

Student Technology Needs Study – Spring 2015

Purpose of the Study

The purpose of this study was to gather information about Georgia State University students' technology needs to inform potential purchasing, staffing, and space design and reallocation decisions. Students were asked about the hardware, software, equipment, and technology support services they need beyond what already is provided on campus. Simultaneously, faculty were asked about the hardware, software, equipment, and technology support services their students need to complete their coursework.

Basic Methodology

- The Assessment Librarian administered the student survey face-to-face to students in the Bookstore Building, 3rd floor (Panther's Club dining area), on weekdays over the course of 2.5 weeks.
- The Head of Research and Engagement asked subject librarians to email faculty in their assigned departments the link to the online faculty survey.
- The Communication Coordinator created a graphical button, and the Web Services Librarian added the button to the library's homepage. The button was on the homepage March 6-31, 2015. The button directed web visitors to a [blog post](#) containing information about and links to the student and faculty surveys.
- The Social Media Advisory Group published four social media posts to market the survey via Facebook and Twitter.

Overview of Findings

Top Five Technology Needs for Current Coursework	
Reported by Students	Student Needs Reported by Faculty
1. Laptop	1. Computer
2. Computer	2. Internet/wifi
3. Internet/wifi	3. Microsoft Word
4. Microsoft Word	4. Microsoft Excel
Tied for 5. Microsoft Office	5. Laptop
Tied for 5. Microsoft PowerPoint	
Tied for 5. Printer	

Top Five Student Technology Training Needs	
Reported by Students	Student Needs as Reported by Faculty
1. Microsoft Excel	1. Microsoft Excel
2. Microsoft Office	2. Library resources and research skills
3. Adobe Photoshop	Tied for 3. Brightspace
Tied for 4. Basic computer skills	Tied for 3. Video (e.g., filming, editing, compression, video quality, audio quality, editing)

Tied for 4. Microsoft Word	4. Basic computer skills
5. Microsoft PowerPoint	5. Microsoft PowerPoint

Respondents who reported recalling a time that needed technology wasn't available on campus	
Percentage of student respondents who recalled a time when technology needed to complete their coursework wasn't available on campus	21.2%
Percentage of faculty respondents who rethought an assignment because technology needed for the assignment wasn't available on campus	32.2%

Summary of Student Responses

Student responses = 203

Class Level	# of Responses
Undergraduate	187
Graduate	11
Other GSU affiliation	3
[Blank]	2

Major – Note: Some of these technically aren't majors at Georgia State.	# of Responses – For respondents who indicated multiple majors, the majors have been split and reported separately.
Accounting	4
Actuarial Science	1
Anthropology	1
Applied Linguistics	1
Art	2
Art History	1
Biology	26
Birth through Five	1
Business Economics	1
Business Management	3
Chemistry	4
Communication	1
Computer Information Systems	12
Computer Science	17
Criminal Justice	8
Economics	2
English	2

Exercise Science	5
Film and Video	4
Finance	7
Geography	1
Clinical Health Informatics	3
Healthcare	1
Hospitality Administration	1
Interdisciplinary Studies	2
International Studies	1
Journalism	9
Kinesiology and Health	1
Managerial Sciences	5
Marketing	11
Mathematics	3
Mechanical Engineering	1
Music Education	1
Music Management	1
Music Technology	1
Neurobiology	1
Neuroscience	2
Nursing	10
Nutrition	5
Philosophy	2
Physics	1
Political Science	4
Pre-Law	1
Psychology	13
Planning & Economic Development	1
Public Relations	1
Respiratory Therapy	4
Social Work	2
Sociology	3
Spanish	1
Speech	1
Speech Pathology	2
Statistics	1
Studio Art	1
Theater	3
Undecided/Undeclared	4

Think about the classes you are taking right now. What hardware, software, and equipment do you need to complete your coursework? Responses have been parsed and merged as appropriate. In the event that a response was too unique to interpret, it has been included verbatim.	# of Responses
3	1
"Any kind of help so that the teachers can be better prepared to give us a full and desirable learning experience"	1
"I think being able to integrate student equipment on projections more efficiently if online assignments were given would provide a more productive experience."	1
"Programming programs"	1
"Access codes"	1
Adobe	1
Adobe InDesign	1
Adobe Photoshop	4
Adobe Premiere	1
Adobe Professional	1
Adobe Reader	1
Adobe Shockwave	1
ArcGIS 10x	1
Binders	1
Books	2
Brightspace (Desire2Learn)	5
Browser - specifically mentioned Google Chrome	7
Calculator/scientific calculator	5
Camera equipment/video camera	3
Cellphone/smartphone	9
Chargers/charging stations	2
ChemDraw	2
Computer/desktop computer	68
Desk	2
Earbuds	1
ebooks/"web texts"/"online books"	4
Eclipse IDE	3
Electronic health record software	1
Email	1
eMath	1
Ethernet ports	1
Flash drive	2
Game development software - specifically mentioned Unity	1

Google	2
Google Docs	1
Google Drive	1
Google Hangouts	1
Internet/wifi	21
Java	2
Java Development Suite	1
Javascript	1
Laptop	71
LearnSmart	3
LockDown Browser	2
Macs - specifically mentioned "5K iMac for 4K video editing"	3
MATLAB	1
McAfee Security	1
Microsoft DreamSpark	1
Microsoft Excel	12
Microsoft Office	20
Microsoft PowerPoint	20
Microsoft Project	2
Microsoft Publisher	1
Microsoft Word/word processor	34
My MathLab	2
I don't know.	1
None	3
Nutrient/food analysis software - specifically mentioned Nutribase; Food Processor	5
OneNote	1
Online Web Learning - owl.cengage.com	1
Outlets	4
Paper	1
Pencils	1
Pens	1
Printer	20
Projector	1
Publisher websites and econtent - specifically mentioned MacMillan LaunchPad, McGraw-Hill, Norton SmartWork, Pearson, Pearson Learning Center, Soomo Learning, WileyPLUS	9
REAXYS	1
Recording devices	1
Research databases	3
SAS	1

Scanners	3
Skillsoft	1
SPSS	1
SQL Server	1
STATA	1
Tablet - specifically mentioned iPad, Kindle	17
Touch screen capability in the classroom	1
Towers	1
VMware	1
Windows	1

Can you think of a time when the hardware, software, and/or equipment you needed to complete your coursework was not available on campus?	# of Responses
No	158
Yes	43

[If yes:] Please explain what you needed that wasn't available on campus. (Responses have been parsed and merged as appropriate.)

3D printing - "but that isn't so much coursework related"	1
5K Mac	1
ArcGIS 10x - needed on more computers	1
CARINA - doesn't have a very modern OS	1
Classroom desks with enough room for devices	1
Classroom projectors not working	1
Computer science tutoring sessions	1
Computers - none available	5
Computers - none available in quiet areas	1
Computers - none available in the library	2
Computers - needed admin rights to install software	2
Equipment - available but out of order	1
Internet/wifi - down	4
Java - not installed	1
Java - outdated	1
Laptops	1
Laptops - better library	2
Lockdown browser	1
Macs	1
Mac chargers	1
MATLAB - site license that doesn't require VPN	1
Microsoft Project	1
Online journal access	1
Online textbook	1

Outlets - not enough	4
Printing - \$3 credit is insufficient	1
Printing - not enough printers	3
Printing - was down	2
Scanners	1
Service request procedure - inadequate	1
Software for personal devices	1
Tablets	1
Tablets - better library	1

What other hardware, software, and/or equipment can the campus provide to better support your research and assignments?	# of Responses
Responses have been parsed and merged as appropriate. In the event that a response was too unique to interpret, it has been included verbatim.	
"Allow us to text 'equipment down' reports, directly to techs....shouldn't take two days for a 20-second 'fix'!"	1
"I like to think the library directory would be a bit more efficient."	1
"I personally would like to learn the old-fashioned way. I don't like technology with learning. I don't feel like it really helps me learn."	1
"Larger encyclopedias"	1
"Less online book fees"	1
2-in-1 computers	1
3D printing	1
Ability to connect student devices to monitors - BYOD	1
Adobe Creative Cloud	1
Adobe Photoshop	1
Apps that recognize and provide math symbols and format	1
Apps/software that help take notes - OneNote or other	1
Article databases/online journal access/more full text	3
Calculators/TI-89s for checkout	2
Cameras	1
Charging stations - more	2
Computer classes (specifically computer science) should be in classrooms with computers or desk space for students' laptops	1
Computer lab with technology software	1
Computer labs - more	1
Computer labs - more accessible	1
Computers - better	3
Computers - more	6
Computers - more in the library	3
Copiers - better	1

Desire2Learn	1
Desks with outlets	1
Digital Aquarium	2
Greater access to higher-end statistical software (beyond Microsoft Excel)	1
Headphones	1
I don't know.	5
Internet/wifi - better	7
iPads	4
iPads - for checkout	1
Labs for exercise science students	1
Laptops	3
Laptops - better campus discounts for purchase	1
Laptops - better library	1
Laptops - more	2
Laptops - more for checkout	3
Library	1
Library - books	1
Mac chargers	1
Macs	1
Macs - more	2
Market available software classes	1
Matlab - site license that doesn't require VPN	1
Microsoft Office	1
Microsoft Office for free	1
Microsoft PowerPoint/Prezi	1
More advanced equipment	1
More equipment rather than new equipment	1
Nothing else/needs are met	42
Outlets - more	3
Outlets - more in the classrooms	1
Phones/iPhones	2
Printing - free	2
Printing - more access	4
Printing - more color printers	1
Programming help	1
Recording software	1
Staff - more staff to ensure equipment is working properly	1
Study rooms - more with ability to connect your device to display on a monitor	1
Study rooms - more with smartboard or touch screen technology	1
Tablets	4
Tablets - more	2

Tablets - more for checkout	2
Technology that allows for communication between different schools at GSU and different colleges in Georgia and the country for more collaborative research.	1
Textbooks to rent	1
Touch screen	1
Websites - better	1

What technology training needs do you have?	# of Responses
Responses have been parsed and merged as appropriate. In the event that a response was too unique to interpret, it has been included verbatim.	
None	81
"Audio alteration"	1
"Certain software that isn't popular would require guidance from a trained individual"	1
"Computer programs other than office"	1
"Higher-end statistical software"	1
"New software training"	1
"Software training"	1
Adobe	2
Adobe After Effects	1
Adobe InDesign	1
Adobe Photoshop	6
Adobe Premiere	1
App development	1
Basic computer skills	5
C#	1
C++	2
Camera	1
CSS	2
Digital personal organization skills	1
Eclipse	1
GIS	1
Graphic design software	1
HTML	2
Java	3
Javascript	1
Linux	1
Macs	2
Microsoft Excel	27
Microsoft Office	7

Microsoft PowerPoint	4
Microsoft Publisher	1
Microsoft Word	5
Motion analysis software	1
Notetaking on a tablet or laptop	1
Prezi	1
Programming	1
Projectors	1
Research skills	3
Researching evidence based practice	1
Software on the MILE computers	1
Typing	1
Video editing	2
Web development	3
Zotero	2

Summary of Faculty Responses

Faculty responses = 87

Departmental Affiliation	College/School	# of Respondents
Accountancy	RCB	8
Art & Design	A&S	4
College of Education (no department designated)	COE	1
Communication	A&S	5
Computer Information Systems	RCB	2
Educational Policy Studies	COE	1
Educational Psychology, Special Education, & Communication Disorders	COE	6
Epidemiology & Biostatistics	SPH	1
Finance	RCB	1
Health Administration	RCB	3
Health Management & Policy	SPH	1
History	A&S	9
Hospitality Administration	RCB	1
Kinesiology & Health	COE	1
Learning Technologies	COE	2
Managerial Sciences	RCB	5
Marketing	RCB	7
Music	A&S	3
Philosophy	A&S	2

Political Science	A&S	5
Real Estate	RCB	1
Religious Studies	A&S	2
Risk Management & Insurance	RCB	2
Robinson College of Business (no department designated)	RCB	1
Sociology	A&S	5
Total		79

Think about the classes you are teaching right now. What hardware, software, and equipment do your students need to complete their assignments and research?	# of Responses
Responses have been parsed and merged as appropriate. In the event that a response was too unique to interpret, it has been included verbatim.	
"Audio-video access (can be a computer)"	1
"Virtual servers that can host application software that the students can access via a web interface. Would alleviate having to install this software on individual computers around campus. Difficult to do for a few classrooms (equipped with computers); nearly impossible to do for non-classroom usage (e.g., the library)."	1
Adobe - all applications; "Adobe everything"	3
Adobe Creative Suite	2
Adobe Reader	1
Atlas.ti	1
Audio equipment - specifically mentioned: built-in microphones for recording audio; headsets with microphones for online meetings	2
Audiometric equipment	1
BNA Tax Portfolios	1
Books - specifically mentioned reference collection for a library assignment; "books. Real books made of paper."	3
BrightSpace - app for mobile devices	1
BrightSpace - training	2
BrightSpace (Desire2Learn)	7
Calculators/financial calculators	2
Cameras and recording equipment - specifically mentioned cameras and tripods for recording presentations (Tegrity preferred in classrooms); camcorders; digital cameras; ability to record student presentations; "device that captures high quality audio/video"	5
Choral Public Domain Library	1
Citation management software - specifically mentioned Zotero	1
Computer/desktop computer	28
Digital Aquarium - more information on how to do simple tasks (film, edit, etc.) to load into Brightspace	1
DVDs on reserve in the library	1

Final Cut Pro	1
Garageband	1
GraphPad Prism	1
iBooks Author	1
iMovie	2
Instructor need: Classroom clickers	1
Instructor need: Clicker to advance PowerPoint slides	1
Instructor need: Computers in classrooms	1
Instructor need: Digital projectors in the classroom	1
Instructor need: Interactive white boards	1
Instructor need: Photoshop on office computer to grade digital image documentation assignments	1
Instructor need: Video editing suite (including FinalCut Pro) for graduate students who include video as part of their thesis exhibitions	1
Intel Visual Fortran	1
Internet/wifi	19
Laptop	9
Laptop - for checkout. Specifically mentioned: "It is ludicrous to make students return laptops after one week."	1
Laptop - students can bring to class	1
Latex	1
Library catalog	1
Library databases/online journals - specifically mentioned: BAS [Bibliography of Asian Studies?], JSTOR, Naxos, RILM, Westlaw, WorldCat	8
Lynda.com	1
Macs - specifically mentioned: Macs with lots of RAM; Macs with large monitors	5
Maxon Cinema 4D	1
Microsoft Access	1
Microsoft Excel/spreadsheet software	12
Microsoft Office	7
Microsoft PowerPoint	1
Microsoft Word/word processor	15
Mobile devices	1
Mobile video recording technology	1
Movie Maker	1
NodeXL	1
None	2
Notetaking software	1
Online meeting software - specifically mentioned gotomeeting	2
Online search capabilities - specifically mentioned Google	2
Outlook (GSU) email	1

Outlook -other applications	1
Printer - specifically mentioned: "to print out those readings and bring them to class, since I do not allow the use of electronics in class"; large-format color printers	7
Qualtrics	1
R	1
Registration app for mobile devices	1
Research assistance	1
RISM [Repertoire International des Sources Musicales]	1
SAS	2
Scanners	1
Server-based statistical software	1
Smartphones	1
Software for statistical analysis	1
SPSS	5
Stata	5
Streaming video - specifically mentioned Netflix, Hulu+	1
Tablets - specifically mentioned: iPads; Wacom	5
Tax research database	1
Twitter	1
Video compression software	1
Wix.com	1
XLMiner	1

Can you think of a time when you wanted to assign a project but changed your mind because the hardware, software, and/or equipment that students needed was not available on campus?	# of Responses
No	54
Yes	28
[If yes] Please describe what students needed that wasn't available on campus.	
"Apps"	1
"Not allowed to recommend that film majors use the Digital Aquarium"	1
"Video streaming that is easy for faculty to use and compatible with mobile devices"	1
Access to an academic Electronic Health Record (EHR)	1
Audio capabilities - specifically mentioned: can't play recordings in Aderhold 430 because the speaker quality is so poor	1
Classrooms - inadequate technology. Specifically mentioned: ineffective display systems; no interactive displays/touch screens; not enough interactive whiteboards; document cameras not working well; monitors buried within desks; not enough computer classrooms; internet connection not good enough to stream media; instructor workstations with working DVD/Blueray players	9

Classrooms - necessary technology not available. Specifically mentioned: PowerPoint; database access; cameras to record rehearsals and presentations; video conferencing software (e.g., Skype); no technology in assigned classroom	7
Computer labs - issues. Specifically mentioned: difficult to reserve; students' can't install software they need (e.g., gaming software)	2
Databases - not available. Specifically mentioned: BNA Tax Portfolios; Westlaw	1
Equipment - cost. Specifically mentioned: headsets with mics need to be offered for sale with low to no cost	1
Equipment - not available. Specifically mentioned: equipment for cutting paper from vector files; filming equipment not available to some COMM students because they're not enrolled in a production course	2
Equipment - not enough. Specifically mentioned: video cameras; audio equipment; editing equipment	4
Instructor need: how to control technology use during class (e.g., would like class to use tablets and remain on task)	1
Instructor need: how to integrate other software or apps in class (e.g., creating multimedia)	1
Software - not available. Specifically mentioned: ArcGIS; Atlas.ti; Scribe 4; Stata; Intel Visual Fortran; Graphpad Prism; "statistical software"	10
Software - not reliable. Specifically mentioned: ArcGIS	1
Software - too expensive. Specifically mentioned: Mplus; SmartPLS	1
Students - do not meet the technological prerequisites for courses with clearly stated prerequisites	1
Students - equal access to technology; not all students have a smartphone or camera	2
Students - lack of technology skills and inability to use technology effectively/student technological literacy	2
Tablets - for checkout by an entire class; classroom iPads	2

What technology training needs do your students have?	# of Responses
Responses have been parsed and merged as appropriate. In the event that a response was too unique to interpret, it has been included verbatim.	
"Basic writing skills through technology"	1
"Because I have been allowed to use RCB 821, I know that more than half the students (for me, more than 30 people per semester) require testing of their presumed skills and then training that is ongoing throughout the 14 weeks they are in my classroom."	1
"Companies"	1
"Graphics"	1
Adobe After Effects	1

Applications training - "How to use the apps and not learning about apps during the class. The class should be focusing on inspiring students' creativities."	1
ArcGIS	2
ARGUS	1
Basic computer skills/"digital media literacy" - specifically mentioned: download and save a file, web navigation, file organization, file back-up, file naming, file clean-up, virus protection	5
Brightspace/Desire2Learn and relatedly: "Undergrads need training on learning to learn in online learning."	7
Data manipulation and analysis	1
Digital etiquette	1
Don't know	3
EHRs [The faculty who submitted this is affiliated with Health Administration, so this could mean "electronic health records."]	1
Email	1
EndNote	1
Final Cut Pro	1
Financial calculators	1
Google Drive	1
Grammarly and other writing tools	1
Graphing programs - specifically mentioned GraphPad Prism	1
HLM [Hierarchical Linear and Nonlinear Modeling from SSI]	1
Instructional technologies (for graduate students who teach)	1
Latex	1
Library resources and research skills - specifically mentioned online databases, evaluating sources, Boolean searching, web searching, library catalog, microform readers	16
Mac/Windows integration, and this specifically: "Since Excel does not work fully on Apple (macros don't work), how to partition the hard drive on an Apple computer so that it can run Windows (in order to run the full version of Microsoft Excel)—unless there is an easier way to run the full version of Excel on Apple."	2
Microsoft Access	1
Microsoft Excel	17
Microsoft Office	2
Microsoft PowerPoint	4
Microsoft Word	3
Mplus	1
Needs are varied	2
None: "They are well ahead of the faculty and the university. We need to catch up with them."	7
PAWS	1

Protecting one's online identity in a digital world	1
Python	1
R	1
Reading	1
Request: Ability to electronically track class attendance, e.g., swipe cards in classrooms	1
Request: Campus license for a digital polling system for all faculty and students	1
Request: Campus license for videoconferencing software for group meetings and projects – specifically mentioned gotomeeting	1
Request: Technology training for faculty	1
SAS	2
Social media	1
SPSS	2
SPSS Amos	1
Stata	2
Twitter	1
Typing	1
Video - specifically mentioned filming, production, editing, compression, video quality, audio quality, interviewing, video editing for edTPA, iMovie	7
Web development	1