



**Faculty Advisory Council for Academic Computing  
Survey of Faculty/Teaching Assistants**

Report

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Survey Research Center  
Social Science Research Institute  
and  
Teaching & Learning with Technology  
Information Technology Services  
  
The Pennsylvania State University

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## **Executive Summary**

### **Background**

In fall semester of 2009, 1500 full-time faculty and 566 teaching assistants (TAs) at Penn State campuses (excluding Penn College) were invited to participate in the annual FACAC survey to determine current technology use and ownership trends. (For purposes of brevity in this report, TAs and faculty will be referred to collectively as "faculty.") A total of 616 responded, for a response rate of 29.8%. 70% of the respondents were from University Park (UP) and 50% were males. Themes that emerged during analysis included: general behaviors, mobility and cell phone use, social networking, teaching with technology, and use of Penn State technology resources and services.

### **General Technology Practices**

Penn State faculty continue to grow in their use of technology in teaching and learning. Of those responding, 37% rate themselves as advanced computer users, but 57% percent feel they are average in their computer skills and get help from colleagues, as needed. Windows is still the most widely used operating system by 69% of the responders, but Macintosh OS use by faculty has increased to 26%, up from 24% last year and Linux use is at 6%, also up 2%. Many make conscious decisions to operate their computers securely, loading and updating virus and malware detection software (65% of all, 73% of faculty only), while 75% (77% of faculty only) back-up their computer files at least once per month. Ninety- three percent (93%) own a laptop of some kind and 35% (43% of faculty only) have had it scanned and 17% of their computers have been encrypted.

### **Mobility at PSU – Cell Phones**

Penn State faculty are recognizing the advantages of mobility, especially with their use of cell phones. While 64% report owning a cell phone, 55% of those are smartphones (i.e., phones that can access the Web and email). The most popular smartphones are iPhones (31%) and Blackberrys (24%) and are used for mostly making calls (99%), texting (84%), taking / viewing / sending photos (74%), reading / sending emails (60%), and getting directions or maps (45%). Faculty also use smartphones to download and listen to music, to play online games, and to download / read articles or even books (just about 3% used a Kindle for this purpose). Thirty-two percent (32%) use smartphones to access social networking sites such as Facebook or MySpace.

### **Social Networking Sites (SNS)**

Teaching and learning is becoming more and more socially oriented. While faculty are not as active as are students in sites such as Facebook or MySpace, 65% reported having a Facebook account and sharing photos there (37%), while 10% have accounts in MySpace. Almost 20% reported spending 1-3 hours in those SNS accounts in an average day. Slightly less than half (48%) admit to viewing videos in YouTube, but 21% have a YouTube account and 11% have uploaded videos there. Slightly more than 15% have a Twitter account.

### **Teaching with Technology**

Employing changing technologies in their teaching is a challenge, but 43% of faculty rate themselves as intermediate users, including some multimedia in their lectures and activities.

The use of laptop technology in teaching is growing and 31% of the responding faculty connect their laptop to the technology podium in the classroom. However, only 6% require their students to bring laptops to class. Less than 18% of the responding faculty have used the Lynda.com online software training tutorials provided by ITS Training Services.

When interacting with their students, faculty use a number of different modes of communication. E-mail is used by 83% of the faculty, 80% use ANGEL, 6% use Facebook, 5% use blogs, and 5% use instant messaging (IM). Although 34% reported teaching a class enhanced with online activities and/or resources, 11% said they had taught a class that met entirely online.

### **Services Available to Support Instruction**

Penn State offers many technology-based services to support teaching and learning. Of the Penn State services available to them, 90% of the responding faculty reported that they used eLion, 52% used the PSU Portal page, 33% used their PASS space, 17% used Adobe Connect, and 18% used Turnitin. Ninety-three percent (93%) reported that they use ANGEL in some way, with the most popular features being coursemail (75%), syllabus (57%), drop box (56%), gradebook (55%), roster manager (48%), archives for later retrieval (45%), course export (38%), and quizzes (31%).

Faculty were asked specifically about their use of ANGEL groups and 42% responded that they own one or two (1 or 2) ANGEL groups. Most groups report that fewer than 10% of their members are not Penn State members and there are one to five (1-5) members on average per group. Less than half (42%) belong to between three (3) and five (5) groups and they use them for research (17%), committees (17%), administrative purposes such as sharing documents (15%), and 12% for study groups.

Videoconferencing is also a support tool provided at Penn State. Of those reporting that they used videoconferencing in the last year, 15% used Adobe Connect from their computer and an equal percentage teleconferenced from a dedicated room with Polycom or Tandberg. The videoconferencing tool was used for administrative purposes, such as meetings (15%), and 8% used it for instruction. A little more than a third (34%) claimed to have had two to five (2-5) people in the same physical room with them during the videoconference and 43% were aware of the "Teaching during a Pandemic" resources.

There are also a number of resources and services outside of Penn State that faculty use as well. YouTube was used by 34% of the faculty responding, 20% used Google apps, 10% used non-PSU wikis, 9% used newsfeeds for teaching, and 7% used blogs from non-PSU sources.

## ***The Study***

The survey was administered online by Teaching and Learning with Technology and the Survey Research Center, and was made available to a randomized sample of Penn State faculty and teaching assistants in the fall of 2009. The goal of the survey was to understand the use of technology by Penn State faculty and teaching assistants (TAs).

SPSS® 15.0 for Windows was used to analyze the data. Statistical differences were based on four independent variables—gender, academic status, college, and campus location (University Park and other Penn State campuses). This report summarizes the findings and indicates areas where there are significant differences at the  $p < .05$  level. Percentages reported are percentages based on the actual number of individuals who responded to the specific question (Valid %), not on the total number of respondents (% Sample), unless otherwise noted.

## ***Survey Respondents***

Invitations were sent to 1500 faculty and 566 teaching assistants (TAs) for a total of 2066 individuals at all Penn State locations except Penn College. Of those invited, 616 individuals responded to the invitation for a response rate of 29.8%.

### *Gender*

Table 1 shows the distribution of respondents by gender, based on the total of 554 respondents to the question on gender: 50.2% answered "male," 47.8% answered "female," 0.4% answered "transgender," and 1.6% preferred not to answer. According to the Penn State Fact Book, the females comprise 49.4% and males, 50.6%, so this sample is fairly representative of the larger University in regard to gender.

*Table 1. Gender*

<b>Gender</b>	<b>Frequency</b>	<b>Valid%</b>
Male	278	50.2%
Female	265	47.8%
Transgender	2	0.4%
Prefer not to answer	9	1.6%

### *Location*

The majority of respondents to the survey (69.8%) were from the University Park (UP) campus, followed by Hershey at 3.9% and Erie, The Behrend College, at 3.4% (see Table 2). The Penn State Fact Book indicated that University Park faculty make up 56% of the full-time faculty employed by the University, so UP is over-represented by approximately 14% in this sample.

Table 2. Campus Locations

<b>Campus Location</b>	<b>Frequency</b>	<b>Valid%</b>
Abington	14	2.3%
Altoona	12	2.0%
Beaver	3	0.5%
Berks	11	1.8%
Brandywine (formerly Delaware Co)	8	1.3%
Dickinson	1	0.2%
DuBois	6	1.0%
Erie, The Behrend College	21	3.4%
Fayette, The Eberly Campus	6	1.0%
Great Valley	1	0.02%
Greater Allegheny (formerly McKeesport)	13	2.1%
Harrisburg	20	3.3%
Hazleton	4	0.7%
Hershey	24	3.9%
Lehigh Valley	4	0.7%
Mont Alto	6	1.0%
New Kensington	8	1.3%
Schuylkill	8	1.3%
Shenango	2	0.3%
University Park	430	70.1%
Wilkes-Barre	1	0.2%
Worthington Scranton	2	0.3%
York	8	1.3%

*College Affiliation/Expertise/Status*

Those responding from the University Park campus were also asked to identify their College affiliation. As noted in Table 3 The College of Liberals Arts had the highest responses at 26.4%. Twelve (12) individuals responded "other" and those included three (3) from World Campus, two (2) each from Dickinson School of Law, the Materials Research Lab, and Outreach, and one (1) each from Applied Research Lab and Social Science Research Institute.

Table 3. College - University Park campus only

<b>College</b>	<b>Frequency</b>	<b>Valid%</b>
The College of Agricultural Sciences	33	8.6%
The College of Arts and Architecture	24	6.3%
Smeal College of Business	14	3.7%
The College of Communications	10	2.6%
The College of Earth and Mineral Sciences	17	4.4%
The College of Education	29	7.6%
The College of Engineering	34	8.9%
The College of Health and Human Development	26	6.8%
The College of the Liberal Arts	101	26.4%
The School of Law	0	0.0%
Eberly College of Science	65	17.0%
School of Nursing	5	1.3%
The College of Information Sciences and Technology	4	1.0%
University Libraries	9	2.3%
Other - (please specify)	12	3.1%

Other Penn State campus respondents were asked to identify their areas of academic expertise (see Table 4). Humanities and languages had the largest number of responses at 12.8%, followed closely by Biological/Life sciences at 12.2%. Seven (7) individuals responded "other" and these included one from each of the following areas, Biblical literature, business law, family and disability law, public health services, School of Public Affairs, and swimming.

Table 4. Academic Expertise other Penn State campuses.

<b>Academic Expertise</b>	<b>Frequency</b>	<b>Valid%</b>
Agriculture and natural resources	2	1.2%
Visual and performing arts	5	2.9%
Biological/life sciences	21	12.2%
Business	18	10.4%
Communications	7	4.1%
Computer and information systems	7	4.1%
Education	9	5.2%
Engineering and engineering technologies	12	7.0%
Health professions, allied health services, and recreational services	19	11.0%
Humanities and languages	22	12.8%
Interdisciplinary studies	1	0.6%
Physical sciences and mathematics	16	9.3%
Social sciences	20	11.6%
Library Science (University Libraries)	6	3.5%
Other (please specify)	7	4.1%

All respondents were asked to indicate their academic status (see Table 5). Lecturer or Instructor had the highest number of responses (28.3%) followed by Teaching Assistant, (26.0%) Associate Professor (10.9%) and Professor (10.4%). All other categories had less than a 10% response rate.

Table 5. Faculty Status

<b>Status</b>	<b>Frequency</b>	<b>Valid%</b>
Teaching Assistant	143	26.0%
Lecturer or Instructor	156	28.3%
Senior Lecturer or Senior Instructor	18	3.3%
Assistant Professor	51	9.3%
Associate Professor	60	10.9%
Professor	57	10.4%
Research Assistant or Research Associate	38	6.9%
Senior Research Associate or Senior Research Assistant	10	1.8%
Assistant Librarian	6	1.1%
Associate Librarian	4	0.7%
Librarian	5	0.9%
Senior Scientist	1	0.2%
Cooperative Extension	1	0.2%

### **Current Technology Usage and Ownership**

#### *Technology Devices*

Respondents were asked what technology devices they owned (see Table 6). Only 0.3% of the respondents reported they did not own any of the technologies devices listed. The majority of participants (77.8%) responded they owned laptop computers; 70.1% owned desktop computers; 64.1% owned cell phones; and 63.3% owned portable storage devices.

Table 6. Technology devices

<b>Device</b>	<b>Frequency</b>	<b>Valid%</b>
Desktop computer	432	70.1%
Standard laptop computer	479	77.8%
Laptop computer that is a Tablet PC	41	6.7%
Laptop computer that is a netbook or mini notebook	50	8.1%
Cell phone	395	64.1%
iPod	158	25.6%
iPod that is NOT a Touch (eg, nano, shuffle)	100	16.2%
Portable MP3 player that is not an iPod or a cell phone	51	8.3%
Kindle reader, a Sony Book Reader, or another e-book reader	21	3.4%
Web cam that IS built into my computer	139	22.6%
Web cam that is NOT built into my computer (USB / Firewire)	76	12.3%
USB headset (earphones and microphone used with Adobe Connect Pro or podcasts)	58	9.4%
Palm-sized video camera (eg, FLIP)	36	5.8%
Digital camera that is NOT part of my cell phone	264	42.9%
Portable storage device (eg, flash, pocket, thumb drive, etc)	390	63.3%
Cellular modem card or device	26	4.2%
None of these devices	2	0.3%

Respondents were asked if they could access the Web on their cell phones and 43.6% indicated they could do so (see Table 7). These respondents were asked what type of Internet-capable cell phones (smart phones) they owned. The iPhone (23.6%) and Blackberry (19.4%) were the brands that had the higher ownership frequency. Sixteen (16) people responded to the "other" category, and of that group, 11 of those individuals responded they did not own a Internet-capable phone, two (2) owned Verizon, one (1) Virgin Mobile, one (1) Qualcomm, and one (1) Motorola tracfone.

*Table 7. Internet capable phone*

<b>Phone</b>	<b>Frequency</b>	<b>Valid%</b>
Blackberry	55	19.4%
HTC or other Windows Mobile Device	7	2.5%
iPhone	67	23.6%
LG	46	16.2%
Motorola	29	10.2%
Nokia	12	4.2%
Palm	9	3.2%
Samsung	27	9.5%
Sony Ericson	7	2.5%
T-Mobile	9	3.2%
T-Mobile Google phone	0	0.0%
Other	16	5.6%

Respondents were also asked how they used their cell phones. The majority of respondents (63.5%) indicated they used their phones for making phone calls and approximately 50% said they used their cell phones for sending text messages. Almost 36% used their phones for taking/sending photos and 22% for sending/receiving emails. In the "other" category, the most popular uses for the cell phone were accessing calendars, checking news and weather, and accessing the web.

*Table 8. Cell phone activities*

<b>Activity</b>	<b>Frequency</b>	<b>Valid%</b>
Making phone calls	391	63.5%
Sending text messages	305	49.5%
Sending and receiving email	133	21.6%
Taking and sending or viewing photos	220	35.7%
Taking and uploading videos	44	7.1%
Downloading and viewing videos	29	4.7%
Downloading / listening to music	70	11.4%
Downloading business applications	29	4.7%
Accessing social network sites such as Facebook or Twitter	71	11.5%
Playing games	68	11.0%
Receiving bulletins or alerts from a subscription service	64	10.4%
Using GPS/maps or getting directions	99	16.1%
Reading e-books or articles	44	7.1%
Scheduling courses	8	1.3%
Accessing ANGEL	30	4.9%
Accessing eLion	16	2.6%
Other (please specify)	13	2.1%

Respondents were asked if they used an electronic calendar and what calendaring program they used (see Table 9). Approximately 60% used an electronic calendar and the most frequently used calendar was Google Calendar (23.1%), followed by Microsoft Outlook (16.9%). For those who specified "other", 50 individuals responded that they used iCal and 14 used Palm and Blackberry. Groupwise and cell phones were each mentioned six (6) times.

Table 9. Electronic Calendars

Calendar	Frequency	Valid%
I do not use an electronic calendar.	2	0.3%
ANGEL Calendar	42	6.8%
Google Calendar	142	23.1%
Meeting Maker	2	0.3%
Microsoft Outlook	104	16.9%
Oracle Collaboration Suite Calendar	47	7.6%
Yahoo! Calendar	8	1.3%
Wikipedia Electronic Calendar	0	0%
Other (please specify)	107	17.4%

The most widely used email program by faculty and TAs, as noted in Table 10, is Penn State Webmail (34.4%), followed by Google Mail (19.2%) and Outlook/Outlook Express (17.7%). In the "other" category, ANGEL was the most frequently mentioned email, alpine and Lotus notes were listed twice.

Table 10. Email programs

Email	Frequency	Valid%
Penn State Webmail	212	34.4%
Mozilla Thunderbird	48	8.0%
Google Mail	115	19.2%
Eudora	46	7.7%
Groupwise	6	1.0%
Microsoft Outlook / Outlook Express	106	17.7%
Mail (Apple)	36	6.0%
Windows Mail	2	0.3%
Yahoo!! Mail	6	1.0%
AOL	3	0.5%
Entourage	6	1.0%
Other	13	2.2%

Respondents were asked to rate their everyday expertise with computers as compared to their colleagues. The majority (56.9%) rated themselves as average, 36.5% rated themselves as advanced and less than 6% rated themselves as novice (see Table 11). Based on faculty status, teaching assistants and lecturers were more likely to rank themselves as advanced/average computer users as compared to their colleagues.

Table 11. Computer use compared to colleagues

	Frequency	Valid%
Advanced	224	37.4%
Average	341	56.9%
Novice	34	5.7%

Respondents were asked how they connected to the Internet from home (see Table 12). Comcast was the most frequently used service (52%), followed by Verizon (27.2%). Almost 20% responded they used a service not listed. In the “other” category, DE Communications was listed the most, with 41 indicating they used that service. Six (6) used Atlantic Broadband and five (5) responded they used Penn State University.

Table 12. Internet Provider

	Frequency	Valid%
Comcast	304	52.0%
Verizon	159	27.2%
Embarque	6	1.0%
Other (please specify)	116	19.8%

In regards to technology training, participants were asked if they had used the Lynda.com software video tutorials made available through ITS Training Services. The majority of respondents, 52.6%, said they were not aware of this service, 30.1% said they were aware of it but do not use it and 17.3% said they used it!

### **Technology Use in Teaching**

Respondents were asked about their use of Social Networking Sites (SNS). The use of Facebook was the most commonly mentioned. A majority of the respondents (64.8%) had a Facebook account, 37.3% indicated they shared photos on Facebook and 20.8% said they used Facebook to look up students or other instructors. The other most frequently used service was YouTube (or a similar service). Almost 48% said they viewed movies on this type of service although less than 22% have an account with the service, and only 11% have ever uploaded a video to that site (see Table 13). In the “other” category, blogs (not in Blogs at Penn State), LinkedIn, and websites (both personal and professional) were mentioned.

Table 13. Social Networking Sites.

Site	Frequency	Valid%
I have a MySpace account.	61	9.9%
I have a Facebook account.	399	64.8%
I have an academic MySpace account that I have linked to for class.	3	0.5%
I have an academic Facebook account that I have linked to for class.	8	1.3%
I have looked up instructors or students on MySpace.	16	2.6%
I have looked up instructors or students on Facebook.	128	20.8%
I share my photos on MySpace.	23	3.7%
I share my photos on Facebook.	230	37.3%
I have an online photo account to share digital photos (Flickr, Picasa, etc.)	121	19.6%
I have an account with YouTube or a similar site.	132	21.4%
I have viewed a movie on YouTube or a similar site.	295	47.9%
I have uploaded a movie to YouTube or similar site.	67	10.9%
I have a Twitter account.	94	15.3%
I have a personal blog in Blogs at Penn State.	44	7.1%
I have a personal wiki.	25	4.1%
I do not use any of these services.	103	16.7%
Other	28	4.5%

Respondents were asked how much time they spend in an average day in the SNS. More than 77% said the time spend was less than one (1) hour, 18.6% said they spend 1-3 hours, and 1.2% said they spend 4-9 hours per day. On the "other" category, most responded they spent no time on these sites.

Based on faculty status, teaching assistants were more likely to share photos on their Facebook page than their colleagues. Females and University Park respondents were more likely to look up students and instructors than males or other Penn State campus colleagues. Female respondents were more like to have an online photo account than males as were respondents from the University Libraries and Colleges of IST, HHD, and Communication. Teaching assistants and University Park respondents were more likely to have YouTube accounts. Females were more likely to have Twitter accounts.

Respondents were asked to rate their expertise with technology used specifically in teaching. Forty-three percent (43%) said they were intermediate users (use some multimedia, blogs, or wikis), 40.8% said they were novices (used PowerPoint and not much else), 9.6% said they were advanced (they used multimedia, blogs, wikis, and much more), and 6.7% said they did not know what their expertise rating was.

Faculty and TAs were asked if they encouraged students to bring laptops to class. The majority of the respondents (76.1%) responded they had no policy, 8.2% indicated they encouraged students to bring laptops/handhelds to take notes, 6.3 said they required students to bring laptops/handhelds and 9.4% said they do not permit students to bring laptops/handhelds. Those who responded they required students bring laptops/handhelds and those who said they did not permit student to bring laptops/handhelds were asked to specify reasons for doing so. The open-ended responses to these questions are included in [Appendix 1](#), but for most of those who required laptops/handhelds, they indicated that the use of laptops/handhelds was part of the class. Those who indicated that they did not permit laptops/handhelds, said it was a distraction.

Respondents were also asked if they used a laptop computer in teaching their classes. Thirty-one percent (31%) responded that they connect their laptop at the classroom podium. Almost 7% used their laptop as a stand-alone in class and 61.8% said they do not use a laptop when teaching.

### ***Technology Activities***

Respondents were provided with a list of available services at Penn State and asked to indicate if (1) they used the service, (2) if they were aware of the service, but did not use it, or (3) if they were unaware of the service. ANGEL (93%) and eLion (90.1%) were the most frequently used services. More than half use the Penn State Portal and a third use the PASS personal Web space

In the "other" category services listed included: clickers, EARS, Fred, wikis, MTSS, Taskstream, CAT, personal web space, website on college server, proxy access to library databases and webmail.

Table 14. Penn State Services

Service	I used this service	I am aware of this service, but do not use it	I was not aware of this service
Adobe Connect Pro ( <a href="https://breeze.psu.edu/">https://breeze.psu.edu/</a> )	17.3%	30.1%	52.6%
ANGEL ( <a href="http://cms.psu.edu">http://cms.psu.edu</a> )	93.0%	6.6%	0.3%
Blogs at Penn State ( <a href="http://blogs.psu.edu/">http://blogs.psu.edu/</a> )	13.2%	46.9%	39.9%
Blogs at Penn State Protected Blogging ( <a href="http://blogs.psu.edu/2009/08/protected-blogging-launches.html">http://blogs.psu.edu/2009/08/protected-blogging-launches.html</a> )	3.1%	35.8%	61.1%
Digital Commons ( <a href="http://digitalcommons.psu.edu/">http://digitalcommons.psu.edu/</a> )	12.8%	38.3%	49.0%
eLion ( <a href="http://elion.psu.edu">http://elion.psu.edu</a> )	90.1%	6.9%	3.0%
ePortfolios at Penn State ( <a href="http://portfolio.psu.edu/">http://portfolio.psu.edu/</a> )	11.8%	44.8%	43.4%
PASS (My Personal Web space)	33.1%	36.9%	30.0%
Penn State Portal ( <a href="https://portal.psu.edu/">https://portal.psu.edu/</a> )	52.4%	52.4%	52.4%
Podcasting at Penn State ( <a href="http://podcast.psu.edu/">http://podcast.psu.edu/</a> )	6.3%	55.2%	38.5%
Refworks ( <a href="http://www.libraries.psu.edu/psu/researchguides/matbytype/refworks.html">http://www.libraries.psu.edu/psu/researchguides/matbytype/refworks.html</a> )	13.9%	31.5%	54.6%
TurnItIn ( <a href="http://turnitin.psu.edu">http://turnitin.psu.edu</a> )	18.1%	51.2%	30.8%
Other (please specify)	20.6%	23.6%	55.6%

Respondents were asked what NON-PSU resources they used. The most frequently used resource was YouTube (34.3%) followed by Google Docs and other Google applications (see Table 15). Twitter was used less than 3%, but wikis were used by slightly more than 10%.

Approximately 40% indicated they did not use any of these resources. In the "other" category, the most cited resources were Web sites and textbook Web sites. Based on faculty status, teaching assistants were more likely to use YouTube when teaching.

Table 15. Non-PSU State online Resources

<b>Non-PSU State online Resources</b>	<b>Frequency</b>	<b>Valid %</b>
MySpace	2	0.3%
Facebook	28	4.5%
YouTube	211	34.3%
Google Docs or other Google apps	121	19.6%
Blogs from non-PSU sources	43	7.0%
Podcasts from other sources	44	7.1%
Newsfeeds	54	8.8%
Twitter	13	2.1%
Wikis	63	10.2%
Other	37	6.0%
None of the above	248	40.3%

Respondents were asked about their use of technology enabled classrooms or computer labs and if it was easy to schedule these rooms. Approximately 60% said they used these types of rooms. Of those who responded to this question 18.8% said they rooms were easy to schedule, 14.6% said it was somewhat difficult, 5.6% said it was very difficult, 40.6% said they did not know, because they did not schedule their own classrooms and 5.3% indicated "other" responses. Some of the "other" reasons included that: they were in extension, their course had nothing to do with technology, or they had mixed results scheduling the room. See full comments in [Appendix 2](#).

University Park respondents used more technology-enabled classrooms than respondents at other Penn State Campuses, but respondents at other Penn State campuses found it easier to schedule technology enabled classrooms than their colleagues at University Park.

Respondents were asked how they interact with their students (see Table 16). More than 80% of the respondents said they used email (82.5%) and ANGEL(80.2%) to interact with their students. In the "other" category, cell phone/telephone, class Web sites, face-to-face and TaskStream were mentioned.

Table 16. Tools for Interacting with Students

<b>Tools</b>	<b>Frequency</b>	<b>Valid%</b>
ANGEL	494	80.2%
Adobe Connect Pro	17	2.8%
Blogs	29	4.7%
Email	508	82.5%
Facebook	35	5.7%
MySpace	1	0.2%
Instant Messaging (IM)	33	5.4%
Listservs	23	3.7%
Twitter	4	0.6%
Text messages or SMS	26	4.2%
Wikis	20	3.2%
Other	32	5.2%
None of the above	18	2.9%

When asked what operating systems faculty and TAs used, the majority, 76.5%, indicated they used Windows, 24.2% used Macintosh, 4.1% used Linux/Unix, 0.8% did not know and 1.1% responded "other." In the "other" category the only valid response was they used "whatever ANGEL is."

### **Videoconferencing**

Respondents were asked about their use of videoconferencing - what services they used and for what purposes.

The majority of the people did not use videoconferencing services, but for those who did, the most frequently used were Adobe Connect Pro from a computer and a dedicated room using Polycom or Tandberg. In the "other" category, Skype was mentioned 17 times, iChat 6 times, OOVVO was mentioned twice along with WebEx, and Gmail.

When asked why they used videoconferencing, 15% indicated it was for administrative purposes followed by instruction/course delivery at 8%. In the "other" category, meetings, research and professional development/training were mentioned the most often (see Tables 17 & 18).

*Table 17. Videoconferencing Services*

<b>Service</b>	<b>Yes</b>	<b>NO</b>
from a computer using Adobe Connect Pro	15.8	84.2%
from a computer and projector in a room using Adobe Connect Pro	9.0	91.0%
from a computer using Polycom or Tandberg	6.7	93.3%
from a dedicated room using Polycom or Tandberg	14.6	85.4%
Other (please specify)	18.6	81.4%

*Table 18. Videoconferencing Purposes*

<b>Purpose</b>	<b>Frequency</b>	<b>Valid%</b>
Instruction/course delivery	50	8.1%
To help students absent due to H1N1 illness	2	0.3%
Student advising	8	1.3%
Office Hours	10	1.6%
Administrative purposes (e.g., meetings, interviews)	90	14.6%
Other	38	6.2%

Respondents were asked how many people watched the session during their last videoconference. As indicated in Table 19, 34.2% said there were 2-5 people in the videoconferencing session and 23.2% said they were alone. Fewer than 12% said there were 16+ people watching the session.

Table 19. Number of people in videoconferencing session.

Number of people	Frequency	Valid%
I was alone	37	23.2%
2-5	53	34.2%
6-10	27	17.4%
11-15	20	12.9%
16-20	8	5.2%
more than 20	10	6.5%

Faculty and TAs were asked during the past year, what format(s) they used to teach a course (see Table 20). The majority (70.1%) responded that they taught classes in the traditional face-to-face format and approximately 34% taught using an enhanced face-to-face format.

Table 20. Instructional format

Format	Frequency	Valid%
Face-to-face (classes with only face-to-face meetings)	432	70.1%
Enhanced Face-to-face (face-to-face classes with some online activities or resources)	210	34.1%
Hybrid or Blended (reduced face-to-face meetings and more online activities)	44	7.1%
Web (entirely online)	66	10.7%

They were also asked if they were aware of the listed resources (see Table 22). The majority of the respondents were not aware of the services and fewer indicated were using these resources. Respondents were also asked if they were aware of the "Teaching During a Pandemic" resources. Less than half (43.3%) said they were aware of the resources.

Table 22. Resource use

Resource	Yes, I am aware of this resource.	Yes, I am using this resource.	No, I am not aware of this resource.
Education Gaming Commons ( <a href="http://gaming.psu.edu">http://gaming.psu.edu</a> )	11.0%	0.9%	88.1%
Graduate Education and Research Services (GEaRS) or RCC ( <a href="http://rcc.its.psu.edu/index2.shtml">http://rcc.its.psu.edu/index2.shtml</a> )	6.3%	2.2%	91.5%
Technology Learning Assistants (TLA) ( <a href="http://tlt.its.psu.edu/tla">http://tlt.its.psu.edu/tla</a> )	18.2%	4.0%	77.8%
ITS Training Services Training on Demand (TOD) ( <a href="http://its.psu.edu/training/ondemand">http://its.psu.edu/training/ondemand</a> )	28.9%	8.4%	62.7%

Survey respondents were asked how often they accessed the Libraries' Web pages. Approximately 42% responded they accessed the pages on a weekly basis during the semester.

Table 22. Libraries' Web pages access

<b>Access during a semester</b>	<b>Frequency</b>	<b>Valid%</b>
Daily	118	20.6%
Weekly	239	41.8%
Monthly	93	16.3%
Just once or twice	73	12.8%
Never	49	8.6%

Respondents were asked to indicate the resources they required their students to use. The most frequent answer was online library resources as well as resources available on the web. The second most common answer was that they did not require students to use any of these resources.

Table 23. Required resource use

<b>Resource</b>	<b>Frequency</b>	<b>Valid%</b>
Online library resources in addition to resources freely available on the web	255	41.4
Online library resources in addition to resources freely available on the Online library resources in addition to print/physical library resources (books, maps, manuscripts, videos, CDs, etc.)	190	30.8
Online library resources in addition to e-reserves	99	16.1
None of the above	245	39.8

Respondents were asked whether or not they required students to create an e-portfolio for their course, 96% responded they did not.

Respondents were asked how frequently they engaged in the listed activities (see Table 24). The activities most frequently engaged in on a daily basis were: texting friends (30.1%), accessing Facebook pages (29.1%), and downloading and reading books and articles (26.8%). The activities least frequently engaged in were accessing MySpace, Twitter, developing and using interactive games and simulations, participating in videoconferences, using online quizzing tools and watching Netflix movies.

Table 24. Required resource use

	<b>Never</b>	<b>Once or twice a year</b>	<b>Once or twice a month</b>	<b>Once or twice a week</b>	<b>Every Day</b>
Accessing Facebook pages	29.0%	4.0%	14.2%	23.7%	29.1%
Accessing MySpace pages	82.7%	7.5%	6.2%	2.6%	0.9%
Accessing Twitter	78.9%	4.3%	8.4%	4.9%	3.5%
Texting friends	31.0%	4.6%	14.5%	19.7%	30.1%
Listening to a podcast	42.7%	20.8%	23.4%	9.9%	3.1%
Downloading digital music from a service (e.g. iTunes, Ruckus)	43.4%	16.8%	30.1%	8.3%	1.5%
Downloading and reading books or articles	18.2%	7.7%	15.1%	32.1%	26.8%
Developing and using interactive games and simulations	76.9%	10.3%	6.8%	4.3%	1.7%
Watching TV shows / movies on my computer	34.4%	17.1%	21.8%	20.4%	6.4%
Using a digital camera (still or movie)	12.2%	10.1%	41.4%	30.6%	5.7%
Participating in an Adobe Connect Pro videoconference	74.7%	14.6%	8.5%	2.0%	0.2%
Using new ANGEL features	20.6%	20.2%	24.7%	20.6%	13.9%
Using the Penn State Portal	35.0%	19.5%	18.2%	14.8%	12.5%
Using the Penn State PASS resources	63.0%	15.8%	11.3%	6.8%	3.2%
Using online quiz tools	66.6%	10.6%	12.8%	8.9%	1.1%
Using library electronic resources (LIAS and e-resources)	18.7%	10.6%	20.4%	33.6%	16.7%
Watching Netflix movies	63.9%	7.6%	10.1%	16.4%	2.0%
Safely backing-up my computer files	14.6%	20.8%	29.3%	19.9%	15.3%
Other (please specify)	72.2%	2.8%	5.6%	8.3%	11.1%

### **Use of ANGEL**

Respondents were asked if they used ANGEL and the overwhelming majority (91.3%) said they used it. Respondents were also asked to indicate the features and to rank how important each of the features were to them (see Table 25). The items that were extremely important to the majority of individuals were: course mail (74.9%), syllabus (57.3%), drop boxes (56.2%) and grade books (54.7%). Games (crossword and quiz shows) were considered not at all important by approximately 40% of the respondents. The features that were not applicable or not used by many were IMS/SCORM packages and Learning Object Repository.

Table 25. ANGEL features

	<b>Not at all important</b>	<b>Somewhat important</b>	<b>Extremely Important</b>	<b>NA/Don't use</b>
Accessible View (508 Compliance)	14.5%	19.0%	20.8%	45.8%
Announcements	13.7%	35.1%	28.3%	22.9%
Attendance	22.9%	22.1%	22.3%	32.8%
Bookmarks / Links	17.2%	31.9%	23.8%	27.1%
Calendar	21.7%	33.1%	17.4%	27.7%
Course Archiving (1 yr after course ends)	10.0%	26.5%	45.0%	18.5%
Course Export (downloading course to your computer)	12.5%	23.5%	38.3%	25.8%
Course Mail	3.9%	15.8%	74.9%	5.3%
Course Themes	28.1%	24.2%	10.6%	37.0%
Data Manager	17.7%	24.5%	18.6%	39.2%
Discussion Forum	14.5%	28.6%	29.5%	27.4%
Drop Boxes	8.9%	16.7%	56.2%	18.2%
Game (crossword puzzles)	40.2%	8.6%	1.5%	49.7%
Game (quiz shows)	40.1%	7.8%	1.5%	50.5%
Gradebook	10.5%	17.2%	54.7%	17.6%
HTML editor	19.6%	20.7%	15.9%	43.8%
IMS / SCORM packages (publisher content)	26.6%	8.1%	3.1%	62.2%
Knowledgebase (ANGEL Help documents)	17.5%	26.5%	16.6%	39.4%
Learning Object Repository (LOR)	25.8%	11.5%	3.3%	59.4%
Library - eReserves	12.4%	26.7%	28.0%	32.8%
Live Chat	28.9%	16.1%	7.2%	47.9%
Merged Roster Management	16.5%	16.3%	26.5%	40.7%
Mobile / PDA view	25.2%	13.1%	10.9%	50.8%
Quizzes	16.2%	21.0%	30.7%	32.0%
Report Tab (Attendance, Activity, Grades, etc.)	11.0%	19.6%	46.6%	22.8%
Roster Manager	8.8%	23.1%	47.5%	20.6%
Survey	17.8%	28.5%	17.2%	36.5%
Syllabus	7.8%	21.5%	57.3%	13.5%
Team Manager	18.4%	20.6%	22.1%	39.0%
Tracking eLion Student Add/Drop	10.7%	26.1%	41.2%	22.0%
Tracking student access (i.e., logins, folder access)	11.7%	33.5%	29.7%	25.1%
User Profile Page	17.3%	34.8%	18.2%	29.8%
What's new notifications in My Courses and My Groups	18.6%	28.4%	17.7%	35.3%
What's New Sidebar	23.4%	24.3%	11.2%	41.1%

When asked about the Pollock Testing Center and secure ANGEL quizzes, 22.2% were satisfied, 4.0% were not satisfied, 30.5% were not aware of them and 43.3% were aware of them, but did not use them. When asked if they used ANGEL groups, 49.7% said they used them, 50.3% said they did not. Respondents were also asked to indicate how many ANGEL groups they owned (Table 26) and what percentage of the group members area were not Penn State faculty, staff or students (Table 27). One to two groups was the most common answer on group ownership and most group members were affiliated with Penn State.

Table 26. ANGEL groups owned

<b>ANGEL groups</b>	<b>Frequency</b>	<b>Valid%</b>
None	92	36.8%
1-2	104	41.6%
3-5	37	14.8%
6-8	12	4.8%
9-10	5	2.0%

Table 27. ANGEL groups outside membership

<b>Outside membership in ANGEL groups</b>	<b>Frequency</b>	<b>Valid%</b>
Less than 10%	215	92.3%
10-25%	10	4.3%
26-50%	3	1.3%
51-75%	3	1.3%
76-100%	2	0.9%

Respondents were also asked to indicate the primary use for ANGEL groups. Research (17.2%) and committee/task forces (16.6%) were the highest uses, followed closely by administrative uses (15.3%).

Table 28. ANGEL categories

<b>ANGEL categories</b>	<b>Frequency</b>	<b>Valid%</b>
Administrative	24	15.3%
Advising	11	7.0%
Club	14	8.9%
Committee / Task Force	26	16.6%
Course Development Space	21	13.4%
Research	27	17.2%
Study Group	19	12.1%
Training / Professional Development	15	9.6%

Respondents were also asked how many ANGEL groups they were either a member of or guest of, and approximately 42% responded they belonged to 3-5 groups (see Table 29).

Table 29. Membership in ANGEL groups

<b>Membership in ANGEL groups</b>	<b>Frequency</b>	<b>Valid%</b>
None	5	3.2%
1-2	54	34.2%
3-5	66	41.8%
6-8	21	13.3%
9-10	4	2.5%
11 or more	8	5.1%

Respondents were asked what feature of ANGEL groups they used the most often, communication and email were commonly used, additional responses in [Appendix 3](#). Respondents were asked to list one tool they would like to see added to support the e-learning/learning support environment. Responses are in [Appendix 4](#).

### **Security**

Respondents were asked what operating system(s) they preferred to use on their primary computer (see Table 30). The majority (68.5%) preferred Windows (down from 74%) followed by Macintosh (25.8%, up 2% from the last survey), Linux/Unix (6.0%, up 2%), and other (0.2%). One person responded for the "other" category and indicated they would prefer Macintosh, but it was not supported in their department.

Table 30. Preferred operating system

<b>Preferred operating system</b>	<b>Frequency</b>	<b>Valid%</b>
Windows	422	68.5%
Macintosh	159	25.8%
Linux/Unix	37	6.0%
Don't know	37	6.0%
Other	1	0.2%

Respondents were asked how they updated their anti-virus software on their computers. The majority of respondents had their computers set to accept all anti-virus updates automatically. Approximately 7% did not have anti-virus software and just over 5% were not sure (see Table 31).

Table 31. Anti-virus software updates

<b>Anti-virus software update</b>	<b>Frequency</b>	<b>Valid%</b>
I manually update my anti-virus software, but less than once	29	5.2%
I manually update my anti-virus software, at least once a week	35	6.3%
I have my computer set to accept all anti-virus updates auto	345	61.9%
I have software, but do not update it regularly.	13	2.3%
Tech support updates it for me.	67	12.0%
I do not have anti-virus software on my computer.	38	6.8%
I'm not sure.	30	5.4%

As indicated in Table 32, the majority of respondents (64.9%) responded they had spyware/malware software loaded on their computer, 9.7% did not, and 15.6% were not certain.

*Table 32. Spyware and malware*

<b>Software to eliminate spyware and malware</b>	<b>Frequency</b>	<b>Valid%</b>
Yes	400	64.9%
No	60	9.7%
I'm not sure.	96	15.6%

Respondents were asked if their computers had been scanned for personal identity information (social security numbers, student grades, and protected health information - PSU Policy AD-197). Approximately 35% said their computers had been scanned, 22% said "no" and 43% said they did not know.

Respondents were also asked if their Penn State laptop computer had been encrypted and the majority, 54.4%, responded that they did not know, 29.1% said "no" and 16.5% responded "yes."

Respondents were asked if they ever had a computer security issue at Penn State and if so, where they reported it. The majority, 90.7% said they had not. Of those who had a problem, 1% said they did not know where to report it, 3.3% said the help desk and 0.7% said they reported it to ITS SOS operations. In the "other" category, the most common answer was that they reported it to their department ITS support.

Respondents were asked how often they stored/backed-up their computer files and how they stored the computer files. The most frequent answer was monthly, at 33.1%, followed by weekly, at 23.7%, and daily, at 18.5%. Approximately 10% said they never backed up their files. The most common methods for storing back-up files were on external hard drives (48.2%), on flash drives (36.2%), and on their computers (22.4%) (see Tables 33 & 34).

*Table 33. Backup frequency*

<b>Back-up frequency</b>	<b>Frequency</b>	<b>Valid%</b>
Daily	103	18.5%
Weekly	132	23.7%
Monthly	184	33.1%
Never	56	10.1%
Not sure	81	14.6%

*Table 34. Backup file storage*

<b>Back-up file storage</b>	<b>Frequency</b>	<b>Valid%</b>
On my computer	138	22.4%
On an external hard drive	297	48.2%
On my U drive	34	5.5%
On a flash drive	223	36.2%
On a CD	85	13.8%
On a personal or department server	70	11.4%
In my PASS space	25	4.1%
On an ITS server (e.g., TSM)	21	3.4%
Other (please specify)	33	5.4%

Respondents were asked if they assigned permissions or restricted access to their files in their PASS space using Access Control List (ACL) or User-Managed Groups <https://umg.its.psu.edu/index.cgi>. Twenty-five individuals responded to this question and 17 indicated that they did not allow others to access their files.

*Table 35. PASS space*

<b>Access to files on PASS space</b>	<b>Frequency</b>	<b>Valid%</b>
Yes, I assign access permissions to my files.	3	12.0%
No, I do not allow others to access my files.	17	68.0%
I do not know how to set permissions to access my files.	5	20.0%

## **Appendix 1.**

### **Do you encourage students to bring their laptops to class?**

Answer: Yes, I include activities that require student to use their laptops or handheld computers in class (please describe).

When students have labs to complete or group work in class they are encouraged to bring laptops to facilitate group work. If students want to take notes with their laptops they can bring them for this purpose as well.

we do programming excersizes

to go over power points

They bring their pictures of disease looking trees which is part of the last class project.

special software use

once, I asked students to bring laptops for an ecological modeling exercise, since we did not have access to a computer lab for that period

non teaching appointment

my "class" is onllne ... you assumed "class" meant literal classroom. In the question below you also rule out on-line classes.

imovie, garageband, studio code all required for completion of course assignments

iMovie projects, podcasting, blogging, I have encouraged using Twitter, podcast

I teach writing and journalism, and most of my classrooms have computers in them, but when I have a writing class with no computers, I make it clear at the beginning of the semester that students may bring laptops to class, and sometimes I require it.

I teach through World Campus and the eLearning Institute

I teach online, so student must use computer throughout class.

I teach computer-based courses where I we build models in class

Google docs, diigo, video editing

Generally, I discourage the daily usage of laptops, but for several assignments there are specific days I encourage them to bring laptops to work on.

for research etc

for e-portfolio creation

clicker

certain assignments and certain activities

blogging, podcasting

As part of EDUCATE in the College of Education I strive to incorporate laptop use in nearly every class period

architecture students all required to have laptops

accessing virtual slides at [virtuallslides.psu.edu](http://virtuallslides.psu.edu)

Answer: No, I DO NOT allow students to bring laptops to class (please describe).

Why not have a "I discourage it" choice? Far too many students use laptops to surf the web or watch the world series when they should be paying attention in order to increase their grade!

We work in a lab, so computers on the lab benches isn't really safe

We have one hour a week in the computer lab.

Unnecessary for the work we do and may prove distracting with internet browsing.

Unless they have a disability and require the tech. I find that they are distracted by their computers.

Too much distraction!

Too hard to keep them off the internet

They just play games and don't pay attention. It also makes it hard to see their faces for class interaction.

They check email and surf the web  
They are too frequently not paying attention (shopping, facebooking, etc.)  
They are distracting and the students do non-class activities.  
They are a distraction.  
They are a distraction to the student and others.  
teaching a chemistry laboratory class  
Students typing is noisy and disruptive. Students also surf the web.  
retention is higher when people take notes by hand  
Not suitable to my class.  
Not permitted in labs. Not necessary for chemistry recitations.  
not applicable, I don't teach students  
nonteaching appointment  
Most of them don't do any productive work on the laptop brought to class  
mainly because they tend to deviate and start using facebook  
Learning language and literature is about communicating and sharing ideas with your  
classmates. I do not want students faces lost and sumerged into their computers  
screens  
laptops distract from discussion / interaction  
Laboratoy class, laptops are not necessary  
Kinesiology -activity classes  
It is a course with significant math derivations and laptop notes would be impossible  
in most circumstances.  
It distracts them from the lecture.  
it's a distraction  
In my experience, they distract the entire class: the student user, other students, and  
the professor.  
I usually teach in a classroom with computers.  
I teach yoga and there is no need for a laptop.  
i teach swimming!  
I teach studio acting classes  
I teach Spanish - students are expected to listen and speak and are fully discouraged  
from using translating sites which typically do a poor job of translating. Students use  
this as an easy out an need to understand that it is akin to cheating.  
I teach primarily laboratory classes or recitations which do not require internet  
access.  
i teach online  
I teach intro drawing classes, they are not necessary  
I teach drawing.  
i teach chemistry labs  
I teach a exercise class  
I have no way of making sure they're doing only class-related activities online. I don't  
mind them multitasking but I do not want them doing stuff that isn't somehow related  
to class. It wld be nice if they could look something up related to class, tho.  
I give them my notes and I expect them to listen  
EVERY time I have permitted their use, those students are inattentive due to surfing,  
DVD-watching, social-networking, etc.  
Distraction  
distracting for other students; internet use  
Distracting  
Computers can be helpful after class, but in class, it is just distractive.  
because they're distracting  
Because they'll be checking their mail, FB pages, or twittering instead of taking  
notes.

## **Appendix 2.**

### **How difficult was it to schedule a technology-enabled classroom or computer lab.**

all the classrooms in the building where i teach are technology enabled.  
Courses were scheduled by the Biology Dept and the College of AG  
easy for one, impossible for the other  
Gotta walk 10 mins w/ 15 mins btw classes  
haven't been assigned a room for spring yet  
Hershey has a computer classroom that's associated with the library. Not difficult at all.  
I'm not sure what you mean by technology enabled--there is a computer, projector in the room  
I do not schedule  
I do not teach, but do reserve tech classrooms for research interactions  
I get help scheduling my classrooms, and it's not difficult to schedule a tech-enabled  
classroom but the exact location I want to have is difficult  
I have an extension not classroom teaching appointment  
I was put into a classroom with no technology, even though we are strongly "encouraged" to  
use it. How can you use it when it isn't available?  
It's difficult to get any classroom that I want  
It is not something I handle, but in the past, sometimes it has been difficult to get a tech room  
despite prior requests. This has eased a bit more recently  
it was sceduled for me  
registrar schedules classrooms; we tell her that we need a tech classroom  
The course has nothing do with the technology available in the room.  
Very Difficult since every semester the romm/building location changes

### **Appendix 3.**

#### **Most commonly used features in ANGEL**

viewing common documents

viewing

Uploading material

The version of the lessons tab in course Angel.

The teams and forums.

student roster

Storing documents for everyone to look at and make suggestions for. We could really use something like Google Docs that allows multiple people to edit and comment on documents.

Also some sort of alert system that emails everyone when you add documents to

Sharing information with others (fellow faculty at other campuses as well as TAs for the current course) regarding present and past course materials and policies.

Sharing documents.

Sharing Content

shared documents

shared documents - lessons

scheduling

same things I use ANGEL for with my courses (to share materials)

Same as in ANGEL courses

Roster, attendance, share files and links, communication

Roster, and Group content

Quizzes -- I wish there were a way to take group quizzes with all members logging in and accessing the quiz.

quiz / grade

Posting, receiving information

posting meeting minutes; posting readings; posting announcements

Posting material for online access for members

Posting documents the group needs to read.

Posting documents and sending messages to members of the group that are not tied into a course. Such as students in certain levels of our major. For example, cohort 2010 are the second level of our major and will graduate in May 2010...etc.

posting announcements

OL 2000 series

not sure

na

Mostly to provide files, information, websites, resources for a blended embedded education abroad course

Most often I use it for communication. My course has no tests or quizzes because it is

Kinesiology studio course, so I have no need for many of the other features.

Meeting materials repository

Maintaining and managing resources for courses I teach.

Mail

Lessons/Contents, Drop Box, and Communicate.

information - drop box

I use it very infrequently

I use ANGEL groups for student group forums.

I read the content that others write!!

I communicate with my students through ANGEL. I use gradebook 100%. All my course information (syllabus, readings, papers) is posted on ANGEL. I could not live without ANGEL.

I intend to use it a lot more.

I am not sure I understand the question. The idea to share information from/on Admin. info is important.

I'm not sure but mostly the posting of materials that can be accessed by others in the group.  
Hearing about club activities  
haven't been on it in over a year so I couldn't really tell you.  
group email  
Find out what everyone else is doing and ask questions.  
file storage  
File sharing.  
File sharing  
File sharing  
emailing, storing and sharing files  
emailing group members  
email? posting materials for the group  
email/communication  
Email, rosters, discussion boards  
Email, posting articles & other resources  
email, discussion  
email  
posting schedules  
email to group  
resources for group  
email to committee members, sharing of files  
Email students  
Email communication  
Email  
Email  
E-mail to members of the group  
Sharing Files  
e-mail  
Documents  
Document sharing  
document sharing  
Dividing my students into sections under their TAs  
Discussion Forums  
discussion forums  
discussion forum  
discussing confidential student and faculty decisions, posting secure information  
Course development  
administrative communication  
Course related.  
**COURSE MANAGER**  
Course development (and then import to course) and collaboration with course assistants  
and mentors  
course assignments under lessons tab  
content management/sharing, e-mail  
Content and e-mail  
contacting people  
Communication, Sharing files/info.  
Communication  
Posting files  
Communication to send e-mail to the students/faculty members in the group.  
communication tab/messaging  
Communicating with group members and uploading documents.  
communicating and discussion  
common space for accessing documents  
committee information  
Committee communications

capacity to store resource data and other materials for access by private/authorized members

bulletin boards

Archiving course content for future use

Archive group information

Announcing advising facts, club activities, internships, jobs and etc announcements and library resources

Am still discovering and learning new things.

Accessing information on our academic programs

Access info provided by someone else.

#### **Appendix 4.**

##### **Tools to be added to ANGEL**

wireless routers that have sufficient bandwidth to support the students' needs on campus, and an expansion of the wireless coverage to broader areas of the campus.  
wikis

Who has read the emails I send, both through webmail AND ANGEL.

When emailing, I can pick up individual students or faculties instead of groups

We have excellent e-learning support. I have plans to use the tools more once I have more training -- such as tutorials.

upload video

this week - a slide scanner

They should improve the existing, then considering something new.

The return of Eudora as a supported system. I was pushed to shift to Mozilla

Thunderbird when I received a new MacBook Pro, but I don't find it to be as effective a system as Eudora.

the ability to plug in different applications that would interoperate with the CMS

thank you

Tegrity!!!!!!

survey tool outside of ANGEL or other system.

support for viewing explicitly on mobile devices

support for iphones

synching online calendar with iphone

angel/blackboard that supports graphic communication

Student Assignment Uploads

Something on how to develop wikis and iPhone apps.

Some type of voice chat.

Smartboard compatibility

Smart classrooms where groups of four students could control a single projected screen from individual computers/laptops.

Simple video conferencing

Seamless communication to and from ANGEL, webmail and off-campus email room scheduling.

Remote desktop to office comp software. Please for the love of God!

Regard ANGEL, I have used a couple of other course management systems. I do not like the new ANGEL. In particular, I hate the online discussion forum format. The older was better. Also, as I recall, other systems had more tabs available. In ANGEL, I end u

Recording classes and lectures to have access by the students.

really don't know

place for streaming digital video

One page that's easy to find and is exclusively a user's guide to every single feature.

Nothing.

nothing in particular

Nothing I ca think of thank you

nothing at this time

Not sure at this time.

Not sure

Not sure

none I can think of

None

None

None

none-- very pleased with angel

No suggestions.

no idea?  
no idea  
na  
N/a not sure  
N/A  
N/A  
N/A  
n/a  
n/a  
n/a  
MTSS videos on demand  
More streamlined integration between Webmail and Course mail in ANGEL.  
More space for each course, as I go over the limit each semester with students turning in large media files for their projects.  
more seamless interface with Shreyer Institute scantron ops  
More places to take secure tests!  
More obvious way to contact helpdesk while mid-project.  
More Mac support  
More intuitive connection between drop box scores and gradebook  
more intuitive (Wiki-like) editing for ANGEL pages  
More interfacing with other packages i.e. My Accounting Lab  
More information on best practices or FAQs for using technology in the classroom, especially for using clickers & for setting up the gradebook in ANGEL using points.  
Even when I know that some services exist, I do not know much about what they are best us  
More flexible and intuitive grading tools. Specifically the ability to leave part of a digital quiz ungraded or graded later (i.e. having the multiple choice auto graded but having the choose one of three essay portion graded later without creating strange  
More flexibility in content - maybe ability for faculty to upload their own page to a course space?  
micro-merging so to have less tools.  
Making audio/video recordings of classes universally available online.  
live human interaction AT OUR CAMPUS to help less savvy people learn to use this stuff. Help is usually only available in an presented electronic format that requires a fairly high level of expertise- if we could do that, we wouldn't need so much help in  
Larger quotas for storage of digital media. For those of us who are interested in using podcasts or include videos for our students, there is not enough available storage and splitting between Angel, iTunesU and Blogs is confusing and more of a hassle th  
iWeb  
its fine  
It would be a big improvement if a directory with several files could be uploaded more easily by just dragging and dropping.  
iphone  
Integrated scheduling with etesting center.  
institutionalized use / support of Google apps  
Instant notification of course drops  
In terms of learning support in the classroom I would like a document reader so I can show books on the smartboard to the class. I am learning more about angel for an online course next term but would like to see more visual and interactive dimensions.  
At  
Improved discussion forums (i.e. better/smoothier than what's in ANGEL 7.0)  
improve the message system so that you can just type someone's name rather than having to search for it by the first letter of their name  
immediate access to published papers from outside  
IMAP mail with folders!!!

I would love to have MySQL service so that I can run Wordpress for my classes. Wordpress is the most widely used blog system among mathematicians for its simplicity and equation rendering using LaTeX.

I would like to see the student ID along with the names in the coursemail application. I would like to see more use of Adobe Connect among faculty. Maybe if everyone had access to web cam and headset if they wanted it (without it being a special request), and if it were used more among faculty for administrative reasons, it would be used more

I would like to see ANGEL gradebook made easier to use. I have had such a hard time with setting up my courses properly. I have been to the class, and I guess I'll try to sign up for another one, so I can figure out what I am doing wrong.

I would like the group to have the same format as a course group as the default I would like the ability to restrict what students can do on the computer labs during class. Currently, I cannot view the screens, so the students know that I cannot monitor what they are doing. Consequently, some of them play games or surf the web during class

I would like a smarter, less error prone, quizzing function that would allow students to enter numerical answers in a variety of forms that would all be recognized as correct. For example, if the answer to a problem is 21.3 lb, I would like for the quiz

I wish the 'report' function supported reports covering the entire semester rather than simply the last month, as it makes assessing attendance for students much more painful.

I was a teaching assistant working beneath a professor. As such, I was not in a position to mandate the use of turnitin or a related application. However, I was consistently disgusted with the level of blatant plagiarism in the course work of my students.

I used Blackboard at another institution and it was 100 times better than Angel.

i tried to do angel on my own, haven't had time to go to faculty help lab. i have a computer program at home on personal computer that calculates my grades.

I think the Angel format is kind of \*klunky\*, but I don't have experience with any other format to compare it to!!

I should be able to send e-mail from Mail (on my Mac) to my ANGEL classes/groups. I just wish that editing ANGEL pages did not take so many CLICKS! ANGEL is often unreliable in its newest version -- the page that I save often appears scrambled when I go back to check it (items out of order).

I have used Blackboard in the past and look forward to using it again.

I HATE SENDING COURSEMAIL ON ANGEL. IT FREEZES UP A LOT AND I HAVE TO RECOMPOSE THE MESSAGE

I find it difficult to use the gradebook in Angel and consequently I keep separate files in excel for grades. I probably just need 10 minutes of help on this and better use of technology in general.

I don't use all the ones that are there--can't think of any I'd like to add.

I don't know if this is appropriate, but I would like to be able to download class rosters with student pictures. This is a feature available at other Big Ten campuses I have worked at and would make teaching large lectures easier.

I don't know enough about any of this to say what's missing.

I don't know at this point.

I don't know

i don't know

I can't think of a specific thing I would like to see added...I would just like to see Angel being more user-friendly and easy to navigate.

I can't access Angel or eLion from my Blackberry despite assistance from the help desk

I am currently available (virtually) 7 days a week, 365 days a year to students and colleagues, with no more than a few hours wait time. Since I choose not to have cable TV my home access is via dial-up modem. Now Penn State is going to cut me off, requir

I'm not sure.

I'm new and will be using more technology next semester. There are lots of resources listed in this survey that I was not aware of.

I'd like to see more information about course archiving on Angel. I can never figure out how to access past courses.

I'd like to learn how to effectively use ANGEL. It seems to change so often that I no sooner get comfortable using it for one thing and it is updated so I have to learn it all over again.

I'd like to be able to enter team grades, so I don't have to enter each student's grade-just the team grade.

I'd like the stuff already available to be easier to understand and use. The reason I listed the on-line help as not important is that it is worthless. I have tried using it several times, but it appears to have been written by someone who has no concept I'd like the email correspondence to be improved.

It was better last year.

I' not sure

How to manage and figure grades.

How about the ability (in ANGEL) to make a histogram of grades for any given test or combination of tests...

Group quizzes.

grade book i can understand

Google Mail to replace Webmail. Webmail has a terrible interface and is annoying to use.

Good email support in Angel.

glitch-free CMS so that we aren't embarrassed to tell our students about the problems

Gain full digital access to books available on Google books. If PSU owns a copy of a book, faculty should be able to access the full electronic version of the book. I recognize there are numerous issues involved with this, but it would be very helpful to

Full support for podcasts, including video

Free Microsoft Office for home computers for TAs

Fewer bugs in Angel. This year it has been a nightmare -- hanging, taking forever, not sending e-mail. Honestly, I had to send out four e-mails to two big classes (300+ students). It took me AN HOUR. I wanted to weep out of frustration.

Extend the University's wireless network to cover residential State College.

Export grades to Excel

Exam integrity so students can take exams online in Angel, and view their results without downloading etc. Have a test bank and scramble the test questions so each test for each student is unique, with an associated automatic grader, for immediate result

Eudora please come back.

Remove boilerplate from Angel course mail that demands that students answer email in Angel. Should allow instructor to choose text.

enhanced gradebook with easier use.

emails from angel go directly to webmail accounts

Email class

Easily maintained mathematics quiz and exam databases

easier small group conferencing for student groups

Easier functionality, make the interface more user friendly! Right now, Angel is so confusing, I do not use it for anything beyond e-mailing students and the grade book, both of which are not easy to use as is.

easier accessibility to student's Angel account from the mailbox  
Easier access to the use of clickers for quizzes.  
Easier access or more awareness of where to find appropriate tutorials  
ease of making homepages  
Doodle-like Group Scheduling option for student groups to find mutual meeting times  
- does this exist and I don't know about it?  
don't know. I'll consider what comes along.  
Don't know.  
don't know  
don't know - but the interface is cumbersome and I would like to see it more user-friendly  
don't care  
Do NOT use blackboard! It is AWFUL compared to Angel!  
Computers in the classroom. Don't believe I should have to use my personal PC to teach at PSU.  
cloud computing  
Clickers. Oddly, they have not been listed above. This technology is available, but I wish that it could become more widely known and the clickers less expensive.  
can not think of anything  
Can not think of any  
Can't think of anything  
can't say.... I use most of the tools that I know of.  
Calendar with reminders to students for when things are due  
blogs  
blackboard qualities - testing options on ANGEL are awful!  
blackboard  
better method for reporting problems  
Better email in ANGEL  
Being able to send e-mail to Angel course from PSU e-mail account and vice-versa.  
Batch grade online (without downloading a dropbox) -- for quizzes, dropboxes, etc.  
Backups to my PC.  
Ability to copy more than one file to another course.  
Attendance (Angel) has problems, but that is one I would have liked to have seen work better; needs controls just like a quiz (i.e. restrict IP address, etc.)  
At this point I wouldn't know what to add as my expertise is limited.  
Assignment tab links directly tied to calendar entries (we should be able to add an entry in the Assignment tab and have options to have it appear on the calendar)  
As my answers have shown, I don't know a whole lot about many of the programs this survey asked about. I am a graduate student and I have been a TA for an introductory course. We primarily used ANGEL to communicate with students and record grades.  
angel mail - it no longer shows new messages when you log on.  
ANGEL does not work as well this year as it has in the past due to the recent "upgrade." Functions that used to take 1 or 2 clicks (mail to students, printing discussion forum responses) now take a PhD to figure out and then 4 or 5 clicks to make work--an  
an ANGEL inbox that is accessible from the homepage rather than having to enter a course to view it (like we used to have)  
all classrooms should have technology in them instead of our having to request a/v or computer cart  
Advanced easily accessible help that knows what they are talking about (I sometimes find myself instructing the ANGEL help desk on where things are, when I have more complicated questions. If they don't even know how to track a student's logins, I guess t  
ability to write C++ code, or some other language, into ANGEL quizzes to make dynamic math questions or reviews, with graphs

A workable angel! Most of my students are experiencing trouble with dropboxes in Angel.

A Wiki that is easy to use and works. The current solution is not usable.

A more flexible grade book that would allow me to store information but wouldn't make it immediately available for viewing by students. Right now, because I use a different calculation system (letter grades, with calculation based on a 4.0 scale) than tho

A feature similar to "wall display" on Facebook for announcements and keeping in touch with my students

A classroom with 100 seats and the same number of netbooks for student use.

a calendar that multiple people in a group can add events to. I'd like to be able to have office hours listed and students can see what hours are available, then sign up in a way that all the other students can see which spaces are still open and which are

A better way to Grade material online with a Tablet PC and be able to return the feedback to the students without having to download it and re-upload it. Very cumbersome!!