

INDIVIDUAL SOURCE REPORT 1—Web-based Survey

A survey entitled *Distance Education Courses & Experiences at the University of Utah* was constructed and delivered to known distance education and e-learning educators. The survey was open for a 38 day period from Wednesday, November 28, 2007 to Tuesday, January 15, 2008.

The survey was divided into six sections...

- SECTION 1: Identify Distance Education Courses, Activities or Experiences
- SECTION 2: Features and Delivery Methods
- SECTION 3: Frequency of Contact between Faculty and Students
- SECTION 4: Using Courseware Management Systems
- SECTION 5: Technology Support and Services
- SECTION 6: Additional Comments

WEB SURVEY REPORT: FALL 2006 to FALL 2007

There were a total of **42 survey responses** reporting on a total of **123** distance education courses and events sponsored by 54 departments, programs, and colleges for the period of Fall Semester 2006 through Fall Semester 2007.

The survey instrument itself is included in the Appendices to this report. It is also posted to the University IT website as a PDF file...

[<http://www.it.utah.edu/leadership/committees/DistanceEd/papers/SurveyInstrument.pdf>]

The full data report from the survey is posted to the University IT website as a separate PDF file...

[http://www.it.utah.edu/leadership/committees/DistanceEd/papers/SurveyReport_2008-01-24.pdf]

CAVEAT: The Task Force cautions that this web survey was completed by 42 respondents reporting on 123 distance education courses and events delivered through their departments and programs. This accounts for less than half of the courses the Task Force was able to itemize from a combination of data sources on campus. The survey by nature is unable to report data that represents a course-by-course accounting of teaching methods, tools, and delivery methods. Responses are based on aggregations of courses. In some cases, questions were not answered by all of our respondents. Even with this caveat, there are trends that can be derived from the data and they are summarized below.

SUMMARY ANALYSES OF SELECTED SURVEY RESPONSES

RE: TYPES OF DISTANCE EDUCATION EVENTS

From the respondents to our Distance Education Survey reporting on 123 courses, over 80% of events are identified as semester-long courses, with 14% of events presented as multiple semester courses. Student assignments account for 12% of the events; 7% are assessment-based activities. At the present time, no one is using web collaboration or web-based virtual meeting tools; this absence is likely due to the lack of an enterprise-wide solution licensed for the entire campus. These figures are anticipated to change during 2008 as the state-wide licensure for the WIMBA virtual classroom service is brought online and integrated into learning courseware management systems (Web-CT/Vista, Moodle, Sakai). Other distance education activities reported in the survey include independent study, open-entry & exit courses, as well as modules of readings, papers, and exams.

RE: PRIMARY DELIVERY METHOD FOR DISTANCE EDUCATION EVENTS

In keeping with an emerging definition of Distance Education as ...

... learning opportunities, live or on-demand, synchronous, asynchronous or blended, mixing traditional classroom experiences with the options afforded by the most user-appropriate and pedagogically sound “technologies of connectivity” in order to offer, expand, and enhance a learning environment and the interactions that transpire between educator and learner, faculty and student....

...it is reasonable that the results of our online survey show a complete mix of delivery methods for distance education activities, blending synchronous and asynchronous modes, with a variety of delivery technologies. Broadcast/Telecourses are less frequently reported, undoubtedly due to the preparation and production requirements and associated costs for these packaged programs. The use of Courseware Management systems, such as Web-CT, used asynchronously, is used 80% of the time (based on our survey respondents). Synchronous components using online computer technology (outside of EdNet/IVC) should be seen more often in the next few years as the virtual online classroom capabilities of the WIMBA solution, licensed for the entire state of Utah, is implemented and integrated into online courseware modules. Of note, Correspondence Study is still alive and useful, with an 80% presence (again based on our survey respondents).

RE: TEACHING METHODS EMPLOYED

The data for this question must be viewed critically since the counts are based on 42 respondents, not on the number of different distance education classes being taught. Respondents were asked to complete the survey based on aggregations of similar classes as sponsored by their respective departments. At the present time, outside of two-way video classes conducted through EdNet/IVC, much of the distance education experience for students is based on individual study, asynchronously (29%). As reported by the respondents to our survey, such study is often in combination with other teaching methods, such as group/work collaboration, seminar/group discussions, demonstrations, and lectures (all below 10%). As the technologies of connectivity improve and expand, the blend of various synchronous and asynchronous methods should likewise increase.

RE: PEDAGOGICAL TECHNIQUES EMPLOYED

Well defined and implemented pedagogical techniques, as promoted by formal instructional design principles, are not necessarily the mainstay of teaching methodologies in higher education. The focus has always been on the knowledge, expertise, and capabilities of the individual faculty member who is motivated to share his or her specialties with students by using a combination of intuition and personally effective classroom experiences. The introduction of online events and other technologies of connectivity introduce the need for newer, carefully considered approaches to the presentation of educational materials, interaction with students, and assessment of knowledge gained. New media equals new methods, which likely require more rigorous instructional design.

The new methods of content presentation, student interaction, and assessment that accompany the use of contemporary technologies of connectivity can pose challenges to the integrity of the educational process. Reported to us in our online survey were the potential for cheating when face-to-face interaction is no longer predominant, with one respondent suggesting that the "class would be much more effective and attractive if there were some face-to-face and interactive components." Also noted are technological failures and connectivity bumps as an ever-present challenge.

RE: ASSESSMENT & TESTING TECHNIQUES EMPLOYED

Our snapshot of assessment methods, given the current state of distance education technologies and implementations, reports 38% of respondents use some sort of live, synchronous, face-to-face event in order to test and evaluate student performance and learning, with one-fourth using face-to-face, proctored, paper-based testing. Online tests, quizzes, self-assessment exercises, reflection activities, and reports and papers, combined account for nearly 30% of the methods used to evaluate learning.

A handful of comments were obtained from the online survey regarding the challenges or successes a faculty member experienced in using distance education assessment methods. One key comment stated that, "A major challenge is testing and insuring that the student taking the course/exams is the student receiving the credit." Refer to the section on "Obstacles and Challenges" in the main ITC report from the Task Force for further discussion about the problems in assessing student performance.

The benefits of technologies that facilitate interactions regardless of time and place are noted, although the inclusion of face-to-face interaction opportunities is suggested as a key component in the learning process. Courseware Management Systems, such as WebCT, assist in grading homework assignments and communicating progress back to students. Of course, early planning and preparedness are vital to the success of distance education and its assessment methods.

RE: ACCESSIBILITY ACCOMMODATIONS

Accommodating students who have unique needs (visual, auditory, motor, cognitive) and who require accessibility modifications is undertaken where required by faculty and sponsoring departments. The online survey respondents comment that they have provided various accommodations as needed or requested.

RE: FREQUENCY OF FACULTY-STUDENT INTERACTIONS

Interaction between faculty and student is a key component of successful distance education activities and coursework. Naturally, the type and frequency of contact depends entirely on the nature of the distance education topic, method of delivery, and necessity for communication. Synchronous events, as delivered in two-way video/audio through the UEN EdNet/IVC state-wide system have by definition 100% interaction, all

the time. For other asynchronous events, it does not appear that daily interaction, other than by e-mail, commonly occurs. Weekly and end-of-semester contact is prevalent, particularly in dealing with written assignments and correspondence study activities. Simply based on our respondents, there seems to be no interaction with students, about 20% of the time, across most of the various methods on making faculty-student contact. The data should be observed critically because of the low number of respondents.

RE: USE OF COURSEWARE MANAGEMENT SYSTEMS

Over three-fourths of our respondents report that their distance education activities are delivered through a Courseware Management System, such as WebCT, OPEN, Moodle, or Sakai. For the University of Utah, most of these activities are managed through the TACC Center in the Marriott Library, although individual departments (such as Psychology) maintain their own management system (OPEN). Note that these figures are based on the 42 respondents reporting on an aggregation of 123 distance education events (which also account for just under half of the distance education events the Task Force has been able to itemize from other campus sources).

Of those using a Courseware Management System, about three-fourths of our respondents employed WebCT/Blackboard, followed by the Psychology Department's use of the OPEN Learning Management System, and a smattering using the newly available iTunesU platform, WebWorks, and WIMBA virtual classroom utilities.

Courseware Management Systems offer a variety of features and components in order to present and manage the online educational experience. The survey reports a broad spectrum of feature use, with 12% employing e-mail followed by syllabus, content module, assignments, availability of text/pdf files, and student record keeping (ranging between 7% and 10%). No one reports using the synchronous capabilities of whiteboards or chat. We may be seeing a trend in which the synchronous features of online computer technology are perceived as esoteric, difficult, or not germane to the educational processes for specific distance education courses and activities.

RE: ORINATION SITES FOR DISTANCE EDUCATION ACTIVITIES

For those who use a room, office or origination site to deliver a distance education event, about 72% indicated in our survey that the facility was "ready to go." Our data is unable to report to what extent the respondents are those using EdNET/IVC interactive video/audio as the preferred method, in which case, those facilities are designed to be "ready to go."

RE: EQUIPMENT/SOFTWARE RESOURCES

In the preparation phase of creating content for distance education courses and events, three-fourths of the respondents indicated that the computers, scanners, cameras, and software tools they use are provided by their college or department. Just under a third of respondent use outside services to assist in the creation process, and about 17% use personal gear and software.

For those respondents who used services outside their department to assist in the content creation process for their distance education events, about a fourth employed facilities managed by the Eccles Health Sciences Library and 5% the AOCE department. Granted, these figures are skewed by those who chose to answer this question (a very low number) and is not completely representative of the entire campus or the full spectrum of distance education activities undertaken at the University of Utah.

RE: PERSONNEL RESOURCES

For the most part, personnel from an individual department or college were used in the preparation and creation of content for distance education courses and events (two-thirds of those responding to this question in the online survey). Since the question allowed multiple responses as they applied, the results showed that 50% also used outside personnel, and 20% just themselves.

Solely based on those responding, almost half used staff from the Eccles Health Sciences Library and 5% from the TACC Center in the Marriott Library to assist them on content creation. These figures are not completely representative of the entire campus or all of its distance education activities.

RE: DISTRIBUTION/DELIVERY RESOURCES

About three-fourths of respondents used facilities, origination sites, or distribution technology found within their own colleges or departments. It is unknown to what extent those facilities are paid for and maintained by those departments themselves, or if other campus service departments carry that responsibility.

RE: OBSTACLES TO DESIGNING, BUILDING & MANAGING DISTANCE EDUCATION COURSES AND ACTIVITIES

It appears that the chief impediments to providing distance education courses and events at the University of Utah are related to funding issues, technology fragility or failures, as well as the increased faculty load to design, teach, and maintain distance education materials for students (two-thirds of respondents expressing concern in each of these areas). Interestingly, 71% of respondents suggested that a chief impediment is the familiarity of students with distance education technologies and the protocols used. Further investigation is needed to examine this failing, since the use of newer technologies of connectivity require a high level of comfort on the part of users. Not unexpectedly, copyright and intellectual property rights are of major concern, both in using resources created by others and in protecting one's own content.

Response	Count	Percent
Funding for equipment	28	66.7%
Funding for personnel support	28	66.7%
Funding for technical support	28	66.7%
University support & endorsement	27	64.3%
College support & endorsement	1	2.4%
Department support & endorsement	2	4.8%
Colleague support & endorsement	1	2.4%
Student support & endorsement	1	2.4%
Technology resources	3	7.1%
Technology failures	28	66.7%
Personnel resources	0	0.0%

Personnel failures	0	0.0%
Facilitator at origination site	27	64.3%
Facilitator at distant receive sites	0	0.0%
Student motivation	4	9.5%
Student familiarity with distance education technology & protocols	30	71.4%
Communication & contact with participants (including virtual office hours)	3	7.1%
Evaluating & assessing participant learning	0	0.0%
Faculty release time to development & manage distance education events	3	7.1%
Increased faculty load to re-design teaching and learning methods for distance education	30	71.4%
Increased faculty load to monitor & manage distance education events	30	71.4%
Necessity for on-going updates to and refinement of content	0	0.0%
Copyright & Intellectual Property Rights restrictions & concerns (imposed by others)	28	66.7%
Copyright & Intellectual Property Rights concerns (personal content)	27	64.3%
Not sure	0	0.0%
None	3	7.1%
Other	27	64.3%
<u>Other Responses:</u>		
teaching pedagogy; policies		

RE: ADDITIONAL COMMENTS

Although only a handful of respondents supplied additional comments to the survey, we should note that the "buy-in and support from administration" was mentioned as critical; in one instance, a course of particular importance and uniqueness was cited as defunct because of failed support from a department. Independent Study services (likely through AOCE) were noted as "very efficient." Specific mention was made about the Adobe Connect/Breeze web collaboration software and that it

has been the only solution available for a virtual classroom learning environment. This picture will change in the coming year as the state-wide WIMBA license for their web collaboration solution is implemented and exploited. A final comment by one respondent is particularly enlightening. Based on the respondent's years of involvement in distance education activities, he/she reports that **"it is vital to be prepared for any contingency."**