campus, and telephone services show drop in satisfaction**

Seventy percent express satisfaction with the campus network down from eighty percent in 2006 (Table 6). Comments include: “Please fix the bandwidth issues on campus. As streaming media quickly replaces text as a source of information, it puts us at a disadvantage when we have to wait for videos to buffer for sometimes hours in order to watch videos or clips. It’s also a hassle in class when some teachers try to show videos or stream audio.” Twenty-two percent of students report cell phone with Internet capabilities up from seven percent in 2006 (Table 20). Seventy-eight percent use cell phones with text messaging (Table 20). Beginning in August 2007, cell phone emergency alerts, which include text and voice messaging, will be available for faculty and staff who provide their cell phone information through J-Ess.

During the fall 2006 semester, Information Technology realized that we were reaching full capacity due to normal bandwidth growth and the popularity of streaming services such as Youtube. Due to the demand of the streaming applications, we had to limit the amount of

bandwidth these applications were consuming in order to keep standard web browsing functional. In January, 2007, we requested and were authorized to upgrade our connections through Network Virginia. Two 155mb Internet connections were installed in August 2007.

Eighty-six percent of students indicate that they are very satisfied/satisfied overall with e-campus down from ninety-six in 2006 (Table 5). Comments include: "The new e-campus is awful! Scheduling is not user friendly! Go back to the old way please!"

In March 2007, we completed a major upgrade to the student system. Part of this upgrade included the most significant revamping of e-campus since its initial go-live in 1999. E-campus functionality was totally overhauled to provide a more concise, full-page view of student data. It was also restructured to adopt recommendations we received from faculty advisors to emphasize items which support student success. Typically, changes of less magnitude than this one have reflected a drop in satisfaction numbers as students adjust to the change. In the past, these numbers have returned as new students arrive and returning students have more opportunities for using the new version.

Fifty-one percent of the students report no basis to judge for Telephone Services up from twenty-six percent in 2004 (Table 6). The percentage of students reporting "no basis to judge" for Telephone Services has grown steadily over the four year the survey has been conducted.

#### **Under thirty percent report "no basis to judge" off-campus access to on-line library resources**

Twenty-eight percent report no basis to judge off-campus access to online-library library resources down from thirty-six percent in 2006 (Table 16). Significant number of student still indicate "no basis to judge" for other Libraries and Educational Technologies services including streaming media at forty-seven percent and Media Resources software checkout at sixty percent (Table 16).

#### **Seventy percent of students report using laptops**

Laptop computers jumped from twenty-five percent in 2004 to seventy percent in 2007 (Table 20). John Rhealt, Director of JMU Bookstore indicated that ninety seven percent of 2007 incoming freshmen students purchased laptop computers. Eighty-two percent of the students indicate that their computers are three years old or less (Table 22). Three-fourths use Windows XP Pro as their operating system (Table 21). Although Internet Explorer (IE) remains the most widely used browser, the percentage of students using Internet Explorer dropped for the fourth straight year from a high of nearly nine out of ten students in 2004 to fifty-three percent in 2007 (Table 24). The percentage of students using Mozilla and Firefox continues to grow with twenty-four percent indicating Mozilla and twenty-six percent using Firefox. The amount of time that students report spending on the computer remains consistent for the four years that the survey has been conducted with over fifty-five percent indicating that they spend more than 16 hours per week (Table 23).

#### **Students Express Satisfaction with Overall Web Experience**

Nine out of ten respond very satisfied/satisfied for overall experience with the JMU web down from ninety-five percent in 2006 (Table 25). Nine out of ten continue to indicate that the information on the JMU web is very useful/useful (Table 26).

#### **Sixty percent report technology resources and services slightly or not important in decision to attend JMU**

Thirty-seven percent report very important/important when asked about the importance of technology resources and services in their decision to attend JMU compared with forty-three percent in 2006 (Table 27).

**Three-quarters report bringing a new computer to JMU with only one-third opting to purchase it from the JMU Bookstore**

Three-quarters of the students report bringing a new computer to JMU (Table 28). One-third purchased their computers from the JMU Bookstore. Nine out of ten report satisfaction with their purchase (Table 32). Reasons for purchasing their computers from the JMU Bookstore include price [twenty-two percent], on-campus service [twenty-six percent], warranty [twenty-three percent], convenient location [sixteen percent], and University academic recommendation [twelve percent] (Table 30). One-third list price for not purchasing from the JMU Bookstore (Table 31).

Fifty-five percent were neutral describing the JMU Bookstore computer staff (Table 33). Half were totally satisfied/somewhat satisfied in their opinion of the products and services available in the JMU Bookstore Computer Program Department. Only one-third report visiting the JMU Bookstore Computer Program during orientation (Table 35). Three-quarters indicate that the JMU Bookstore Computer Program web site is useful (Table 36).

This year was the first time JMU Bookstore questions were asked. Information Technology and Follett partner together to meet the needs of the student population. We will continue to use Bookstore questions and results on this survey.

<b>Surveys Returned</b>	<b>317</b>	<b>(396 580)</b>
<b>Surveys Distributed</b>	<b>3500</b>	<b>(3500 3250)</b>
<b>Return Percentage</b>	<b>9%</b>	<b>(11% 18%)</b>

Note: 2006 and 2005 Survey Results are Shown in Parenthesis.

**Table 1 Residency**

On-campus	45%	(67% 48%)
Off-campus	55%	(33% 52%)

**Table 2 Year**

Freshman	31%	(52% )
Sophomore	18%	(24% )
Junior	18%	( 5% )
Senior	20%	( 3% )
Graduate Student	14%	(17% )

**Table 3 Off-Campus Access to Internet**

NTC/Shentel	51%	(42% )
Comcast	20%	(19% )
Verizon DSL	8%	(11% )
Verizon Cable Modem	5%	( 4% )
Dialup (AOL, EarthLink)	7%	(12% )
Other	9%	(14% )

**Table 4 Overall Technology Satisfaction**

	Very Satisfied/ Satisfied	Very Dissatisfied/ Dissatisfied
Overall satisfaction with technology at JMU	91% (95% 95%)	9% (4% 4%)
Overall satisfaction with technology services and support in learning experience	87% (92% 88%)	6% (3% 6%)

**Table 5 E-Campus**

	Very Satisfied/ Satisfied	No Basis to Judge
Ease of understanding information	86% (96% 96%)	2% (<1% <1%)
Ease of access to information	84% (92% 90%)	3% (<1% <1%)
Overall satisfaction	86% (96% 92%)	2% (<1% 1%)

**Table 6 Infrastructure Services**

	Very Satisfied/ Satisfied	No Basis to Judge
Campus network infrastructure (bandwidth & reliability)	69% (80% 80%)	9% (11% 12%)
Telephone services	44% (53% 56%)	51% (38% 36%)
Cable television system	62% (72% 64%)	35% (23% 29%)
Wireless access	44% (44% 34%)	31% (34% 54%)

**Table 7 E-mail System Used Most**

JMU e-mail	76%	(95% 95%)
JMU e-mail forwarded to another service provider such as AOL, Hotmail, Yahoo, or Gmail	24%	( 5% 5%)

**Table 8 If you forward your e-mail to another service provider, why?**

Want all e-mail consolidated into one account	16%	( )
Use for personal mail	8%	( )
Additional Quota	16%	( )
Want to use an e-mail client instead	8%	( )
Other	8%	( )

**Table 9 E-mail Anti-Virus, Spam, Speed, Reliability**

	Very Satisfied/ Satisfied	No Basis to Judge
Anti-virus protection		

on e-mail system	83%	(88% 81%)	15%	(7% 11%)
Spam control on e-mail system	74%	(87% 77%)	9%	(5% 6%)
Speed of message delivery	90%	(88% 96%)	3%	(3% 1%)
Reliability of e-mail	93%	(95% 95%)	4%	(1% <1%)
Overall satisfaction with WebMail	85%	( )	5%	( )

**Table 10 Computer Security**

	Very Satisfied/ Satisfied	No Basis to Judge		
Balance between security and ease of use	90%	(94% 90%)	6%	(4% 5%)
Confidentiality of information (SSN, grades)	89%	(93% 90%)	9%	(5% 8%)
Security of JMU network	90%	(94% 89%)	8%	(4% 7%)

**Table 11 HelpDesk**

	Very Satisfied/ Satisfied	No Basis to Judge		
HelpDesk-Promptness	46%	(48% 47%)	49%	(46% 44%)
Professionalism of staff	47%	(49% )	51%	(47% )
HelpDesk-Self-help and FAQ found on web	43%	(45% 46%)	54%	(49% 46%)
HelpDesk-Overall satisfaction	50%	(54% 55%)	46%	(40% 40%)

**Table 12 Information Technology Services**

	Very Satisfied/ Satisfied	No Basis to Judge		
Software downloads found on Computing web site	58%	(64% 56%)	36%	(33% 38%)
Warranty repair for personally-owned Dell/Apple computers	33%	(41% 34%)	62%	(55% 60%)

**Table 13 Do You Use Blackboard?**

Yes	100%	(99% )	No	0%	(1% )
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**Table 14 Satisfaction with Blackboard**

	Very Satisfied/ Satisfied	No Basis to Judge		
Overall, as a teaching and learning tool	95%	(96% 90%)	1%	(1% 3%)
Syllabus	99%	(98% )	<1%	(1% )
Online readings and links to text-based materials	93%	(93% )	4%	(4% )
Links to video, audio and other media (eg Tegrity, Powerpoint)	80%	(80% )	14%	(15% )
Online discussion boards	73%	(67% )	22%	(29% )
Access to sample exams and quizzes	79%	(79% )	19%	(19% )
Taking exams and quizzes	73%	(69% )	17%	(25% )
Sharing material among students	71%	(70% )	25%	(28% )
Keeping track of grades	87%	(86% )	3%	( 4% )

**Table 15 Blackboard Support**

	Very Satisfied/ Satisfied	No Basis to Judge		
Blackboard support found on web	33%	(42% 71%)	66%	(57% 22%)
Blackboard support via e-mail	29%	(37% 59%)	70%	(62% 34%)

Note: 2006 and 2005 Survey Results are Shown in Parenthesis.

**Table 16 Libraries & Educational Technologies Services**

	Very Satisfied/ Satisfied	No Basis to Judge
Off-campus access to on-line library resources	62% (56% 65%)	28% (36% 29%)
Streaming technology-upload/download video, sound files	42% (52% 54%)	47% (45% 41%)
Media Resources software checkout (SAS)	37% (45% 43%)	60% (54% 56%)

**Table 17 General Computer Lab Usage**

Chandler 134	3%	(2% 2%)
Godwin 342	1%	(1% 3%)
Hillside Basement (24 hrs)	9%	(14% 9%)
Showker 206-208	12%	(10% 17%)
Carrier Library 101	28%	(38% 33%)
Maury 203	2%	(1% <1%)
Harrison 111	2%	(<1% )
HHS (A2) Bldg 2037	15%	(7% 9%)
Harrison 117	2%	(0% )
Duke 110 (Mac lab)	<1%	(<1% 1%)
Moody 203 (Mac lab)	<1%	(<1% <1%)
Harrison 103	4%	(1% )
Carrier 102 (assistive technology)	<1%	(1% 1%)
Music Library B59	2%	(3% )
Educational Technology & Media Center in Memorial Hall	4%	( )
Other	15%	(20% 17%)

**Table 18 Satisfaction with Computer Lab Facilities Chosen Above**

	Very Satisfied/ Satisfied	No Basis to Judge
Hardware (computers, scanners)	85% (87% 88%)	11% (10% 9%)
Software	84% (85% 87%)	14% (12% 9%)
Printing facilities	66% (73% 76%)	20% (18% 15%)
Lab availability for course assignments	70% (73% )	18% (15% )
Overall satisfaction	86% (89% 92%)	10% (8% 5%)

**Table 19 Satisfaction with Computer Lab Assistants**

	Very Satisfied/ Satisfied	No Basis to Judge
Knowledge & ability of assistants	38% (50% 43%)	57% (48% 54%)
Helpfulness of assistants	38% (52% 45%)	57% (45% 52%)
Overall satisfaction	40% (55% 46%)	56% (44% 52%)

**Table 20 Intent to use the following devices**

	Currently Using	Looking to Purchase	Not Interested in Using
Desktop	39% (32% 57%)	1% (<1% )	38% (44% )
Laptop	71% (70% 43%)	12% (9% )	6% (7% )
Tablet PC	1% (2% 1%)	2% (1% 1%)	78% (76% 81%)
Palm OS Personal Digital Assistant	2% (4% 5%)	4% (<1% 3%)	76% (76% 75%)
Pocket PC/Windows Mobile Personal Digital Assistant	2% (1% 1%)	2% (1% 2%)	74% (82% 83%)

Cell Phone with Internet capability or other portable e-mail/cell phone	22% (7% 6%)	6% (3% 3%)	43% (68% 74%)
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Cell Phone with text-messaging	78% ( )	3% ( )	12% ( )
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**Table 21 What operating system is installed on your computer?**

Macintosh OS 9 or lower	0%	(<1% <1%)
Macintosh OS X or higher	14%	(7% 7%)
Microsoft Windows 2000	8%	(10% 7%)
Microsoft Windows XP Pro	66%	(75% 78%)
Linux	<1%	(<1% <1%)
Don't Know	7%	(4% 3%)
Other	5%	(2% 4%)

**Table 22 How old is your computer?**

Less than a year	39%	(53% 28%)
1-3 years	43%	(38% 66%)
More than 3 years	17%	(8% 5%)
Don't know	1%	(<1% 1%)

**Table 23 How many hours a week do you spend on your computer?**

0-5	2%	(2% 3%)
6-10	16%	(16% 15%)
11-15	25%	(26% 25%)
16-20	24%	(25% 23%)
more than 20	32%	(32% 34%)

**Table 24 Internet Browser Used Most Often**

Internet Explorer	53%	(67% 74%)
Mozilla	24%	(20% 14%)
Safari	11%	(7% 3%)
Firefox	26%	(13% 12%)
Other	0%	(0% 2%)

**Table 25 Using Web to Find Information On**

	Very Satisfied/ Satisfied	No Basis to Judge
Computing	73% (85% 77%)	24% (13% 20%)
Telecommunications	60% (70% 77%)	38% (27% 20%)
Online Learning	70% (81% 53%)	27% (16% 45%)
JMU Libraries	85% (90% 91%)	11% (6% 5%)
Overall experience with JMU web	90% (95% 93%)	6% (3% 3%)

**Table 26 How useful do you find the information on the JMU web?**

	Very Useful/ Useful	Slightly/Not Useful
	90% (91% 89%)	10% (10% 11%)

**Table 27 How important were technology resources and services in your decision to attend JMU?**

	Very Important/ Important	Slightly/Not Important
	37% (43% 39%)	63% (57% 61%)

**Table 28 Did you bring a new computer to JMU?**

Yes	74% ( )	No	26% ( )
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**Table 29 Did you buy your computer from the JMU Bookstore?**

Yes	33% ( )	No	67% ( )
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**Note: 2006 and 2005 Survey Results are Shown in Parenthesis.**

**Table 30 Why did you choose to buy from the JMU Bookstore Computer Program?**

Price	22%	( )
On-Campus Service Availability	26%	( )
Warranty	23%	( )
Loaner Program	4%	( )
Advertising	6%	( )
Convenient Location	16%	( )
Brands	9%	( )
Sales Staff	4%	( )
University Academic Recommendation	12%	( )
Other	2%	( )

**Table 31 Why did you choose NOT to buy from the JMU Bookstore Computer Program?**

Price	33%	( )
On-Campus Service Availability	4%	( )
Warranty	8%	( )
Advertising	5%	( )
Convenient Location	9%	( )
Brands	12%	( )
Availability	10%	( )
Sales Staff	3%	( )
Other	19%	( )

**Table 32 Are you satisfied with your purchase?**

Yes 93% ( ) No 8% ( )

**Table 33 Describe your experiences with the JMU Bookstore Computer Program staff.**

Totally Satisfied	20%	( )
Somewhat Satisfied	23%	( )
Neutral	55%	( )
Somewhat Dissatisfied	2%	( )
Totally Dissatisfied	<1%	( )

**Table 34 Describe your overall opinion of the products and services available in the JMU Bookstore Computer Program Department.**

Totally Satisfied	22%	( )
Somewhat Satisfied	27%	( )
Neutral	47%	( )
Somewhat Dissatisfied	4%	( )
Totally Dissatisfied	0%	( )

**Table 35 Did you visit the JMU Bookstore Computer Program Department during Freshman or Transfer Orientation?**

Yes	33%	( )
No	61%	( )
Received enough information on-line	4%	( )
Other	2%	( )

**Table 36 Did you find the JMU Bookstore Computer Program's Web Site Useful?**

Yes 75% ( ) No 25% ( )