

Online Student Evaluation of Teaching for Distance Education: A Perfect Match?

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Abstract

Given the limited number of currently available resources, one public mid-western university is working to develop and implement an effective and appropriate means for online student evaluation of teaching in distance education courses that is useful and beneficial for all stakeholders — student, faculty, and administration. Because traditional methods have proven insufficient in addressing the breadth of instructional delivery and course design methods, the university began a pilot project supporting online evaluation for distance education courses in spring 2003. This paper outlines the issues considered and challenges faced in the search to employ reliable and valid online student evaluation for distance education courses, to maximize the benefits associated with electronic data gathering and reporting, and to meet the organizational and logistical challenges inherent in such an endeavor.

Introduction

Distance education as a vehicle for the delivery of course content, as well as complete academic programs, continues to grow rapidly in American higher education. According to the recent NCES Report, *Distance Education at Degree-Granting Postsecondary Institutions: 2000-2001* (Waits & Lewis, 2003), during the 12-month 2000-2001 academic year, 56% of all two-year and four-year Title IV-eligible, degree-granting institutions offered distance education courses, with public institutions more likely to offer distance education courses than private institutions. During the 2000–2001 academic year, nearly 90% of public two-year and public four-year institutions offered distance education courses, compared with 16% of private two-year and more than 40% of private four-year institutions.

With these statistics in mind, several pressing questions arise. How are institutions measuring and ensuring the quality of their distance education curricula? How thoroughly is teaching in distance education courses being evaluated? Are standardized evaluations of teaching forms being used, and if so, with what result? Are students completing the same evaluation forms as they would for on-campus courses? Who is responsible for developing the forms, and have the forms been evaluated for statistical reliability and validity? Who oversees survey and instrument administration, data collection processes, and dissemination of results? For many institutions, the answers to these questions are not obvious.

Just as distance education frequently makes use of existing and emerging technologies, especially the Internet, for delivery of curriculum, another trend in higher education's leveraging of technology is the increasing use of the Internet in facilitating student evaluation of teaching, for both distance education and campus-based courses (Achtemeier, Morris, & Finnegan, 2003). Online student evaluation of teaching is a fairly recent topic of scholarly interest, with practitioners collaborating to build a foundation of best principles and practices for other institutions considering the migration from paper-and-pencil evaluation and assessment. Sorenson and Reiner (2003) provide a helpful overview of the online student evaluation trend, including references to its pervasiveness in higher education. The authors outline a number of benefits, such as time savings, flexibility in design and reporting of data, increased quantity and quality of student responses, and lowered instructional and support costs. Additionally, the

authors highlight a number of logistical and organizational challenges to online evaluation systems and make recommendations for meeting these challenges.

In the same vein, our public mid-western university is currently laboring to develop an effective and appropriate means for online student evaluation of teaching that is useful and beneficial for all stakeholders—student, faculty, and administration. Because traditional methods (paper-and-pencil assessments) have proven insufficient in addressing the breadth of instructional delivery and course design methods, our university began a pilot project supporting online evaluation for distance education courses during the spring of 2003. Outlined in this paper are the more pressing issues considered and challenges faced in our attempt to develop and employ reliable and valid online student evaluation for distance education courses, to maximize the benefits associated with electronic data gathering and reporting, and to meet the organizational and logistical challenges along the way.

Student Evaluation of Teaching, Distance Education, and Online Evaluation Systems

There is no shortage of research on the subject of student evaluation of teaching (SET). A casual search of the ERIC database for “student evaluation of teaching performance” reveals over 5,000 citations (Cashin (1999) found over 2,000). Research examining instrument development, validity, and reliability has been conducted by a number of notable scholars on these issues (Arreola, 1995; Aleamoni, 1987; Feldman, 1978). Theall and Franklin (1990) reviewed voluminous studies that date as far back as the late 1920’s.

Not surprisingly, colleges and universities differ in their approaches to the student evaluation of teaching in distance education courses. In his study of institutions offering telecourses, Compora (2003) found that institutions consider evaluation of teaching important and that many had mechanisms in place for conducting evaluations; however, methods and success varied among institutions. In some cases, faculty members were responsible for conducting evaluations; in other cases, the distance education program director coordinated instrument administration. An evaluation of teaching via distance education was not found to be mandatory at all of the institutions studied. The author further proposed that at minimum, summative

evaluations of individual distance education courses be conducted every term, and that preferably both formative and summative evaluations are conducted.

Consistent with this sage advice, our university is currently attempting to develop a consistent, effective, and appropriate means for student evaluation of teaching in distance education courses, which recognizes the unique necessity of combining both formative and summative measures. With an enrollment approaching 10,000, our university offers three undergraduate degree programs, three graduate degree programs, and more than 150 courses via distance education. Although these courses are offered in a variety of academic disciplines, complete degree programs are offered only through the School of Nursing and Health Professions. Instructional delivery is primarily Internet-based, with course enrollments increased steadily since 1996, when the distance education programs began. This past spring semester, 145 faculty members taught 177 distance education course sections generating 2586 course enrollments.

Historically, our end-of-term course evaluations have been handled through the same cumbersome paper-and-pencil method used for on-campus courses. In spring 2003, we began a pilot project to examine the feasibility of moving student evaluation of teaching into an online environment. Goals for the project included:

- Utilizing the Internet to administer and collect student evaluation data;
- Decreasing the time necessary for administration, data collection, analysis, and report dissemination;
- Providing faculty teaching distance education course with course evaluation items more suitable to their pedagogical and course design needs;
- Providing students with an alternative to paper-and-pencil student evaluation of teaching form completion; and
- Facilitating the analysis of SET results across disciplines and over time.

In theory, a natural fit would seem to exist with distance education courses and student evaluation of teaching facilitated online. In practice, a great deal of effort is needed to make this work. Tasks such as coordinating the work of a project steering committee, establishing and testing the evaluation items, determining access permissions to the evaluation data, assigning

responsibility for process details, uploading course enrollment data into survey software, providing technical support for students and faculty, and collecting and reporting the findings require cooperation and individual dedication to the project.

Addressing Reliability and Validity of SET Instruments

The assurance of validity and reliability in a teaching evaluation instrument is of obvious importance, whether for on-campus or distance education courses. Despite decades of extensive research, questions persist related to validity and reliability. A prior study conducted by Harrington and Schibik (2003) produced national baseline data concerning evaluation forms used by students to evaluate teaching in on-campus courses. Specific research questions addressed the origin of forms, frequency of forms utilization, and the evidence of the reliability and validity of forms. The authors found that nearly 90% of all institutions surveyed indicated that student evaluation of teaching were required of all faculty, both full- and part-time. Hence, SETs remain the primary source of information available to those involved with the evaluation of faculty teaching performance. More than two-thirds (69%) of all institutions indicated that their campuses had adopted a single, campus-wide student evaluation form with a common core of evaluation items. Many of these respondents indicated that the common evaluation form was supplemented with a school and/or departmental specific SET instrument. The mean number of separate SETs used within the university during any given term was 7.5. Perhaps most significantly, despite the availability of commercially available evaluation tools, more than 80% of institutions using a supplemental form had designed their own student evaluation of teaching survey instrument. Most of these supplemental and “home grown” evaluation forms were developed to address faculty preferences.

The utilization of user-created forms is not a major cause for concern. However, the fact that only approximately 9% of survey respondents (30 of 334) had conducted studies on the reliability and/or validity of their own student evaluation of teaching instruments presents a significant dilemma.

To avoid this problem with our endeavor, a project steering committee comprised of faculty, academic administrators, and distance education support professionals was convened to facilitate

the development and testing of potential assessment and evaluation items. Faculty with expertise in statistical analysis, particularly psychometrics, tested suggested items for reliability and validity. Statistical analyses were run to calculate inter-item correlations, covariance, and Cronbach alphas, and the Tukey test for additivity for all items. Additionally, survey items were field-tested with student focus groups to ascertain appropriateness and readability.

Increasing Consistency of Evaluation of Distance Education Courses

As faculty and students collectively define appropriate means of evaluation for distance education courses, questions about consistency will likely arise. What purposes do student evaluations of teaching serve? Can and should all distance education courses, regardless of academic discipline, utilize the same evaluation instrument? Who should have access to the findings - individual faculty, department chairpersons, program directors, or academic deans? Regarding distance education evaluation, Cheung (1998) suggested the following best principles relative to teaching evaluation:

- Provide diagnostic feedback for improving the academic quality of the course,
- Provide information for personnel and administrative decision making,
- Allow students to express their needs and views formally and systematically,
- Advance research on distance teaching,
- Monitor the quality of distance teaching for the sake of accountability,
- Collect information for accreditation purposes,
- Provide comparative data across different courses so as to monitor the consistency of standards, and
- Facilitate staff development.

Cheung further stressed the importance of using evaluation tools with solid psychometric properties.

Facing the Challenges of Distance Education Course Evaluation

As those who teach or administer distance education courses and programs can attest, there are many inherent challenges to evaluating distance education courses, some of which include the facts that:

- Adjunct instructors frequently teach distance education courses. What is the institution's policy toward SET for part-time faculty? Is this policy the same for on-campus and distance education courses?
- Distance education instructors frequently employ teaching strategies mediated by technology that serve to bridge the separation of student and instructor. Are instructors properly prepared to teach at a distance so that favorable SETs are within reach?
- Student evaluations typically figure into the promotion and tenure process. Has the academic dean or department chairperson specified evaluation expectations and rewards for faculty teaching distance education courses?
- Distance education courses are often the product of a team of professionals, including instructional designers, producer/directors, and technical specialists, working alongside faculty. The technology used in instruction is integral to the teaching and learning processes; therefore, it is important to assess the technology's effectiveness alongside the faculty member's teaching effectiveness. Because these two elements are intertwined, it is understandable that the evaluation process can become very complex. How can evaluation forms be constructed so that all interested parties get the information that they need without making the process excessively burdensome for the student?

Institutions offering distance education courses are likely to experience these common challenges. However, it is possible to overcome them with careful planning, collaboration, creativity, and individual dedication to the project. Inevitably, the principle question that institutions must answer for themselves is, "how can we develop and implement a distance education course and instructor evaluation system that supports a campus culture of assessment?"

Collaboration is critical to project success. Faculty must be involved in all aspects of project development, such as item selection and testing, deployment and data collection strategies, and the presentation of results. Faculty evaluation is a topic fraught with potential peril and one that should not be taken lightly or shortsightedly. Involving campus assessment professionals in discussions relative to the formative assessment items strengthens the project further.

Maximizing Benefits and Meeting Challenges

While the perceived benefits of migrating to an online evaluation system, such as time savings, flexibility in design and reporting of data, increased quantity and quality of student responses, and lowered costs, may seem obvious to some, proposing a change in an institution's process for student evaluation of teaching has far-reaching implications and can elicit strong, and potentially negative, opinion (Sorenson & Reiner, 2003). Even a scaled-down pilot project, in our case limited to distance education courses, requires widespread buy-in and long-term planning.

Before committing to an expensive and long-term contract for course evaluation software, we wanted to focus attention on the creation of a culture of assessment. To this end, members of the university community, including institutional research professionals, academic affairs administrators, deans, department chairs, faculty, and instructional technology support staff, came together in order to discuss a series of fundamental questions: Why are we doing this in the first place? What do we *need* to measure? What would we *like* to measure? What do the results need to look like? How will they be used?

Once the project steering committee had identified a point of departure, the pilot project was launched in spring 2003. The following is a general outline of project logistics:

1. An inexpensive Internet-based survey software was licensed on a monthly basis to collect, store, and report SET data.
2. Evaluation items were developed and tested for validity and reliability.

A sample of student evaluation of teaching items included:

Formative Items:

- I found course objectives and assignments to be clearly stated and easily understood.
- I felt connected to the instructor and other students in this course.
- The instructor used a number of teaching techniques to involve me in learning.
- The way in which this course was taught required me to think in new and different ways.

- The instructor was able to clearly explain the relationships among the various course topics.
- The instructor makes difficult course material understandable.
- Parts of this course were designed to make difficult material thoroughly understandable.

Summative Items:

- In this course, the instructor's teaching required me to do my best work.
 - In this course, the instructor is able to explain difficult materials in ways that I can understand.
 - In this course, the assignments given in class were challenging.
 - This instructor is one of the best I've had at this University.
 - Of all the courses I've taken at this university, this course is one of the best I've had.
3. A maximum of 40 items per evaluation was established, comprised of 20 mandatory items that all participating distance education faculty would use plus a bank of 50 optional items from which faculty could select an additional 20. These items included both summative and formative evaluation questions.
 4. The timeline of events was established, with particular attention given to the window of opportunity for students to respond.
 5. Distance education faculty were invited via email to participate in the online evaluation project as an option to the paper-and-pencil method.
 6. Participating course rosters and student email information were merged into spreadsheets and loaded into the software, which then generated customized email messages containing student-specific Internet links to the appropriate evaluation instrument for their course.
 7. Technical support for both faculty and students was provided as needed.
 8. Participating faculty were sent periodic progress reports.
 9. SET data were gathered by the Office of Academic Affairs and reported to deans, department chairs, and faculty.

10. The members of the project steering committee met to debrief and plan the next phase in the evaluation project.

The following is descriptive information concerning the online evaluation project. Faculty teaching classes via distance education were provided an opportunity to participate, but were not mandated to do so.

Table 1. Online Evaluation Project Descriptive Information

	Faculty Participants	Course Sections	Student Respondents	Response Rate
Spring 2003	11	20	202/332	60.8%
Fall 2003	35	96	1129/1791	63.0%
Spring 2004	33	77	947/1461	64.8%

(Note: Fewer overall course sections are offered in spring terms compared to fall.)

The student response rate has increased steadily each term. As faculty and students become more comfortable with this new approach to SET, we anticipate a continued increase in the response rates.

It is also posited that faculty will begin to use the SET item bank for formative classroom assessment. Perhaps the greatest single benefit from this project involves the ability to separate summative from formative assessment. Historically, the two have been combined. Using the paper-and-pencil method, potentially helpful formative assessment data were not available to faculty until the release of the summative results, typically weeks following the close the academic semester and far too late to make substantive changes to the course. By migrating to an Internet-based evaluation tool, we gain the ability to share with faculty the formative assessment results in a timely and helpful fashion, without compromising student confidentiality in the development of the summative evaluation data.

Our university has benefited significantly from an introduction to online student evaluation of teaching in distance education courses. As this project evolves and matures, we look forward to

an increased ability to examine the growing data set in a multitude of ways. Because the data are electronic, longitudinal analysis of course-specific or instructor-specific data is more easily conducted. Similarly, data are readily available, and data reporting is faster, more flexible, and customizable.

Conclusion and Future Directions

University faculty and administrators realize that student evaluation of teaching is critical for the continued improvement and success of distance education courses. We are giving careful attention to this issue by the development of a new and improved evaluation system. Prior studies on this topic have examined institutional evaluation practices and instruments used for student evaluation of teaching in distance education courses; however, opportunities exists for institutions to examine their own practices and compare them with benchmark institutions, whether statewide, nationally, or both. Higher education institutions have a responsibility to their students for ensuring effective and quality teaching practices, and this can be a complex and difficult matter for distance education courses.

Our project will continue to provide attention and focus in an attempt to exploit this Internet-based assessment and evaluation approach as a way to improve curricular and pedagogical quality. Embedding classroom assessment items in the formative survey items, helping faculty discover ways in which they can capitalize on the results of these assessments to make immediate and substantive improvements in their teaching, developing a longitudinal assessment and evaluation database, and increasing faculty and student satisfaction and comfort with this new evaluation approach will dominate our project agenda in the near term.

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