

Results & Analysis
for
Faculty Instructional Technology Survey



2007

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Executive Summary

As the Spring 2007 semester drew to a close, 248 faculty members participated in a comprehensive “Teaching with Technology” survey sponsored by the Educational Technology Center, *UBlearns* Faculty Advisory Committee and Computing & Information Technology. This report and others are available at <http://www.itsurvey.buffalo.edu/reports/>. Responses were received from all decanal units and represented 72 departments. Over half the respondents considered themselves “expert” or “very comfortable” using technology to prepare and deliver course materials.

The broad purpose of the survey was to explore how faculty use technology as a teaching tool, and to explore the barriers and incentives they find in its application. UB faculty encourages *student* use of technology primarily through online resources and incorporation of images and/or multimedia as part of lectures or formal presentations. A surprising number (one quarter) of the respondents offered at least one course through an “alternative delivery system” (an online, distributed learning or otherwise time-shifted course); and more than 15% use (or refer students to) “Web 2.0” applications such as a blog, wiki or other social networking tool.

Concern was expressed regarding where to turn for assistance when confronted with an educational technology issue. Instructors primarily rely upon colleagues or departmental resources when seeking help, though also make good use of central resources for enterprise level software or service issues when departmental resources are not available or appropriate (e.g., ETC, CIT or external online help). A clear theme emerged that technology has value, but should be built upon sound pedagogical practice, and can not, by itself, address broad instructional resource needs.

Qualitative comments indicate that a departmental discipline strongly influences the type of tools used and features desired, particularly within *UBlearns*. Publishers that cater to specific disciplines sometimes supply services that become attractive alternatives to *UBlearns*, but are not locally supported. Some instructors choose to maintain a course web site that links to specific tools as a preference over *UBlearns*. This data provides a clear roadmap to the *UBlearns* faculty advisory and support teams to prioritize and review enhancements that will make teaching and learning more productive.

The results from this survey make strong headway toward better understanding the barriers and incentives faculty experience incorporating technology in their teaching. When asked to rank budget priorities to meet their needs, easier access to technology classrooms with integrated tools and services that enhance active learning as well as student tutorial/review (e.g., “clickers” and course capture) was given top priority. This was closely followed with the need to enhance existing enterprise systems for course management and digital content storage, additional library services and instruction regarding pedagogy. Productive feedback was received regarding the development of collaborative learning spaces to support student team work.

Qualitative feedback was balanced and reflective – acknowledging both the progress made with broadly available instructional tools and services while identifying new technologies that may allow UB students and faculty to focus on effective teaching with learning. Continuous faculty feedback is critical in the assessment of new tools and practices. More than a dozen instructors volunteered to participate in future technology focus groups that will help determine how tools and services are adopted on campus.

The survey team wishes to thank all who participated in the development of the survey instrument and acknowledge the generous assistance received from the University of Minnesota’s Digital Media Center in the planning and creation of this survey.

Introduction

This survey was designed to better understand how UB Faculty use educational technologies in teaching applications. Created by a team of representatives from the Educational Technology Center (ETC), UBlearns Faculty Advisory Committee, and Computing and Information Technology (CIT), this report contains answers from the 248 respondents who completed the survey in the 45 day period from April 16th through May 30th 2007.

Demographics

All decanal units were represented, with the highest rates of response coming from Arts & Sciences, Education, Engineering, and Medicine & Biomedical Sciences. The respondents represented 76 of the 172 departments in the university.¹

Table 1 – Response by Decanal Affiliation

Decanal Unit	N	%
Architecture & Planning	7	3
Arts & Sciences	78	32
Dental Medicine	8	3
Education	31	13
Engineering & Applied Sciences	27	11
Law	10	4
Management	11	4
Medicine & Biomedical Sciences	25	10
Nursing	15	6
Pharmacy & Pharmaceutical Sciences	4	2
Public Health & Health Professions	13	5
Social Work	19	8

All levels of faculty professional ranks were represented in the survey, as shown in Table 2. Nearly 75% of the respondents held the rank of assistant professor or higher.

Table 2 – Response by Professional Role

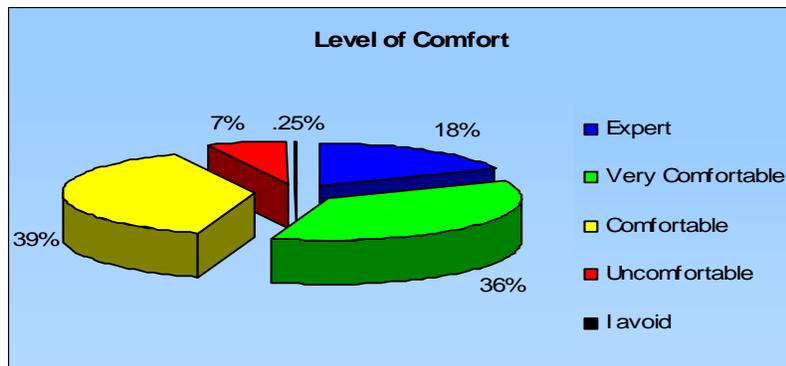
Faculty Ranking	N	%
Professor	56	23
Associate professor	69	28
Assistant professor	55	22
Adjunct professor	27	11
Instructor	19	8
Graduate/Teaching Assistant	6	2
Other	14	6

Over half (55%) of the respondents consider themselves expert (18%), or very comfortable (36%) using technology to prepare course materials and provide instruction. A Chi-square analysis shows there is NO relationship ($p=.918$) between academic rank and comfort with technology. As illustrated in Figure 1, the

¹ All percentages reported throughout this report are rounded to the nearest whole number from the original raw data.

vast majority of respondents were, at minimum, *comfortable* using Instructional Technology². Only one person avoids the use of technology in teaching.

Figure 1 – Level of Comfort with Instructional Technology



Use and Encouragement of Instructional Technology

Faculty encourage student use of instructional technologies in a variety of ways: primarily by suggesting use of online resources, followed by the faculty themselves incorporating technology in lectures to encourage active learning. Additional comments reported requiring students to use of RSS feeds, newsgroups and multimedia software as a means to, “compose and create, not just present or represent.” Only 5 respondents indicated that they did NOT use any methods to encourage student use of technology, which are shown in descending order of use in Table 3.

Table 3 – How Do You Encourage (Student) Use of Instructional Technology?

Type of Encouragement	N	%
Suggest use of online resources	221	89
By incorporating use of technology in lectures	159	64
Suggest use of presentation software for projects	138	56
Requiring use of technology as part of their grade or evaluation	117	47
Suggest use of digital images in presentations	113	46
Suggest “creative use” of multi-media for papers/presentations	98	40
Suggest use of discussion forums/chat features in UBlerns	77	31
Offering a course through non-traditional delivery format	54	22
Using or referring to blogs, wikis, or other types of social networking	38	15
Other	12	5
Do not encourage use of instructional multimedia technologies	5	2

Faculty use a variety of resources to assist in the use of educational technologies. Respondents were asked to indicate where, or from whom, they seek help for technology needs. *Departmental IT support* and *colleagues* were the sources most often cited when requesting help. *Online help* (broadly inclusive of internal resources or external resources) was used to learn more about the incorporation of multimedia technologies, as well as use of research or discipline-specific software. Table 4 indicates the top three sources of help for each kind of technology-related challenge presented, with the percent of respondents who chose those sources of help.

² The term “Instructional” technology is used interchangeably with “educational” technology in this report. Either term represents those technologies that are used to create and deliver classroom-based instruction.

Table 4 – Sources of Help

Instructional Technology Challenge	First Preference	%	Second Preference	%	Third Preference	%
1. Prepare course materials	Colleagues	40	Library services	22	Dept. IT	20
2. Incorporate multimedia	Colleagues	24	Dept. IT	24	Online Help	13
3. Learn new technologies	Colleagues	32	Dept. IT	25	ETC	23
4. Use desktop software	Dept. IT	34	Colleagues	22	Online Help	17
5. Use research software	Colleagues	38	Dept IT	18	Other	14
6. Use discipline specific software	Colleagues	25	Dept IT	16	Online Help	16
7. Image scanning	Dept. IT	22	Colleagues	13	Dept. Instruct	11
8. Test scoring software	Other	8	Colleagues	8	Dept IT	7
9. Computer “not working”	Dept. IT	58	CIT Help Desk	14	Other	10
10. Logging in from home	Dept. IT	64	CIT Help Desk	21	Online Help	10

Other sources of help mentioned were centralized services from iMedia, DEVO, and textbook publishers. Some confusion was expressed regarding the various support acronyms (e.g., ETC) and the differences between information technology (desktop computer/network/server set-up and troubleshooting services) as distinct from instructional or educational technology support. This is likely due to some distributed units either combining those functions within a service group, or in many cases, lacking specific support for educational/ instructional support for classroom-based teaching.

Faculty provided the names of the professional staff they most frequently rely upon. It is anticipated that future focus and advisory groups will call upon these people to provide direction and feedback concerning service coordination and collaboration.

Teaching with Technology – Attractions and Barriers

Faculty provided detailed qualitative feedback regarding attractions to use instructional technology, as well as barriers encountered to successful adoption.

Attractions

Faculty were asked the degree to which they felt attracted to use various educational technologies. Table 5 represents the top three responses. Those items which had a *moderate* to *large* degree of influence were:

Table 5 –Strength of Technology Attraction

Attraction	Mean	SD
Increase students’ access to course material	1.29	.58
Facilitate communication between instructor(s) and students	1.41	.70
Potential to make teaching more efficient	1.86	1.00

Of little influence was the ability to use games and simulations to teach certain topics, which may in part be attributed to lack of exposure to tools that specifically provide these opportunities. Reducing the cost of education for students was seen as having a small degree of influence on the respondents’ use of technology. Some commented that efficiencies realized through technology required a greater “up front” time investment, but that it ultimately paid off in terms of later course revisions.

Two questions were asked to probe adoption barriers. The first was intended to identify technology (hardware/software) issues, the second to identify administrative or training deficiencies. There was significant overlap in the commentary regarding both probes.

Technical Barriers

Lack of access to technology classrooms was seen as a *moderate to large* barrier (40%). This was followed by lack of technology support in classrooms or labs (32%), inadequate support staff (to assist with or actually produce content) and lack of skills specific to the technology environment (26%). Additional comments cited scheduling difficulty to gain access to existing technology classrooms, and inadequate support to faculty who were willing to adopt new teaching methods in those classrooms.

Administrative and Training Barriers

The amount of discretionary (or release) time to required to learn about technology tools was seen as a *moderate to large* barrier (55%), along with lack of formal recognition (promotion and tenure) at 48%. Difficulty keeping up with changes in technology (39%) and lack of “hands on” technology classroom spaces (43%) are appreciable barriers.

Faculty seem anxious to receive additional training and assessment resources, but express frustration at a lack of time to apply themselves to expand their skill set. Over one-third (36%) suggested that a lack of models or examples of effective use of teaching with technology were *moderate to large* barriers. Copyright and intellectual property concerns – including support for distributed (distance learning) course development was also commented upon. Student resistance to technology, as might be expected, was the least of the respondents’ concern, with over 60% feeling that it was not a barrier at all, though skepticism was expressed as to whether students are as “tech savvy” as our academic cultural assumptions would suggest.

Qualitative comments regarding barriers and incentives detailed concerns about how departments can expand course offerings through distributed learning. It seems that UB is following national trends where the line between distance/distributed/tutorial learning and delivery is growing fuzzy, if non-existent. This is reinforced by independent data from ITSS reflecting increased requests for digital course capture over the past 18 months. Podcasting was specifically called out an area requiring more attention.

Concern was expressed about how to stay current with new and emerging technologies. “I would like to use clickers...give online quizzes and homework...and have my lectures captured... I think these things are possible, but I need to learn more.” The “need to learn more” comment was thematic throughout the comments, as was the need for instructional design support to assist faculty with effective pedagogy (both with and without technology integration).

Faculty require more than just technical and instructional support. One respondent commented, “I’m out there on my own – we don’t share, and the culture doesn’t support collegial interaction” and another, “...their ability (ETC) to communicate in an understandable way with non-tech folks (without making them feel like fools) is extremely important.” It would seem that a more supportive university culture in general, including tangible rewards for teaching with technology would have a significant adoption impact.

Budget and Resources

Faculty were asked about issues on which UB might focus educational technology effort and budget resources including: classrooms, seminars, facilities, software, emerging technology, etc. The highest priority was given to more technology classrooms in general, followed by more “hands-on” technology-enabled classrooms (Table 6).

Table 6 – Faculty Ranking of Budget Priorities

Faculty Preference for Effort and Budget Resource	% High priority	% Moderate Priority	% Low priority
More technology classrooms	56	26	5
More "hands-on" technology-enabled classrooms	42	27	6
Expanded technology classroom tools (e.g., video course capture, smartboards, annotation tablets)	34	28	12
Course management system (UBlearns)	33	33	8
Library facilities / services	32	36	3
Facilities to use technology tools (scanners, A/V editing, multimedia)	27	31	10
Digital content storage system / repository	25	29	10
Seminars about improving pedagogy through use of instructional technologies	25	29	17
Emerging technologies (e.g., blogs, wikis, podcasting)	23	28	13
Improving discipline-specific software	23	28	11
Small, technology-enabled work group spaces	23	26	10
Ability to borrow technology tools (e.g., laptops, projectors, cameras, recorders)	20	29	11
Improving student IT literacy skills	19	35	8
More public computing labs/spaces	19	31	11
Facilities for students to learn how to use technology tools (e.g., scanners, A/V editing, multimedia incorporation)	15	32	14

Professional Development Opportunities

Faculty were asked, “If you had a block of time set aside to learn more about teaching with technology, which topics would interest you?” Responses were received on a 5 point Likert scale. The left column of Table 7 ranks professional development topics that respondents are *somewhat* to *very* interested in. The right column ranks topics that respondents are *not interested* in. It is noteworthy that *Webconferencing/shared desktop* (e.g., Webex™) and *Image editing software* are reported in both columns. The gap is the result of those who selected the *Neutral: Depends on how it’s delivered* or *Don’t know, not applicable* choice on the Likert scale.

Table 7 – Professional Development: Topics of Interest

Of Greatest Interest	%	Of Least Interest	%
Information design - organize - presentation	59	Database software	32
Colleague’s use of educational technology	56	CD authoring tools	32
Funding opportunities for projects	55	Spreadsheet software	32
Pedagogy of technology enhanced learning	54	Social networking or online tools	27
Usability testing (designing for easy use)	54	Electronic presentations	25
Podcasting or video course capture	53	Publishing tools (Acrobat™, Pagemaker™)	24
Course management tools (UBlearns)	51	Webconferencing/shared desktop (e.g., Webex™)	23
Evaluation of tech. enhanced learning	50	Animation / modeling software (e.g., Flash™)	22
Image editing software (e.g., Photoshop™)	50	Web page authoring	22
Webconferencing/shared desktop (e.g., Webex™)	48	Image editing software (e.g., Photoshop™)	20

Faculty expressed a variety of preferences for how to best attend to professional development opportunities, reported in Table 8 by descending order of preference. Hands-on instruction is preferred

by more than 50% of the respondents, as are short workshop sessions. “Just in time” instruction via video-on-demand clips was mentioned in the qualitative section, and may account for the relatively strong preference for *short video-based clips via the web*.

Table 8 – Preferred Learning Method by Percent of Respondents

Professional Development Instruction Preference Method	%
Hands on session in lab	53
Short workshop sessions (@ ETC or other)	51
Short video-based clips via the web	46
Assistance via departmental IT support staff	34
Instruction in my office	32
Electronic / shared desktop classes (e.g. <i>Webex</i> or <i>Adobe Presenter</i>)	16
Other	6

Technology Enabled Classrooms

This survey makes clear the desire for increased technology enabled classrooms in general, and the addition of more “bells & whistles” to existing technology classrooms, as well as the need for hands-on labs and small, technology-enabled collaborative spaces. Vociferous comments about this issue were received in open-ended qualitative comments in addition to the categories defined in Table 9.

Faculty were asked to rate the importance of various features that should be included in the “perfect technology-enabled classroom.” The most important feature was a video projector, the least important, considered “nice, but not critical” was a slide projector (mean = 3.5).

All features of “the perfect technology-enabled classroom” are listed in order of priority on a 4-point Likert scale. The first 5 items (1.x) rate between *High Priority* and *Very Important*. Items with a mean of 2.x, were rated between *Very Important* and *Nice to have, but not critical*.

Table 9 – Importance of Features in the “Perfect Technology Classroom”

Feature	Mean	SD
Video projector	1.42	.74
Wireless Internet Access	1.71	.99
Variable lighting control	1.88	.91
Acoustically treated rooms (so students can hear better)	1.93	.95
VCR/DVD “combo-player”	1.93	1.06
Visualizer™	2.07	1.01
Touchscreen selection control	2.31	1.00
Chalkboard (traditional)	2.36	1.21
Electronic Annotation (digital pen to “mark up” PC projected content)	2.37	1.06
Media on demand (desktop delivery/classroom projection of VHS/DVD film)	2.58	1.07
Whiteboard	2.63	.97
Smartboard™	2.66	.92
Audience response system (“clickers”)	2.81	1.05
Digital lecture recording (audio + displayed content + video of instructor)	2.90	1.04
Projection display of selected student’s workstation or laptop	2.93	.95
Digital lecture recording (instructor audio only)	2.93	.96
Digital lecture recording (audio + displayed content + no instructor capture)	2.95	.95
Slide projector	3.25	.99

Detailed comments regarding technology classrooms and learning spaces ranged from highly specialized needs such as “simulation laboratory for surgery residents to learn surgical techniques before they reach the operating room” to “we need more wireless” and “can we get rid of (or turn off access to) wireless in lecture halls?” One practical suggestion was, “We need more old-fashioned clocks... in the back of classrooms.”

The general themes that emerged from the detailed comments were a need for increased digital lecture recording of all types, secure testing methods (particularly where wireless is present), advanced annotation on multiple displays, videoconferencing, flexible seating for group work, incorporation of gaming software access, and simultaneous presentation of both video projection and chalkboards.

Enterprise Course Management System: UBlerns

The UBlerns Faculty Advisory Committee was very interested in obtaining detailed information about how faculty use Blackboard™ - UB’s campus wide course management tool. Respondents were asked about: a) Course Content features, b) Communication features, c) Course Tools, d) Assessment features, and e) Support/Help features. Their UBlerns “usage rates” are shown, by percent of respondents, in Tables 10-14.

Table 10 – Course Content Features Used

Feature	Percent
Course information	79.0
Document Management	54.8
Staff Information	35.9
Don’t know/Not applicable	5.2

Table 11 – Communication Features Used

Feature	Percent
Email	86.7
Calendar	19.0
Collaboration/Chat	13.7
Digital Drop Box	29.0
Discussion Board	35.5
Group Management	21.8
Don’t know/Not applicable	1.8

The course content feature of UBlerns appears to be well used, as more than 75% of the respondents deal with course information there, and more than half use UBlerns for document management.

Email is by far the most popular communication feature of UBlerns for these respondents. More than 1/3rd of the respondents used UBlerns for its discussion board feature, but not necessarily for collaboration or chat.

Table 12– Course Tools Used

Feature	Percent
Glossary	5.6
Tasks	10.5
Course Statistics	31.5
Gradebook	19.6
Don’t know/Not applicable	17.3

Table 13 – Assessment Features Used

Feature	Percent
Tests	27.4
Quizzes	25.0
Surveys	14.5
Pools	6.0
Assignment Submission	26.6
Don’t know/Not applicable	28.2

Fewer respondents reported using the *Course Tools* (Table 12) and the *Assessment Features* (Table 13) available within *UBlearns*. Nearly 1/3rd of the respondents use the *Course Statistics* feature within *Course Tools* and only 1/5th use the *Gradebook* within *UBlearns*. About 1/4th of the respondents use some *Assessment Features*, i.e. tests, quizzes, and assignment submission.

There are sources of support that the respondents can use for help with *UBlearns*. Less than 1/3rd of the respondents indicated that they use any of the support features available, as can be seen in Table 14. It appears from the qualitative comments that faculty may be unaware of the recent (and robust) effort to enhance and customize the online help sections available through the *UBlearns* home page.

Table 14 – Support/Help Features Used

Feature	Percent
Faculty Help Website	20.2
Blackboard Instructor Manual	29.0
CIT Help Desk	28.6
Contact <i>UBlearns</i> Support	33.1
Don't know/Not applicable	18.1

Open ended comments had a recurring theme regarding the user interface, “There’s too many clicks to get what I need.” Of greatest concern was sharing data between the gradebook feature within *UBlearns* and the online reporting tool that UB uses for grade submission. Many comments indicated that when comparing Blackboard™ on *UBlearns* to other tools (e.g., Angel™ or other proprietary or open source course management tools) that Blackboard was “behind the times” and “clunky to use.” Others reinforced the need to explore Building Blocks (feature enhancements for use in Blackboard™) to improve the user experience. Of particular interest is incorporation of blog and wiki tools, and methods to incorporate podcasting, video clips or modules into *UBlearns*. There is strong desire to increase instructor and student collaboration as well as student-to-student and external population communication.

Faculty were asked about alternatives they may use to *UBlearns*. Several comments emerged about discipline-specific proprietary software and online services, particularly in the Law School. Several faculty have developed materials using advanced features in standard productivity software (e.g., Microsoft Office tools), and some continue to maintain course material on their own website. There were also reports of “hard lessons learned” by relying on tools outside of UB that later became unavailable or no longer maintainable. Other comments suggested that *UBlearns* is appreciated for it’s reliability and stability.

Final Thoughts

When asked to share any additional thoughts, feedback regarding professional development opportunities and specific technology concerns were expressed. Specific concerns regarding technology maintenance issues were referred to the proper production workflow and subsequently addressed. Many used the “final thoughts” probe to express gratitude for the currently available resources and support staff. Other themes mentioned had already emerged in other sections of the survey.

Future Research

This survey was very helpful, particularly when triangulated with other institutional data resources, to provide a snapshot in time of what Faculty need to successfully integrate technology into teaching. It is clear that technology is not, nor should not, be an end unto itself – but rather a utility to assist with the core functions of teaching, research and service mission of the university. With that core mission in

mind, the results of this survey will be broadly shared with the campus community to provide direction with strategic investment in educational technology and support services.

This survey will serve as the foundation for a student learning needs assessment survey. It is clear that any strategic planning that ignores the national trends of incoming student use of technology will provide an incomplete planning picture. Toward that, a gap analysis between this current report, and planned student survey report will further refine the strategic priorities for the entire campus community.

Appendix: Survey Instrument

Faculty Instructional Technology Survey

This survey was designed to better understand Faculty "teaching with technology" priorities. It has been created by the Educational Technology Center (ETC), the UB*learns* Faculty Advisory Committee and Academic Services, CIT.

Your participation will impact instructional technology budgeting and implementation throughout UB. This will take 10-15 minutes to complete.

Please broadly share this with your teaching colleagues and assistants. If you have any questions about the survey, you may contact Stacy Person (ssperson@buffalo.edu) or Lisa Stephens (stephens@buffalo.edu). Thank you in advance for your participation.

1. Please select your decanal affiliation:

- Architecture & Planning
- Arts & Sciences
- Dental Medicine
- Education
- Engineering & Applied Sciences
- Law
- Management
- Medicine & Biomedical Sciences
- Nursing
- Pharmacy & Pharmaceutical Sciences
- Public Health & Health Professions
- Social Work

2. Please select the department in which you do the majority of your teaching:

- African-American Studies
- American Sign Language
- American Studies
- Anatomical Sciences
- Anesthesiology
- Anthropology
- Arabic-International Studies
- Architecture
- Architecture and Planning (School of)
- Art
- Art History
- Arts & Sciences Interdisciplinary
- Arts Management Program
- Arts-Humanities-Sciences
- Asian Studies
- Athletics (Division of)
- Biochemistry

- Biological Sciences
- Biomaterials
- Biomedical Sciences
- Biophysical Sciences
- Biostatistics
- Caribbean Cultural Studies
- Chemical & Biological Engineering
- Chemistry
- Chinese
- Civil, Structural & Environmental Engineering
- Classics
- Clinical Dentistry
- Communication
- Communicative Disorders and Sciences
- Comparative Literature
- Computer Science & Engineering
- Cora P. Maloney College
- Counseling, School & Educational Psychology
- Dermatology
- Economics
- Educational Leadership & Policy
- Electrical Engineering
- Electrical Engineering Online
- Emergency Medicine
- Engineering & Applied Sciences (School of)
- Engineering Science
- English
- English as a Second Language
- Exercise Science
- Family Medicine
- French
- Geography
- Geology
- German
- Graduate School of Education
- Greek - Ancient
- Greek - Modern
- Gynecology-Obstetrics
- Health Behavior
- Hebrew
- Hindi
- History
- Humanities
- Industrial & Systems Engineering
- Informatics
- Integrated Medical Curriculum
- Interdisciplinary Degree Programs Social Sciences
- Irish
- Italian
- Japanese-International Studies
- Judaic Studies
- Korean
- Latin
- Latina/Latino Studies Program
- Law School
- Learning & Instruction

- Learning Center
- Legal Studies
- Library & Information Studies
- Linguistics
- Management (School of)
- Management Science & Systems
- Mathematics
- Mechanical & Aerospace Engineering
- Media Study
- Medical & Health Informatics
- Medical Scientist Training Program
- Medical Technology
- Medicinal Chemistry
- Medicine
- Medicine & biomedical Sciences (School of)
- Medicine - Interdepartmental Studies
- Mg-Accounting
- Mg-Economics
- Mg-Finance
- Mg-General Management
- Mg-Health Care Management
- Mg-Industrial Relations
- Mg-Management & Policy
- Mg-Marketing
- Mg-Operations Analysis
- Mg-Organizational & Behavioral Science
- Mg-Quantitative Methods
- Microbiology & Immunology
- Millard Fillmore College
- Music
- Music Theatre
- Neurology
- Neuroscience
- Neurosurgery
- Nuclear Medicine
- Nursing (School of)
- Nutrition
- Occupational Therapy
- Occupational Therapy - Developmental Disabilities
- Occupational Therapy - Early Intervention/Sch Based
- Ophthalmology
- Oral & Maxillofacial Surgery
- Oral Biology
- Oral Diagnostic Sciences
- Oral Sciences
- Orthodontics
- Orthopaedics
- Otolaryngology
- Overseas Academic Programs
- Pathology
- Pediatric & Community Dentistry
- Pediatrics
- Periodontics & Endodontics
- Pharmaceuticals
- Pharmacology & Toxicology
- Pharmacy

- Philosophy
- Physical Therapy
- Physics
- Physiology
- Policy Studies
- Polish
- Polish Studies
- Political Science
- Portuguese
- PRCI-Cell & Molecular Biology
- Psychiatry
- Psychology
- Radiation Oncology
- Radiology
- Rehabilitation Medicine
- Rehabilitation Sciences
- Religious Studies
- Restorative Dentistry
- Romance Languages & Literature
- RPCI-Biophysics
- RPCI-Cancer Pathology & Prevention
- RPCI-Cell & Molecular Biology
- RPCI-Microbiology
- RPCI-Natural Sciences
- RPCI-Pharmacology
- Russian
- Social & Preventative Medicine
- Social Work (School of)
- Sociology
- Spanish
- Structural Biology
- Surgery
- Theatre
- Theatre Dance
- Ukrainian
- Undergraduate Academic Services (Division of)
- Undergraduate College
- University Experience
- Urban & Regional Planning
- Urology
- Visual Studies
- Women's Studies
- World Languages Program

3. Please indicate your instructional role at UB:

- Professor
- Associate Professor
- Assistant Professor
- Adjunct Professor
- Instructor
- Graduate / Teaching Assistant
- Other (please specify)

If you selected other please specify:

4. When teaching with technology and preparing course materials, do you generally consider yourself:

- Expert, use multiple technologies with ease
- Very comfortable, require little assistance with material preparation or technology classrooms
- Comfortable, but require some consultation and occasional troubleshooting assistance
- Uncomfortable, require a moderate amount of consultation and support
- I avoid the use of technology in teaching
- Other (please specify)

If you selected other please specify:

5. How do you encourage students to use instructional technologies? (Check all that apply.)

- Suggest use of online resources
- Suggest use of presentation software for individual/group projects
- Suggest "creative use" of multimedia for papers/presentations
- Suggest use of discussion forums/chat features in UBlerns
- Suggest inclusion of digital images in presentations/papers
- By using or referring to Blogs, Wikis, or other types of social networking
- By requiring use of technology as part of their grade or other evaluation (e.g. UBlerns or other)
- By incorporating use of technology in lectures to encourage "active learning"
- By offering a course through a non-traditional delivery format (e.g., video or online access)
- I do not encourage students to use instructional or multimedia technologies
- Other (please specify)

If you selected other please specify:

6. Please indicate your sources of help when working with the following technologies. (Check all that apply.)

	Dept. IT Support	Dept. Instructional Help	CIT Help Desk	UB Micro	Library Services	ETC	Colleagues	Students	Online Help	Other	Don't Know / Not Applicable
Preparing course materials	<input type="checkbox"/>										
Incorporating multimedia	<input type="checkbox"/>										
Learning new technologies	<input type="checkbox"/>										
Desktop software	<input type="checkbox"/>										
Research software	<input type="checkbox"/>										
Discipline-specific software	<input type="checkbox"/>										
Image	<input type="checkbox"/>										

Scanning											
Test scoring services	<input type="checkbox"/>										
Office computer "not working"	<input type="checkbox"/>										
Logging-in from home	<input type="checkbox"/>										

7. (Optional Question) To assist with future focus group opportunities, please provide the name(s) of the individual(s) you primarily rely upon for instructional technology support at UB:

8. To what degree does each of the following attract you to teaching with technology?

	Not at all	Small degree	Moderate degree	Large degree	Don't Know / Not Applicable
Ability to address different student learning styles	<input type="radio"/>				
Desire to facilitate communication between instructor(s) and students	<input type="radio"/>				
Desire to facilitate communication among students	<input type="radio"/>				
Desire to increase students' access to course materials	<input type="radio"/>				
Ability to use games & simulations to teach certain topics	<input type="radio"/>				
Ability to use multimedia course materials	<input type="radio"/>				
Potential to make teaching more efficient (time saving)	<input type="radio"/>				
Ability to expect higher quality work from students	<input type="radio"/>				
Desire to increase students' familiarity with technology	<input type="radio"/>				
Student demand for use of technology	<input type="radio"/>				
Personal enjoyment of working with technology	<input type="radio"/>				
Desire to reduce cost of education to students	<input type="radio"/>				
Desire to improve access to educational materials to students	<input type="radio"/>				
Desire to provide access to non-traditional or off-campus students	<input type="radio"/>				

9. To what degree do each of the following serve as a technical barrier to teaching with technology?

	Not a barrier at all	Small degree	Moderate degree	Large degree	Don't Know / Not Applicable
Network / Internet connection problems	<input type="radio"/>				
Technical problems with home computer	<input type="radio"/>				
Technical problems with office computer	<input type="radio"/>				
Lack of current hardware and/or software	<input type="radio"/>				
Lack of access to a technology-enabled classroom	<input type="radio"/>				
Lack of technology support in classrooms or labs	<input type="radio"/>				
Inadequate technical staff support in general	<input type="radio"/>				
Lack of necessary technical skills	<input type="radio"/>				
Lack of teaching skills specific to the technology-enhanced environment	<input type="radio"/>				
Uncertainty about how to get started	<input type="radio"/>				
Disciplinary content unsuited to delivery via technology	<input type="radio"/>				

10. To what degree do each of the following serve as an administrative or training barrier to teaching with technology?

	Not a barrier at all	Small degree	Moderate degree	Large degree	Don't Know / Not Applicable
Amount of time required to learn about technology tools	<input type="radio"/>				
Amount of time required to use technology in class	<input type="radio"/>				
Inadequate student access to technologies	<input type="radio"/>				
Copyright / intellectual property concerns	<input type="radio"/>				
Lack of resources for initial course development	<input type="radio"/>				
Lack of models / examples of effective uses of technology	<input type="radio"/>				
Lack of formal recognition (e.g., promotion/tenure) for educational technology use	<input type="radio"/>				
Doubts about the usefulness of teaching with technology	<input type="radio"/>				
Student resistance to technology	<input type="radio"/>				
Difficulty keeping up with changes in technology	<input type="radio"/>				
Lack of "hands on" technology classroom space(s)	<input type="radio"/>				

11. Please take this opportunity to share additional thoughts regarding barriers or incentives to teaching with technology at UB.

12. Below are several issues on which UB might focus efforts and budget resources. Please indicate your level of priority for each.

	High priority	Moderate priority	Neutral, has value, but not a priority	Low priority	Don't Know / Not Applicable
More public computing labs/spaces	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More technology classrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expanded technology classroom tools (e.g., video course capture, smartboards, annotation tablets)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library facilities / services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improving student IT literacy skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Course management system (UBlearns)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digital content storage system / repository	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seminars about improving pedagogy through use of instructional technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilities to use technology tools (scanners, A/V editing, multimedia)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilities for students to learn how to use technology tools (e.g., scanners, A/V editing, multimedia incorporation)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to borrow technology tools (e.g., laptops, projectors, cameras, recorders)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emerging technologies (e.g., blogs, wikis, podcasting)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improving discipline-specific software	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More "hands-on" technology-enabled classrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small, technology-enabled work group spaces	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. If you had a block of time set aside to learn more about teaching with technology, which of the following topics would interest you?

	Very interested	Somewhat interested	Neutral "depends on how it's delivered"	Not interested	Don't know / Not applicable
Pedagogy of technology-enhanced learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluation of technology-enhanced learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information design (how to organize and present information)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Usability testing (how to design materials for easy use)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Copyright / intellectual property concerns	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adapting publishers content for courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Colleagues' use of educational technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Funding opportunities for educational technology projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Web page authoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social networking or online tools (blogs, wikis, chat, instant messaging (IM))	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electronic presentations (e.g. PPT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Image editing software (e.g., Photoshop, Fireworks)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digital video or audio editing software (e.g. Premier, Garage Band)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Podcasting or video course capture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spreadsheet software (e.g. Excel)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Database software (e.g. Access, Filemaker Pro)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Animation/ modeling software (e.g. Flash)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CD authoring tools (e.g. Authorware)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Course management tools (e.g. Ublearns)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Publishing tools (e.g. Acrobat, PageMaker)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Web conferencing / shared desktop software (e.g. WebEx, Adobe Presenter)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Considering the previous question, what is your preferred manner of receiving information about technology? (Check all that apply.)

- Short video-based clips via the web
- Instruction in my office
- Assistance via departmental IT support staff
- Short workshop sessions (@ ETC or other)
- Hands-on session in lab
- Electronic / shared desktop class (e.g., WebEx or Adobe Presenter)
- Other (please specify)

If you selected other please specify:

15. In thinking about "the perfect technology-enabled classroom" how would you rate the importance of the following features?

	High priority - must have	Very important	Nice to have, but not critical	Low priority	Don't Know / Not Applicable
Chalkboard (traditional)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whiteboard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Smartboard" (interactive whiteboard)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Variable lighting control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Touchscreen selection control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Video projector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visualizer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VCR/DVD "combo-player"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acoustically treated rooms (so students can better hear instructor / each other)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Slide projector(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digital lecture recording (instructor audio only)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digital lecture recording (audio + projected/displayed content - no instructor capture)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digital lecture recording (audio + displayed content + video of instructor)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Projection display of selected student's workstation or laptop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Audience Response System ("clickers")	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Media-on-demand (desktop delivery/classroom projection of VHS/DVD film titles)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electronic Annotation (a digital pen to "mark up" PC/projected content)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wireless Internet Access	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. Are there any technology features or capabilities you would like to see designed into classrooms, labs or shared learning spaces that were not mentioned in the previous question(s)?

The next several questions refer to *UBlearns* features. If you do not use *UBlearns*, please skip to question 18.

17. Which of the following Course Content features do you use? (Check all that apply.)

- Course Information
- Document Management
- Staff Information
- Don't Know / Not Applicable

Which of the following Communication features do you use? (Check all that apply.)

- Email
- Calendar
- Collaboration / Chat
- Digital Drop Box
- Discussion Board
- Group Management
- Don't Know / Not Applicable

Which of the following Course Tools do you use? (Check all that apply.)

- Glossary
- Tasks
- Course Statistics
- Gradebook
- Don't Know / Not Applicable

Which of the following Assessment features do you use? (Check all that apply.)

- Tests
- Quizzes
- Surveys
- Pools
- Assignment Submission
- Don't Know / Not Applicable

Which of the following Support/Help features do you use? (Check all that apply.)

- Faculty Help Website
- Blackboard Instructor Manual
- CIT Help Desk
- Contact UBlearns support through email or the "Need More Help?" online form
- Don't Know / Not Applicable

18. If you choose not to use all (or some) of UBlearns, please share your reasons. If you would like to see additional features added to UBlearns, please let us know. Include your email address if you would like a member of the UBlearns Faculty Advisory Group to follow up.

19. Some faculty choose to use course management tools other than UBlearns. If you are using another tool, or a website, please identify what you are using and describe why you use this as an alternative to UBlearns.

20. Would you be willing to be interviewed or participate in a future focus group to help refine the mission of instructional technologies on campus (typically a one-hour committment)?

If yes, please provide your contact information in the space below (name, email, and preferred phone number).

21. Is there anything else that you would like to share about teaching with technology at UB?

Please click "Submit Survey" to submit your responses. Thank you for your feedback. If you have any questions about the survey, you may contact Stacy Person - ssperson@buffalo.edu or Lisa Stephens - stephens@buffalo.edu.