Online Learning, Quality, and Illinois Community Colleges

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Abstract

In 2005, the Illinois Community Colleges Online (ILCCO) conducted a survey of faculty, staff, and students in order to identify the pressing issues surrounding quality, retention, and capacity building related to online learning. Over a six month period, nearly one thousand individuals from seventeen Illinois community colleges provided data relevant to these three issues. The following article focuses on the issue of quality and online learning, and the information obtained related to quality.

The data collection method included three different tools: an electronic survey of faculty, staff, and students; a focus group that included faculty, staff, and students; and interviews with select faculty, staff, and students. The results of the analysis of the data collected indicated that faculty, staff, and students agreed on the quality benchmarks that were most important and least important to online learning.

In addition, components for maintaining and improving the quality of online learning were identified.

Keywords: Online, Online Learning, Quality, Community College, Distance Learning

Online Learning in Illinois

Technology has impacted learning at an extraordinary pace, perhaps like no other innovation in previous years, decades, and centuries. According to Seagren and Watwood, (1996) "Distance education [specifically virtual classrooms] may have a greater impact on the nature of higher education than any innovation since the invention of the printing press" (p. 1). In 1998, data showed that there were approximately 1.7 million enrollments in all distance education courses in the United States with approximately 1.4 enrollments at the postsecondary level. Ten percent of all undergraduate students enrolled in at least one distance education course from 1999 to 2000 with two-thirds of all distance education enrollments via online learning (Sikora & Carroll, 2002). During the 2000-2001 academic year, there were approximately 3.1 million enrollments in distance at the postsecondary level (U.S. Department of Education, 2003). Amazingly, the concept of technology driven teaching and learning moved from unique and unusual to mainstream and ubiquitous within a very short period of time (Blumenstyk, 1998; Milliron, 2000; Milliron & Miles, 2000; Selingo, 1998).

According to the Illinois Board of Higher Education's Fall Enrollment Survey, fall 2004 headcount enrollment was 801,548 which included all public and private, four year and two year institutions of higher learning within the state of Illinois (IBHE, 2005). During that same time period, Illinois colleges and

universities reported that of the 801,548 total enrollments, 80,165 were classified as online (IVC, 2005). Illinois colleges and universities had offered 5,279 online course sections (IVC, 2005) which represented a 41% increase from the fall 2003 semester. The tremendous growth of online enrollment within the state of Illinois during this time period can be considered substantial; however, the change from fall 2003 to fall 2004 represents only one year of a phenomenal pattern that has occurred over the past seven years. Since 1999, fall online enrollments have increased from 5,887 in 1999 to over 80,165 in 2004 (IVC, 2005).

The majority of the online enrollment during fall 2004 occurred within Illinois independent colleges and universities (34,075) followed by the Illinois public community colleges (33,405), and the Illinois public universities (12,685) (IVC, 2005). Yet the vast majority of the online enrollment within Illinois independent colleges and universities were classified as out-of state with only 27% enrollment classified as in-state. The converse was true for Illinois public universities and Illinois public community colleges with the majority of their enrollment (84% and 97% respectively) classified as in state.

In January 2003, Washburn surveyed directors of online learning at 66 different Illinois institutions of higher education in order to assess their perceptions of online learning (IVC, 2003). He found that most online courses used within these institutions (80%) were developed by individual faculty members and that 85% of the institutions planned on increasing their online courses and programs in the future. There seems to be strong emphasis within Illinois higher education to continue to meet the growing demand for online learning by relying on faculty experts to create new courses and programs.

Online Learning and Illinois Community Colleges

From recent enrollment data, it seems as if students at Illinois Community Colleges have embraced online learning. Over a five year period, fall enrollment more than tripled, increasing from 9,403 in fall 2000 to 33,405 in fall 2004. The fall 2004 online enrollment represented 9.2% of the total enrollment (363,204) at Illinois public community colleges during that same semester (IBHE, 2005).

In order to support the rapid growth in online enrollment throughout the State of Illinois, a variety of support initiatives have emerged. Several of these initiatives thrive due to support received at the state and federal level and they include the Illinois Community Colleges Online (ILCCO) [http://www.ilcco.net], the Illinois Online Conference (IOC) [http://www.ilonlineconf.org], the Illinois Virtual Campus (IVC) [http://www.ivc.illinois.edu], the Illinois Online Network (ION) [http://www.ion.illinois.edu], the Illinois Virtual High School (IVHS) [http://www.ivhs.org], the Illinois Century Network (ICN) [http://www.illinois.net], and the Illinois Digital Library (IDAL) [http://www.idal.illinois.edu/]. Each one of these initiatives provides a level of support for online learning at the community college level as well as support for online learning throughout all higher education in Illinois and beyond.

Quality and Online Learning

Quality, though one of the most nebulous and subjective educational concepts regardless of academic area, has been a key issue within higher education. And as with any significant teaching and learning movement within higher education, as the enrollment has grown, the desire among higher education professionals to ensure quality within the online framework has grown as well. In 2000, Phipps and Merisotis identified benchmarks for online learning success (Institute for Higher Education Policy [IHEP], 2000). This IHEP publication, which provides a listing of 24 benchmarks considered to be "essential" to ensuring quality within online teaching and learning, is one of the most requested of all IHEP documents (http://www.ihep.org). In fall of 2003, the 19 community colleges and senior institutions of higher learning throughout the state of Maryland received funding from the Fund for the Improvement of Post-Secondary Education to "create and implement a process to certify the quality of online courses and online components." Dubbed *Quality Matters*, (http://www.qualitymatters.org), this initiative is one of the most extensive, relevant, and current studies to have investigated quality as it relates to online learning (see http://www.qualitymatters.org/about_qm.htm). As part of the FIPSE grant supporting this initiative, the *Quality Matters* research team assembled a literature review tied to a Matrix of Review Standards that provides sound insight into the terms quality and online learning
(see http://www.qualitymatters.org/resources.htm#literature).

In 2002, the state of Connecticut concluded a study of student experiences in online learning throughout Connecticut institutions of higher education. Upon completion of their study, they noted that faculty played an important role in the success of students in online environments, as well as flexibility, discipline, communication, and student support systems (Burton and Goldsmith, 2002).

Maryland and Connecticut are certainly not the only states that have sought to ensure quality as it relates to online learning. In December of 2005, Ohio produced its first annual report of the state of e-learning throughout its higher education system (Ohio Learning Network, 2005). Ohio's e-learning enrollment had grown to over 37,000 students in the fall of 2004 which represented an increase of approximately 10,000 students over the fall of 2003. Upon completion of the data analysis, they concluded that further study in three areas (finance, new markets, and impact on learning) was essential in the future. In addition, four Ohio institutions were selected for case-studies. All four indicated that quality was a top concern. They found no significant difference between face to face learning and online learning within the selected measured student outcomes that focused on quality (Ohio Learning Network, 2005). Student respondents to the Ohio case study indicated that they assess the quality of an online course in the same way that they assess the quality of a face-to-face course. They believe that the quality of the instructor is a key indicator of the quality of all courses, face to face as well as online (Ohio Learning Network, 2005).

Online Learning, Quality, and Illinois Community Colleges

Similar to higher education in states like Maryland, Connecticut, and Ohio, Illinois community colleges have approached the issue of research related to quality and online learning in a statewide comprehensive fashion.During FY 2003, Illinois Community Colleges Online (ILCCO) (http://www.ilcco.net) asked the Chief Academic Officer (CAO) at each of the 49 Illinois Community Colleges to identify the key research interests for their respective colleges in regards to online learning. Over a six month period and after a great deal of discussion, the CAOs identified the following as the top three key interests: a) Quality – in particular, the quality of online courses; b) Capacity – in particular, the capacity of Illinois community colleges to attract and enroll students in online courses, to increase the number and types of online offerings, and to recruit more faculty to design and teach online courses; and c) Retention – in particular, the retention of students in online courses. Based on this feedback, ILCCO began the process of researching all three areas with a strong and determined focus on the issue of quality.

The Purpose of the Study

Online learning, whether a semester long credit class or a short non-credit professional development activity is a critical teaching and learning activity in the 21st century. As the number of students involved in online learning increases, the expertise of those willing to lead such learning must increase as well. In 1970, there were a nominal number of computers connected to the internet. With little time elapsing between the Internet explosion and the present, the interim period available for intensive study has been quite brief. The unparalleled growth in online learning as a whole has not allowed for adequate, thorough, and methodical research to be completed covering issues like quality, capacity, and retention. As the popularity of online learning continues to increase, so, too, does the need for continued research concerning such issues, in particular quality. However, since the birth of online learning within community colleges throughout the state of Illinois and because of the brief amount of time that online learning has been available, only nominal research regarding any aspect of quality as it relates to online learning had been collected or analyzed.

The study began by focusing on the identification of benchmarks considered important by students, faculty, and staff when considering quality as it relates to online learning. The study used (with permission) the 24 quality benchmarks identified by the Institute for Higher Education Policy as a springboard. In addition, the investigation of quality was directed by the following questions:

1. What do students believe are important benchmarks of quality in online learning?
2. What does faculty believe are important benchmarks of quality in online learning?
3. What do staff members believe are important benchmarks of quality in online learning?

The Participants

Of the 49 public community colleges in Illinois, 17 were selected for participation in this study. Community colleges were selected based on their size, geographic location, enrollment, online learning enrollment, and willingness to participate. Two distinct groups of community colleges were identified. Group I consisted of 12 community colleges considered to be representative of all Illinois community colleges. Group II consisted of nine community colleges, based on self-nomination, as having special programs for the development and offering of online learning. There were four community colleges that were in both Groups I and II. All participants in Group I completed an online survey. All participants in Group II completed an online survey and were interviewed by telephone or participated in an on-campus focus group.

All faculty members who were teaching online courses during the fall of 2003 and all staff members who were directly dedicated to supporting online courses at that time were asked to participate. Finally, the student sample requested from each participating community college to complete an online survey was based on an institution's total online enrollment in fall 2003. Table 1 displays the percentage of students asked to participate in the study as determined by the institution's total online enrollment in fall 2003:

Table 1. *Guide Used to Determine an Institution's Student Sample Size*

Total Enrollment in Online Classes Fall 2003	Sample Size Percentage
500-1000	30%
1000-1500	20%
Over 1500	10%

After incomplete and duplicate entries were eliminated, 1024 respondents provided valid responses to the survey distributed as follows: a) 42 staff members, b) 177 faculty members, and c) 805 students.

Respective to Group II, researchers contacted three faculty members and one staff member at each college location and conducted a 45 minute phone interview. In addition, each college in Group II set up a focus group consisting of fall 2003 online students that met with researchers for approximately 90 minutes.

The Instruments

The Online Surveys

As discussed earlier, the surveys developed for this study were based on the Institute for Higher Education Policy's 24 Quality Benchmarks (IHEP, 2000) with a separate survey designed with appropriate wording for each group of participants (faculty, staff, and students). All surveys, regardless of respective respondents, were housed and completed via the ILCCO website and all response data were maintained, collected, and managed by ILCCO's webmaster. All survey information was submitted anonymously in order to protect the confidentiality of the participants. To prevent duplicate submissions, each person asked to complete the survey received a clearance code that could only be used once to gain access to the survey instrument.

The first section of each online survey asked respondents for demographic information which assisted researchers in developing an accurate picture of faculty, staff, and students involved in online learning. The second section of the survey asked respondents questions regarding quality and online learning. Using a four point Likert Scale (Strongly Agree = 4, Agree = 3, Disagree = 2, and Strongly Disagree = 1), respondents were asked to rank the importance of IHEP's quality benchmarks. In addition, using the

same four point Likert Scale (Strongly Agree = 4, Agree = 3, Disagree = 2, and Strongly Disagree = 1), respondents were provided with an opportunity to indicate whether or not the quality benchmark was occurring at their respective institution. The researchers selected one Illinois Community College who was not among the Group I or Group II participants to pilot test the online surveys. Once comments were received, the researchers made appropriate changes accordingly.

The Interviews

In order to complete the faculty and staff interviews, the researchers developed a list of key interview questions. One set was developed for faculty and one set was developed for staff, with both sets being very similar allowing for differences when discussing areas relevant to job activities. The key interview questions were used when speaking with interviewees via telephone. The average length of time for the interviews was approximately 1 hour. The list of nineteen questions included a few demographic questions in order to allow the researchers to describe the setting / framework of those interviewed.

The Focus Groups

The researchers developed a separate set of focus group questions that were used to guide the student focus groups. The focus group questions were similar to the interview questions asked via telephone of the faculty and staff; however, the focus group questions were tailored to student activities. The only demographic information collected was the number of students who attended the focus group session.

All faculty, staff, and students who either participated in telephone interviews or participated in focus groups were also asked to complete the online survey. In addition to the online surveys and to the interviews and focus groups, an environmental scan of online learning within three state systems (Colorado, New York, and Texas) was completed to help provide a frame of reference for data collected within Illinois.

Procedures

Online Survey Data Collection

To begin the data collection process, the surveys were placed on an ILCCO website. The CAOs were contacted and asked to direct faculty, staff, and students from their respective institution to the website. The researchers sent instructions to the CAOs at the participating Illinois Community Colleges which provided details regarding the entire process and included a deadline for survey completion. The ILCCO webmaster developed a data collection system that funneled response data received from the respondents through the website to a spreadsheet that could be manipulated during the data analysis process. Completion of the online survey was on a volunteer basis, and all information received from the surveys was held confidential.

Interview and Focus Group Data Collection

To begin the interview and focus group process, the CAOs were contacted and asked to submit names and contact information for at least three faculty members teaching online courses during the spring of 2005 and at least one staff member who was providing direct support for online learning during the same semester to the interview team. The CAOs were also asked to assemble a group of students who were enrolled in online courses during spring 2005 and who were willing to participate in a focus group session. The researchers sent the list of interview and focus group questions to the CAOs for their review prior to the activities.

Data Analysis

Creswell (2003) described data analysis as an ongoing process with continual reflection, involving data that has been obtained by the researcher from the participants that had been tailored to the specific strategy used in the study. Merriam (2001) defined it as “the process of making sense out of the data” (p.

178). Best and Kahn (1998) discussed changes in data analysis respective to the advent of the use of the computer and acknowledged that the computer as "one of the most versatile and ingenious developments of the technological age" has significantly altered the way in which researchers analyze data. It has simplified complicated research designs and the data analysis process (p. 428).

The data analysis for the survey portion of this study included the reporting of the number of valid responses, or useable responses returned from the respondents, as well as the number of missing responses or the number of invalid responses. The data analysis also included the frequency of each type of response, the percentage of the total responses, the percentage of the valid responses, and the cumulative percentages of the valid responses. All relevant quantitative data collected were analyzed using means, standard deviations, medians, and modes. All data were collected and placed in an Excel workbook, using separate spreadsheets to assist when necessary.

Using the statistical calculation formula features within the Excel workbooks, all statistical calculations were calculated for all questions that had been assigned Likert scales. The calculations were completed on an aggregate basis as well as an individual basis when necessary.

Finally, the qualitative data provided by the respondents throughout the interviews and the focus groups were analyzed by transcribing and placing all information into searchable Excel tables and seeking repetition of words, phrases, themes, and concepts. An attempt was made to identify comment characteristics that had been repeated not only by an individual respondent, but by multiple respondents in multiple interviews and focus groups. The more words, phrases, themes, or concepts had been repeated, the greater importance they were presumed to play.

Findings

The Survey Respondents

Students. According to the demographic data collected via the surveys, 45.6% of the respondents were between 18 to 25 years of age. That percentage mirrors the percentage of total students age 25 or younger (45.7%) enrolled during fiscal year 2004 within the Illinois Community College System (Illinois Community College Board, 2004). The majority of the respondents were full-time students (57%) with a very even distribution of first year students (35%), second year students (30.7%) and students having completed at least four college semesters (33.4%). Seventy-five percent of the respondents were employed. Sixty percent of the employed respondents were employed full-time.

In addition, 39.7% of the respondents were new to online learning, having enrolled in an online course for the first time. Most respondents (53.6%) were enrolled in only one online course during spring 2005, with 27% enrolled in two online courses and 18.2% enrolled in 3-4 online courses. An overwhelming 84.8% of respondents stated that they were using their home computers to complete their courses. The remainder of the respondents identified using workplace computers (7.1%), school computers (5.1%), or computers located at other locations (3%). The majority of the survey respondents stated that their technology expertise was at an advanced level (58%), with 31% stating that they were at an intermediate level and 10.2% at a novice level.

Faculty. According to the demographic data collected from the faculty respondents to the survey, overall they were a very experienced group. Over 70 % of the faculty respondents had more than 10 years teaching experience (including K-12, community college, and university experience) with 15.4% having 6 to 10 years experience and 12.3% having 2-5 years experience. Over 54% of the respondents had taught for more than 10 years in a community college setting, and 45.2% had taught more than 10 years at their current institution. Not only did the respondents have strong experience levels, the majority (57%), albeit narrow, was full-time faculty. Nearly 37% of the respondents taught between 12-24 credit hours face-to-face during the combined fall 2004 and spring 2005 academic semesters, with 24.8% having taught between 1-11 credit hours. Furthermore, the respondents had a high level of experience teaching online with 57.6% having taught courses online between two to five years and 25% between six to ten years. More than 60% had taught online for their current institution between two to five years, and 61%

had taken an online course as a student. The overwhelming majority of the faculty respondents rated their technological expertise as advanced (80.7%) with another 19.3% rating themselves as intermediate.

Staff. The survey respondents categorized as online support staff provided similar demographic information as the faculty respondents. Three fourths of the staff respondents had been in their current position for five years or less, with 17.5% in their position less than one year, 12.5% between 6-10 years and 12.5% more than ten years. Nearly 58% had been employed at their current institution in some capacity for at least six years and 65% had spent at least six years employed in a community college setting. Nearly 60% of the staff respondents indicated that no less than 40% of their workload was devoted to online learning. Approximately one fourth of the staff respondents had online teaching experience and slightly more than 50% had been a student in an online course. Three fourths of the staff respondents rated their technology expertise as advanced and one fourth rated it as intermediate.

Participants Interviewed. As all individuals who participated in the interview / focus groups were asked and expected to complete the online survey, the demographic information corresponded to that collected through the survey. Some additional information was gathered that provides some additional details about the participants interviewed. One faculty participant interviewed had taught over 100 online sections, and one was teaching online for the first time. The faculty participants taught a wide variety of course including composition, history, humanities, mathematics, speech, psychology, science, word processing, automated office technology, management, accounting, criminal justice, nursing, and computer technology. The staff supporting online learning did so in a variety of ways including instructional design, technical training, course management support, faculty website development, internal online committee participation, and institutional representation on statewide online learning initiatives. Nearly 100% of the staff participants interviewed reported to the academic side of the college.

The Quality Benchmarks

Throughout the survey, all three groups of respondents were asked to rate the importance of each quality benchmark using a four point Likert Scale (Strongly Agree = 4, Agree = 3, Disagree = 2, and Strongly Disagree = 1). Table 2 displays the benchmarks with the highest means based on all respondents (see Table 2). Table 3 displays the benchmarks with the lowest means based on all respondents (see Table 3).

Table 2. *Quality Benchmarks Rated Most Important Based on Highest Means – All Respondents*

Benchmark	Mean
Technical assistance in course development is available to faculty	3.75
A college-wide system, such as Blackboard or WebCT, supports and facilitates the online courses.	3.70
Faculty are encouraged to use technical assistance in course development	3.68
Faculty give constructive feedback on student assignments and to their questions	3.66
Faculty are assisted in the transition from classroom teaching to online instruction	3.65
The institution has a documented technology plan	3.63
Faculty give feedback to students in a timely manner	3.62
Before starting, students are advised about the course to determine if they have access to the technology required by the course design	3.61
Before starting, student are aware of course objectives, concepts, ideas and learning outcomes	3.60
The technology is reliable and failsafe.	3.60

Table 3. *Quality Benchmarks Rated Least Important Based on Lowest Means – All Respondents*

Benchmark	Mean
Instructor training and assistance, including peer mentoring, continues throughout the online course	3.47
The educational effectiveness of the online courses between institution is assessed through an institutional evaluation	3.47
Students are actively engaged in analysis, syntheses, and evaluation as part of their online course and program requirements	3.47
The educational effectiveness of the teaching/learning process is assessed through an institutional evaluation	3.46
The online courses address student learning styles	3.44
Students have access to a virtual library	3.39
Students are provided with online information and hands-on training on library resources	3.32
Data on enrollment, costs, and successful innovative uses of technology are used to evaluate program effectiveness	3.30
Faculty are encouraged and aided in sharing online courses between institutions	3.08

The data collected were also separated according to the distinct respondent groups of faculty, staff, and student. Upon completing appropriate statistical analysis, none of the mean scores of the individual faculty, staff, and student groups were found to be different at a statistical significant level of .05. In addition, the faculty and staff were grouped according to several other distinctions including: 1) faculty who had taken classes online and those who had not, 2) faculty who had taught fewer than six sections online and those who had taught six or more sections online, 3) those who identified their computer skills as novice, intermediate, and expert, and 4) staff who had taught online and those who had not. Students were divided into various groups as well including: 1) those who were 25 years or younger and those who were 26 and older, 2) those who were employed full-time and those who were either employed part-time or not employed, 3) those who had taken two or fewer online courses, those who had taken three or four online courses, and those who had taken five or more, and 4) those who identified their computer skills as novice, intermediate, and expert. For each of these groups, multivariate tests were completed in regards to the means of their responses and the quality benchmarks. As a result of this analysis, no statistically significant differences were found between the means of any of the groups. The lack of statistically significant differences reinforced the consistency among the groups as far as the ranking of the quality benchmarks.

Following their rating of the importance of each quality benchmark, the respondents were asked to rate the extent to which the quality benchmarks were occurring at their respective institution. Again, the respondents used a four point Likert Scale (Strongly Agree = 4, Agree = 3, Disagree = 2, and Strongly Disagree = 1) to complete the survey. Table 4 shows the means of the responses received regarding the extent to which they believed that the quality benchmark occurred at the respondents' respective institutions.

Again, upon completing appropriate statistical analysis, none of the mean scores of the individual faculty, staff, and student groups were found to be different at a statistical significant level of .05; however, it is notable that the faculty means were discernibly higher than those of students in regards to 1) student interaction with faculty and students, 2) the timeliness of faculty feedback, 3) the agreement on expectations for assignments, and 4) students' access to technology assistance. In addition, the faculty means were notably higher than those of the staff on: 1) the constructive quality of faculty feedback, 2) the timeliness of faculty feedback, 3) instruction in proper methods of research, 4) online information and training given on library resources, and 5) the assessment of teaching and learning. Finally, the means of the staff responses were higher than students on: 1) students' access to virtual library, 2) students'

access to technical assistance, 3) timely responses from student services, and 4) the system of feedback about online courses.

Table 4. E*xtent to which Quality Benchmark Occurs at Institution of Respondent based on Mean*

Benchmark	Mean		
	Student	Staff	Faculty
Reliable and failsafe technology	3.33	3.30	3.15
College-wide computer system	3.66	3.70	3.68
Instructional materials reviewed	3.32	2.84	2.89
Courses reviewed periodically	3.35	2.82	2.90
Students engaged in analysis	3.26	3.11	3.14
Student interact with faculty and other students	3.36	3.43	3.28
Student interaction is facilitated through a variety of ways	3.32	3.39	3.48
Faculty give constructive feedback on student assignments	3.41	3.35	3.46
Faculty give feedback to students in a timely manner	3.34	3.30	3.45
Students instructed in proper methods of research	3.30	2.74	3.02
Before starting, students advised about the course to see if they are committed	3.40	3.18	3.01
Before starting, students advised about technology required by course	3.42	3.35	3.13
Before starting, students aware of course objectives, concepts, learning outcomes	3.41	3.35	3.31
Students have access to virtual library	3.12	3.25	3.19
Faculty and students agree on expectations for assignments completion and faculty responses	3.36	3.09	3.12
Online information about programs, admission, requirements, etc.	3.33	3.22	3.36
Students provided with information on library resources	2.99	2.75	2.87
Students have access to technical assistance	3.29	3.62	3.48
Student services answer students' questions in a timely manner	3.20	3.36	3.26
Student services answer students' questions accurately	3.23	3.28	3.26
Educational effectiveness of course is assessed through institutional evaluation	3.28	2.69	2.46
Teaching / learning is assessed	3.24	2.56	2.76
System for feedback about online courses	3.19	3.40	3.23
Online courses address learning styles	3.10	2.91	2.90

The Interviews

At the conclusion of the interview and focus group activities, faculty, staff, and students consistently identified four components necessary for quality online learning programs including: 1) a strong administrative support team that collaborates with its faculty throughout the online learning process, 2) a system for continuous improvement of online teaching and learning, 3) reliable technology and reliable technical assistance, and 4) strong faculty, staff, and student online teaching and learning preparation / orientation programs. Throughout this study, the faculty, staff, and students were in nearly universal agreement that there was no significant difference between online teaching and learning. In addition, the majority of the faculty interviewed stated that the outcomes between the face to face and online version of

the same course were virtually identical. Through the focus groups and interviews, the research team was able to extrapolate a list of components for maintaining and/or improving the quality of online courses (see Table 5).

Table 5. *List of components for maintaining / improving quality*

Components
1. Use of a common course platform through a campus
2. Availability of a well designed professional development program for faculty and staff preparing online teaching and learning activities
3. Implementation of a readiness / assessment program for students selecting online learning
4. Use of online course assessment tools
5. Adoption of clearly articulated standards and a list of components for all online courses
6. Conveying a sense of personality by faculty and students throughout a course
7. Use of an online course template – standardization
8. Use of all available technology – low threshold and high threshold to enhance the learning environment
9. Online mentoring for faculty and students
10. Online tutoring
11. Online readiness assessment for faculty and students

Conclusions

Throughout the entire study, one conclusion that can be gleaned is that online learning is in a more mature phase. The range of data collected during this study in particular throughout the interviews and focus group activities did not focus on the original forefront issues within online learning including those such as its academic credibility, the calculating of load relative to the online modality, the calculation of faculty compensation, and ownership issues. Online learning has moved beyond the initial issues perhaps and hopefully because those issues have been resolved.

Moreover, the results of this particular study demonstrate a remarkable cohesiveness among all respondents (faculty, staff, and students) in terms of their agreement on the quality benchmarks they found to be both most and least important. Their unanimity provides credence to the idea that faculty, staff, and students all have common expectations in terms of quality and online learning even though their interaction, use, or activity within this modality is markedly different. Because of this unanimity, it can also be concluded that there is a level of confidence concerning what constitutes or defines online quality among its daily users.

Of the top ten quality benchmarks considered to be most important, six were directly related to technology, and of the nine quality benchmarks considered to be least important, only one was directly related to technology. Similarly in terms of the extent to which the quality benchmarks were occurring at the respondent's respective institution, four of the top seven strongest and two of the top seven weakest quality benchmarks occurring at institutions involved technology or technical assistance; however, the remaining three strongest and five weakest quality benchmarks did not. Overall, the most important and those strongest occurring quality benchmarks at local institutions focused on technology. The least important and those weakest occurring quality benchmarks did not. In addition, six of the seven strongest occurring quality benchmarks at local institutions identified by the respondents appeared within the top ten benchmarks of greatest importance with the majority focusing on technology.

Within the online learning modality, the technology used as the teaching and learning framework no doubt is paramount to its existence which may explain why benchmarks related to technology were considered most important and why they were occurring strongly at respondents' respective institutions.

Of greater interest is why quality benchmarks commonly associated with quality teaching and learning irrespective of learning modality were ranked of lesser importance and occurring to a lesser degree. These findings seem to indicate that the technological segment of online learning overshadows the non-technological segment. Issues such as a strong focus on learning outcomes, evaluation, assessment, educational effectiveness, and critical feedback should somehow be of greater value to teaching and learning than having technical assistance during course development. If and when the teaching and learning move to the forefront and the technology becomes simply the offering mechanism, the measuring of the quality of online learning will be much easier to complete.

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