

Success and Retention in Online Learning Through Effective Quality Assurance: An Institution-Wide Longitudinal Study at a Rural Public College in The United States

Etkin Nitelik Güvencesi Aracılığıyla Online Öğrenmede Başarı ve Okula Devam: Amerika Birleşik Devletleri Kırsalında Bir Devlet Üniversitesinde Yapılan Boylamsal Bir Çalışma

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Abstract

Universities around the world are realizing the numerous benefits to increased online instructional offerings. The temptation is great to move rapidly ahead in order to increase enrolments by meeting the increased demands of all stakeholders, from students to faculty to board members and investors. However, providing online learning can be a double-edged sword. If it is not monitored carefully and continuously, the repercussions may be significant, potentially resulting in decreased success and retention rates and ultimately lost revenue. This paper will present a framework for assessing the effectiveness of online learning programs, with success and retention as the two central metrics. The implementation of the framework will be illustrated through a case study of retention efforts at a public higher education institution in the United States.

Keywords: Online learning, distance learning, retention, assessment, monitoring

Öz

Dünyanın her yerinde, üniversiteler online derslerin ve ders malzemelerin çoğalmasının çeşitli faydalarını fark etmektedirler. Öğrencilerden akademisyenlere, mütevelli heyeti üyelerinden yatırımcılara kadar bütün paydaşların artan taleplerini karşılayarak öğrenci kayıtlarının artırılması ve online ders veren kurumların diğer üniversitelerin önüne geçebilmesinin cazibesi oldukça büyüktür. Ancak online eğitim vermek iki ucu keskin bir bıçak olabilir. Eğer dikkatli ve düzenli denetlenmezse, online eğitim geri tepebilir, başarı ve okula devam oranlarında düşüşe ve hatta maddi zarara sebebiyet verebilir. Bu çalışma, başarı ve okula devamı temel ölçüt olarak online eğitim programlarının faydalılığını değerlendirmek için bir çerçeve sunmayı amaçlamaktadır. Bu çerçevenin uygulaması, ABD’de bir devlet yükseköğretim kurumundaki okula devamı sağlama çalışmaları üzerine bir vaka çalışmasıyla gösterilecektir.

Anahtar sözcükler: İnternet aracılığı ile (online) öğrenme, uzaktan öğrenme, koruma, değerlendirme, yansıtma

Introduction

In the United States, nearly 70% of chief academic officers report the strategic importance of online learning for their institutions and over 30% of all higher education students take at least one course online (Allen&Seaman, 2013). In countries such as

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a broader population, over 40% of higher education students are enrolled in distance Turkey, where the existence of an Open University expands online learning to learning courses (Özkul&Latchem, 2011). Indeed, most countries are experiencing well over 10% annual growth in online enrollments. The reality for administrators of institutions providing online learning is that the growth curve may just as easily move in the opposite direction if the institution fails to effectively monitor the quality of its online offerings.

There are compelling arguments being made for national and international attention to this matter. Accreditation of online learning (Kocdar&Aydin, 2012), which implies broadly accepted standards and criteria with the goal of uniform, consistent assessment and ratings of institutions, is garnering increasing support. National and international quality assurance bodies such as ENQA (the European Association for Quality Assurance in Higher Education) in Europe and CHEA (the Council for Higher Education Accreditation) in the United States have issued guidelines for the effective establishment of online learning programs. However, Huertas et al.(2011) suggest that there is still a considerable gap between concept and application, arguing that attention to “e-learning quality is not included as a regular or integral part of national quality reviews in any country in Europe” (2009). Likewise, a report published by the Swedish National Agency for Higher Education points out that while e-learning is on the agenda in many European contexts and in individual countries, it is only recently, and much more sporadically, that the subject has been broached of how e-learning quality should be assessed. In many organizations, quality in e-learning appears to be a non-issue (2008, p.9).

One reason why online learning should be carefully monitored is the nature of the students who tend to enroll in online learning in great numbers. In countries such as the US and Turkey, there are demographic consistencies among many distance learning students that make them at-risk students; e.g. higher percentages of working students, part-time students, and students in non-traditional age groups (Aud et al., 2011). This, combined with the fact that succeeding in a distance learning course requires substantial self-discipline and motivation (Brophy, 2010), arguably implies that distance education courses require greater effort for most students, and that they should be closely monitored to ensure that in relation to the traditional classroom, comparable numbers of students are successfully completing courses and programs of study. Regardless of whether online instruction is assessed as a result of accreditation efforts or national quality reviews, higher education institutions should seriously consider an internal, systematic online learning assessment plan in order to see that the majority of students may achieve their educational goals. The choice to not implement such a system may result in dramatic financial consequences for the institution.

Given this backdrop, this paper will report on the efforts of a single higher education institution in the United States to develop and implement an assessment framework

for its online learning program. The assessment framework was created in response to a larger, institution-wide effort to increase student retention. The online program at the school was well-established and gaining in popularity among instructors who expressed a desire to teach online, and the flood of students wanting to learn online. In addition to the internal need to monitor this educational program, there was emerging external pressure from accrediting bodies who were scrutinizing online learning more closely. In response, the school developed an assessment framework for its online courses and program. This report is an evaluation of that effort. The paper describes the methodology used for examining the assessment framework, the design and implementation of the framework itself, a five-year review of results of assessing the online program, followed by a discussion of the learnings from this process.

Methodology

For this research, the Case Study approach was utilized. Stake's (1998) earlier definition takes the angle that a case study is not so much about the methodology, but rather it is a choice of the object to be studied. The case study, more recently defined by Creswell (2013), is a qualitative approach in which an actual, real-life situation is explained via a detailed, in-depth data collection process involving multiple sources of information. Creswell draws a distinction between the intrinsic case study, where the researcher seeks to better understand a particular case, and the instrumental case study, where a particular case is examined to "understand a specific issue or problem". He further remarks that the line can be blurry between these two forms, and that many studies have some crossover. This specific case would fall into this third category of both the intrinsic and instrumental case.

The institution for this case was chosen because it is where the researcher was employed at the time. The data-collection methodology of triangulation was employed in an attempt to secure in-depth understanding (Denzin&Lincoln, 1998) of the specific issue under exploration: the effectiveness of our online student retention efforts. Triangulation is the use of multiple and different sources, methods, investigators, and theories to provide corroborating evidence (Creswell, 2013), or what Stake (1998) refers to as using "multiple perceptions" to clarify meaning. Thus, at the institution in this study, quantitative and qualitative data was gathered from the college's Learning Outcomes database; records provided by the schools Office of Institutional Effectiveness; faculty, staff, and student surveys; professional development workshop evaluations; hundreds of formal and informal meetings across campus over the five-year development and implementation period.

The higher education institution where this case study was conducted is a small (approximate enrollment 3,000), rural, public college. The school has been providing online learning opportunities since the mid-1990s, but online courses were limited to those programs with faculty who were "early adopters" of this methodology. As online

instruction became more accessible (i.e. knowledge of HTML was not mandatory) to both faculty and students via specialized programs (e.g. Blackboard and later Moodle) course offerings and enrollments began to increase. In addition, over 50% of students at the school were part-time because they worked while attending school. This is what made online learning so attractive: It offered a great deal of flexibility to both the students and to school administrators. While this helped to generate greater enrollments in online courses, it also signaled challenges, as the number of non-completers – of courses and academic programs – began to rise as well. By 2004, over 50% of students had enrolled in at least one online course; by 2007, this had risen to over 70%. At the same time, where 75% of students enrolled in seated, or traditional, classes were successfully passing their classes (i.e. grade of C or better), a considerably lower 66% of students enrolled in online courses were successfully passing. In the same year, 85% for traditional students completed their courses (regardless of the grade received), compared with 78% of online students. Moreover, the institution was struggling with an overall retention rate of 55%; i.e. 45% of students who started school in the fall semester would not return the following fall. The school did not perceive online learning as the sole cause of low retention rates, however, because such a significant percentage were not completing or passing their online courses, this area became a central focus for efforts to increase overall retention rates at the school.

Developing A Framework for Assessing Online Learning

The Assessment Framework

Once the school determined that a primary focus of retention efforts would be the online learning program, the question then became where to “drill” into the program and identify barriers to success and retention. The logical first step was to explore existing models. An early list of “key areas of institutional activity” for the assessment of distance learning was published by the Council for Higher Education Accreditation (CHEA, 2002). The list drew attention to the presence of online learning within the organizational structure such as alignment with institutional mission, organizational structure, and resources. From a learning perspective, is online learning integrated into curriculum design, student and faculty support mechanisms, and importantly, is it evaluated via student learning outcomes. In 2010, the Southern Association of Colleges and Schools (a US regional accrediting body) had issued guidelines for the assessment of distance education programs.

The centerpiece of the SACS guidelines reads: “Comparability of distance education programs to campus-based programs and courses is ensured by the evaluation of educational effectiveness, including assessments of student learning outcomes, student retention, and student satisfaction.” This statement is broken into four essential questions that provide a framework for assessment of online education programs:

1. Is the distance education program reflected in the institution’s strategic plan?

2. Is there evidence that outcomes for the program have been identified?
3. Is there evidence that the effectiveness of the distance education program is regularly assessed and steps taken for improvement of the program?
4. Has the institution developed student learning competencies for the courses/programs offered by distance education? If these are the same competencies for courses/programs offered by “traditional” methodologies, is assessment identified for distance learning students separate from students taking courses by “traditional” methodologies?

With the SACS guidelines in hand, the school’s Distance Learning Advisory Council (DLAC) identified a set of metrics for which data would be collected to assess the online learning program. These included: course success rates, course completion rates, student surveys, end-of-semester course evaluations, modality comparisons, grade distributions, program reviews, and learning outcomes (at the institutional, program, and course levels).

In addition, the DLAC created an in-house peer review process (i.e. the Quality Assessment Plan - QAP) designed to comprehensively evaluate all online courses, each of which was designed and created by a course instructor. If a course receives a score below the established threshold, technical assistance and professional development for the areas of weakness are provided to the instructor. The goal of the QAP is not to seek out inadequate courses for punishment, but rather to strengthen online offerings in an effort to increase success and retention. This is detailed below, under 3.3.1. As a result of six years of collection and analysis of data, a number of changes in policy and practice have been exercised. The result has been a steady rise in success and retention rates in the online learning program.

Implementing the Assessment Framework

Existing retention data at the school, plus the guidelines suggested by SACS, provided probing questions that forced the school to seriously consider how it was monitoring its online learning program. The guidelines were a starting point to questions about institutional commitment to online learning, the methodologies being used to assess the online program, and perhaps most importantly, whether the institution was assessing the degree to which learning was taking place in online courses – particularly in relation to traditional courses.

Institutional commitment.

Question #1, regarding the institution’s strategic plan, is intended to determine the institution’s dedication to distance learning, including the commitment of resources to the continuous assessment and improvement of distance learning. Has the institution

deemed online learning to be of enough importance that goals, objectives, outcomes, and resources have been identified for the sustainability and growth of this methodology?

The institution in this case study realized that within its existing strategic plan, expressed commitment to online learning was cursory. At the time, the most relevant statement in the strategic plan read: “We will create a culture where all institutional actions are focused on improving student learning and success and leading to student goal completion.” Likewise, the most relevant objective guiding data collection for this goal was: “Success and withdrawal rates by instructional modalities”. One could argue that support for online learning was implicit in these statements, however, many in the online learning program felt that more explicit articulation of recognition of online learning was necessary. The school’s mission statement now clearly reflects its commitment to online learning with:

[The college] offers opportunities for lifelong learning through high quality traditional and distance learning teaching, training, support, and enrichment with the intended purpose of improving the quality of life for all citizens of [our region and state].

Program outcomes identified.

Question #2, identification of program outcomes, simply asks if outcomes have been identified for the program, broadly speaking. This is a very basic, yet essential task. Have program and institutional administrators considered the outcomes that should be measured in order to assess the effectiveness of the program, and its administration. An example program outcome may be: *Faculty demonstrate the ability to teach in the online environment in a proficient (student-centered) manner.*

Regular assessment of the distance learning program.

Question #3 is the next logical step following the identification of program outcomes: Are they assessed? How are the results used? This question pertains to the quality and effectiveness of the online learning program. To return to our example outcome (above), the focus is now on the issue of measuring “ability to teach” and “proficient manner”. As with all good assessment, it is important to try and gather data for a single outcome via multiple measures. For online learning, institutions may consider a number of ways to measure the ability to teach in a proficient manner. Possible measurements may include:

1. A Quality Assessment Plan
2. Success, Persistence, and Retention Rates
3. Student Surveys and Evaluations
4. Modality Comparison & Grade Distributions
5. Program Reviews

A quality assessment plan (QAP).

A Quality Assessment Plan may be a proprietary product or it may be developed in-house. It is essentially a detailed rubric used to objectively evaluate the quality of instruction being offered by performing a peer-review analysis of an instructor's on-line course. Generally, the review is conducted by a team, not an individual. The team may be comprised of a distance learning instructional design specialist, a content area specialist, and an impartial faculty member who is unfamiliar with the content and the course under review. Any course receiving a score below the standard established by the DLAC must re-enter the review process once suggested improvements have been made. At the case-study college, all existing online courses were administered the newly-developed review process. Even though they may have been in existence for a number of years, they were still subject to the same requirements as any new online course; i.e. if the standards were not met, improvements were mandatory before teaching could continue. In addition, any course that has been reviewed is placed on a three-year cycle whereby it will undergo the review process every three years.

One way in which this process may be conducted is for faculty and staff to develop a rubric to assess online courses. The overarching criteria may include: Staff Information, Organization, Learning, Technology, Learner Support, and Accessibility. Under each of these broad criteria is a sub-set of more specific indicators. As an example, under Learning, a sub-criterion may read: "Course evaluation of students is linked to course objectives and includes multiple ways of assessing students." Underneath this criterion, the instructor and course are evaluated for the number and type of assessments used during the course. The course is also scored according to whether "the types of assessments selected measure the stated learning outcomes and unit objectives and are consistent with course activities and resources." Another criterion is "assessment strategies provide feedback to the students." If the online course of an individual is lacking in any of the areas specified on the rubric, then an instructional designer or online education specialist will provide support and training to ensure that the course meets the relevant criteria. As for the utility of this exercise in evaluating the distance education program, data from individual evaluations can be aggregated and emergent patterns can speak to the quality of the program, as well as point to broad needs for technical support or professional development. The following figure is a snapshot of the QAP. It represents a sub-section (i.e. assessments used) under the criterion of Learning. Column B indicates the points given by the reviewer of this particular course assessment.

Table 1. Sample sub-section, under learning, of quality assessment plan

Course evaluation is linked to course objectives and includes multiple ways of assessing students.	Assessments include a variety of the following (at least 4 different types):	A	B
	Self-check or practice types of tests to provide quick student feedback	1	1
	Online testing	1	1
	Discussion board postings	1	1
	E Portfolios	1	
	Projects - group or individual	1	
	Student presentations	1	
	Peer evaluations	1	
	Case studies	1	
	Papers	1	1
	The types of assessments selected measure the stated learning outcomes and unit objectives and	1	1
	Assessment strategies provide feedback to the	1	
	Assessments selected are appropriate to the	1	1
Total Points Received for this Section		6	

Success, persistence and retention rates.

“Success” can be defined by the institution assessing its own online programs, or it may be pre-determined by an external organization, such as an accrediting body. In the US, a generally accepted definition of success is receiving a passing score of “C” or better in a course. “Persistence” is a term that lacks a consistently-accepted definition. Again, the definition may be determined by the institution or an external agent. In many schools in the US, persistence is defined as the student completing a specific course, regardless of the grade at the end of the course. Therefore, a student may persist in a course by staying in the course until the end of the semester, but the student may not succeed in the course because he received a D or F for a final grade. “Retention” asks whether a student remains in a program until graduation. Whereas persistence examines short-term (i.e. one semester) data, retention examines long-term data (i.e. for the complete program).

All three of these metrics can be used as single-point indicators of how effective an online learning course or program may be. They can be examined in a multi-semester or multi-year trend line. They may also be examined in comparison to seated or traditional sections or programs. For example, success and persistence rates could be compared between online and seated sections of the same biology course. Or, an institution may compare retention rates of students in their online and on-campus Teacher Preparation programs. In the case of comparing two or more sections of the same course taught in the same semester, an ideal situation would be to have the same instructor teaching at least one online and one seated section of the course, in order to control for this variable.

Table 2. A three-year comparison of success and persistence rates in a single course.

	Traditional					Hybrid					Internet				
	Enr	Succ	Withd	Persist	Succ	Enr	Succ	Withd	Persist	Succ	Enr	Succ	Withd	Persist	Succ
Year 1	18	13	2	88.9%	72.2%	24	14	4	83.3%	58.3%	42	29	6	85.7%	69.0%
Year 2	0	0	0	n/a	n/a	18	17	1	94.4%	94.4%	95	60	18	81.1%	63.2%
Year 3	17	10	4	76.5%	58.8%	0	0	0	n/a	n/a	47	32	10	78.7%	68.1%
Total	35	23	6	82.9%	65.7%	42	31	5	88.1%	73.8%	184	121	34	81.5%	65.8%

Student surveys and evaluations

Student surveys and evaluations can be carried out from the institutional level to the course level. Depending on whether an institution utilizes a proprietary survey, or one developed in-house, questions specific to the online program and courses may be interwoven. Indeed, some institutions gather relevant online program feedback from students on three separate surveys: 1) an annual, institution-wide survey; 2) an end-of-course evaluation; and 3) a survey administered specifically by the online program.

An item on a course-level survey may read: “The instructional methods used are appropriate to the course.” Or, “The instructor’s teaching strategies contribute to my understanding of the course.” These are certainly not directly applied to online instruction, however for the sake of comparability between seated and online courses, the items on the course-level survey may be more general. As mentioned previously, this information would not tip the scales on any decision making, yet it may help validate other data that has been gathered. Conversely, the survey administered by the online program may ask more specific questions, such as, “Before enrolling, I met with a faculty advisor to discuss my level of self-discipline, motivation, commitment, and technical ability to succeed in this online course.”

Survey information is extremely useful because it can be used to test hypotheses about why certain phenomena are occurring in online courses. For example, students may be asked to rate the response time of the instructor when they email or post questions. Or, an instructor may ask if specific supplemental material was found useful. The information gleaned from a survey may also serve a purpose when determining the types of questions to be asked in a focus group for the online program.

Before enrolling, I met with a faculty advisor to discuss my level of self-discipline, motivation, commitment, and technical ability to succeed in an Internet course.

Table 3: Sample result from recent student survey of online learning program.

Choice	Count	Percent
Strongly Agree	91	37%
Agree	74	30%
Neutral	49	20%
Disagree	30	12%
Strongly Disagree	5	2%
Mean		3.87

Modality comparison & grade distributions

Modality Comparisons and Grade Distribution analysis are relatively simple, but can yield quite useful information. End-of-semester data from all courses can be disaggregated by modality (i.e. traditional, online, and hybrid, or blended), and again by persistence and success rates and grade distributions. Other relevant data that may be teased out could include withdrawal dates for non-completers, demographic data (e.g., age), full-time or part-time status, etc. In addition, these exercises may be carried out at the institutional, program, and course levels. The modality and grade distribution comparisons provide a broad overview of student performance in the seated sections and their online equivalents. Depending on the level of analysis (i.e. institutional, program, course), more actionable information may be gleaned. Again, as the analysis edges closer to the source of instruction, it may be more revealing, yet equally sensitive. This is especially true in smaller institutions where it is easier to identify the course instructor(s), thus potentially raising anxiety levels. Whenever data is analyzed at the course level, it is well-advised to handle it as discreetly as possible.

Table 4: Modality comparison

Computer Information Technology						
Modality	Total Enrolled	withd	succ	% withd	%persist	% success
Traditional	683	127	443	18.60%	81.40%	64.90%
Internet	869	244	488	28.10%	71.90%	56.20%
Hybrid	339	80	205	23.60%	76.40%	60.50%

Program and departmental reviews

At most accredited higher education institutions in the US, academic programs and departments undergo periodic review. That is, every three to five years, an academic unit will conduct a self-study, examining a wide range of indicators, and utilizing results for improvement and planning purposes. In the section of the review where academic performance is analyzed, the academic unit may examine the effectiveness of its online courses and programs. The data used for the analysis may be derived from

most of the items discussed above, yet the review process allows faculty and staff the opportunity to reflect on the data and their own personal experiences with online instruction, and use this information to initiate change. The unit review process may also include focus groups with stakeholders. This is another opportunity to gather impressions concerning online offerings.

Student learning outcomes

Question #4 asks the most critical question of all: “Has the institution developed student learning competencies for the courses/programs offered by distance education?” It is a difficult area to explore from a cultural perspective in that faculty are exposing their courses for critique and criticism – of everything from their online teaching style to the way they have organized the content of their online course. Additionally, it is a logistically difficult endeavor to collect and analyze data, and develop use-of-results plans for a significantly large number of courses. At the same time, from an improvement perspective, if students are not learning content to the same degree as those in traditional programs and classes, this can also lead to issues with success and retention. Outcomes may be examined at the institutional level, the program level, or the course level.

Institutional level learning outcomes

Institutional Level Learning Outcomes offer a broad-based means for assessing the effectiveness of a distance learning program. If an institution is implementing an outcomes assessment plan, then it is most likely collecting data via Institutional Level Learning Outcomes. Examples may be related to information literacy, computational literacy, technology literacy, research report writing, and so on. For many institutions, these are often collected as General Education Learning Outcomes because the data is indicative of the largest slice of students. This data can be gathered as students enter the institution, and again before they graduate (a pre-test, post-test format); it is often collected from each academic program in an institution. While a school may have up to ten general education outcomes for which it is collecting data, most schools will focus their data collection efforts on a subset (e.g. three or four) outcomes per year. Because this data is collected across all programs, it provides a useful corpus from which analysis of student performance in traditional, online, and hybrid courses may be conducted, at the institution level. Data mining may reveal relationships between student performance on these assessments and the modalities chosen by students for coursework in their academic program.

Program level learning outcomes

Program Level Learning Outcomes (PLLOs) are those learning outcomes that are identified and assessed at the program level. This is the critical knowledge and experi-

ence that students are expected to acquire through completion of the academic program. Such outcomes may be assessed when students enter a program (i.e. baseline) and again in the last semester of the program to measure change in knowledge, skills, or behavior. PLLOs allow one point of comparison for institutions that offer both traditional and online versions of the same program; e.g. Early Childhood Education or Foreign Language Teacher Preparation.

Course level learning outcomes

Course Level Learning Outcomes (CLLOs) are used to determine whether or not students are acquiring critical knowledge or skills in a specific course. A commonly accepted set of outcomes (usually less than five) are assessed across all sections of a course. The outcomes are generally assessed via existing course-level instruments that may be developed and administered by the faculty; e.g. discussion boards, e-portfolios, proctored exams, online reflective journals for problem-based learning. Discussion boards are believed to be very effective at assessing learning because students must participate individually (i.e. they cannot hide in the back of the class), as well, they must articulate their demonstration of learning in this space (see Figure 4, below). Certainly, the onus is on the instructor to draw out the student's knowledge with thoughtful prompts. For a single outcome, results are collected and action plans developed on an annual, or bi-annual basis.

CLLOs are really where the rubber meets the road in terms of assessing learning outcomes. As Question #4 implies, it is the level at which the effectiveness of distance teaching is revealed, particularly when compared to seated sections of the same course. Therefore, CLLOs are a critical source of information when evaluating an online learning program because the classroom is where the learning is taking place. Therefore, through the assessment of CLLOs, it is immediately apparent whether learning is taking place. For this reason, as mentioned above, CLLOs can be perceived as threatening because the results can be directly traced back to an individual instructor. One caveat is in order here. Because CLLOs are sensitive, from an organizational culture perspective, they must be approached very carefully and deliberately. Faculty must be assured that assessment is a non-punitive activity; on the contrary, it should be used solely for improvement. If this recognition is not made, the damage can be irreparable.

Table 5. Comparison of CLLOs between one seated (section 01) and one online (IN02) section with the same instructor

Method of Assessment	Paper 1-100 pts		Paper 2-100 pts		Paper 3-100 pts		Paper 4-100 pts	
Section	HIS111-IN02	HIS111-01	HIS111-IN02	HIS111-01	HIS111-IN02	HIS111-01	HIS111-IN02	HIS111-01
Average	87.5	83.3	86.7	82.3	87.5	88.7	82.9	78.5

Mid-Term Exam-200 pts		Final Exam-200 pts	
HIS111-IN02	HIS 111-01	HIS111-IN02	HIS111-01
149.2	185.5	164.7	197.0

Table 6. Assessment rubric used for online course

What will be graded	Required	% of Final Grade
Tests		
Papers (assigned topics)	4	20
Labs		
Presentations		
Mid-Term Exam	1	22.5
Final Exam	1	22.5
Discussion Board Postings	14	35

Results

Through the efforts of the overall retention project, in a three-year period, fall-to-fall retention of first-time, full-time students at the College rose from 53% to 63% . In the same time frame, retention and completion rates increased in 15 of the College’s 32 programs, including all three transfer programs. Success rates (i.e. grade of C or better) in online courses also increased from 65% to nearly 69%. Persistence (completion) rates over the five-year period of the project increased from 78% to 85% in full-online courses, and from 83% to 90% in hybrid, or blended courses. These success rates were a reflection of a number of actions taking by the College for its online learning program throughout the course of the five-year project.

One accomplishment was the comprehensive review of all online courses, via the Quality Assessment Program, which was the in-house-developed peer review process for assessing the effectiveness of all courses. The three-person peer review team examined on line courses from quantitative and qualitative perspectives. An elaborate rubric was developed to guide this process. When deficiencies were identified by the reviewers, the support team from the Distance Learning unit would provide technical and design assistance where necessary. Because the QAP was initiated at the beginning of the five-year project, it required two years to evaluate all online offerings. Subsequently, all online courses were placed on a three-year review cycle.

It was determined that prior to designing and teaching an online course, any instructor wishing to do so was required to successfully complete a twenty-hour “Bootcamp” to provide foundational and advanced training for online instruction. The bootcamp was built on the notion that “preparing to teach in an online format for the first time generally requires at least ten hours of training outside of a regular teaching load” (Instructional Technology Council, 2010, as cited in Capra, 2011). Another initiative to improve the quality of the online program was the designation of a so-called Pioneer program in which a specific cohort of faculty and staff were given a one-year reduced work load in order to design or improve online courses and services. Pioneers received additional training and technical assistance to support their professional growth in this online learning (e.g. effective online teaching techniques, podcast/videocast recording and editing). Of the 160 full and part-time instructors receiving distance learning training via the Bootcamps, 60 of them participated in the one-year Pioneer program. This not only dramatically increased the number of highly proficient online instructors, but it created a substantial, in-house corps of faculty who could provide support across the distance learning program.

In addition, from a student-centered perspective, over the course of the retention project, online student services were considerably expanded from pre-admission support, to new student orientation, to counseling, to financial aid, to advising, to academic tutoring. Each of these units developed an online presence providing greater access to these offices through such technology as blogs, Skype, Yammer, and Facebook; an online tutoring program for students in English, Math, and Biology courses proved highly successful. And, just as faculty require preparatory training for online courses, so do students, who struggle with the enormous level of autonomy and time management required to complete an online course (Brophy, 2010). Therefore, a student-centered Bootcamp was created for all students enrolling in their first online courses. Data also revealed that greater numbers of students were succeeding and persisting, and therefore being retained by the College if they enrolled in blended, or hybrid courses. Via surveys and interviews, students indicated that a certain level of “face time” with the teacher was desirable (in contrast to none at all for full online courses). For this reason, greater numbers of faculty were provided training to develop this modality of online course.

Another “use of results” stimulated by the data collected was the development of an Early Alert system for students who were showing signs of struggling in their courses. Instructors were asked to report students who were exhibiting any at-risk indicators, such as lagging attendance or online class participation, lack of textbook, poor academic performance, unprofessional online behavior, etc... For these purposes, an early alert software program was designed and developed in-house to help monitor interventions and progress of students who were entered into the system (Khoury et al., 2011). Finally, policy changes were enacted based on the analysis of data. For exam-

ple, whereas students could previously enroll in five online courses in one semester, a limit of four was established; for students taking online courses in their first semester, this number was limited to three.

It should be emphasized, however, that the mere act of collecting data will not lead directly to causation and solutions. In most cases, the data leads to more questions, and the need to “drill” deeper into the existing data, or the need to collect additional data. The important point being that the conversations that result from data analysis are often where the most fruitful results emerge.

Conclusion and Discussion

Despite the challenges and requisite investment in resources – human and technical - online instruction, in any form, can neither be ignored, nor should it be treated as a marginalized entity within the institution. There is abundant evidence supporting the continuous growth of online instruction (Allen&Seaman, 2013) and its positive impact on education broadly, and on the lives of countless individual students. Anecdotally, Brown (2012) evidenced web-based courses gaining greater popularity than traditional courses, even though distance learners were paying extra fees for their courses.

To an institution striving to implement effective online programing, this can translate into a valuable revenue stream; indeed for some institutions, it is the only revenue stream. Thus, the issues of retention and progression are not only “critically important,” for both students and the teaching institution alike (Boston & Ice, 2011), they have become “the key factors by which online programs, in particular, are currently scrutinized” (Ice, 2012). And for valid reasons, annually conducted research on the state of online learning in the United States has revealed a consistent increase in the belief by chief academic officers across all institutional types that lower retention rates for online courses remain a barrier to the growth of online instruction (Allen & Seaman, 2013). In 2012, 73.5% of chief academic officers that participated in the survey rated lower retention rates for online courses as an “Important or a Very Important” barrier.

However, for the benefits to be realized by all parties involved, institutions offering online instruction should fully understand that it is a labor-intensive endeavor requiring a willing organizational culture when it comes to monitoring and ensuring the persistence and success of students enrolled in online instruction. Upon reflection of our own attempts to increase persistence, retention, and success in online learning, a number of practical learnings emerged that should be taken under consideration in this regard.

Data Collection and Analysis

One issue is that while many factors remain consistent across the broad realm of online education, there are still variations in monitoring online persistence and reten-

tion that may be unique to the institutional type. The list of factors and indicators that require continuous observation at two-year public institutions (Hirner&Kochtanek, 2012) may resemble that of a fully online institution, such as the presence of transfer credit among online students (Boston et al., 2011; Boston & Ice, 2011), there will be differences in the lists or the weighting of factors that are closely analyzed.

Regardless, as online learning becomes an increasingly central form of instructional delivery, it is critical that its evaluation become integral to the larger institutional activity of continuous improvement through data collection and analysis. There is no one single, efficient means for assessing the effectiveness of a distance learning program. Any institution devising an evaluation process for its online courses and programs must take a multiple-measures approach. As argued throughout this paper, there are numerous forms of data to be collected - both qualitative and quantitative. The more that is collected through either methodology, the closer an institution and an online learning program can approximate its effectiveness (Ice, 2012). On one hand there is the qualitative data gleaned from evaluations and interviews of students, staff, and faculty. On the quantitative side is the complex issue of utilizing "Learning Analytics" that require increasingly sophisticated analysis because of the sheer volume of data that can be aggregated. Ultimately, the investment in gathering and analyzing data will pay off as educators are better informed when the issue is channeling resources toward interventions for student success (Prineas&Cini, 2011).

Roles and Responsibilities

Certainly, a critical facet of the Distance Learning assessment plan is systematic data collection, analysis, action plan development, and reporting. While the responsibility of oversight of the process should be held by a single individual (e.g., Online Learning or Institutional Effectiveness staff member), the actual activities should be carried out on a much broader basis. Ideally, faculty and staff, with support and leadership provided by chairs and deans and administrators, should play the primary role in data collection, analysis, and action plan development. Just as individual learners need feedback that is timely, targeted, and likely to be acted upon, courses and programs also need feedback loops that efficiently and quickly direct the results of assessment to improve student learning (Ice, 2012).

At the College discussed in this case study, one individual was assigned the role of assisting faculty and staff with all of these relevant steps. This staff member provided support to faculty and staff to ensure that they regularly submitted, via the College's Outcomes database, updated data and action plans resulting from outcomes relevant to their own course, program, or office. This individual would also provide one-on-one and group technical support and professional development regarding data analysis, action plan development, software usage, and so on. In addition, this individual was responsible for monitoring response protocols for the College's Early Alert system,

particularly regarding online students, as well as consistent application of the College's online learning policies.

A Cultural Shift

At the same time, the individual at our College who was responsible for the technical aspects of the data collection and analysis process was also considered a change agent. This person's additional role was to ensure that faculty and staff were on board and up to date with all relevant process. Thus, it was critical for this staff member to instill the belief in faculty and staff that conducting this process not be perceived as "busy work". Without faculty and staff support and engagement, the cultural shift simply cannot occur. To be effectively deployed on any scale, "a profound transformation in how faculty members interact with students as well as how faculty create and improve curricula and programs" must take place (Ice, 2012). Likewise, Ekstrand (2013) argues that a shift in perspective is needed from the students being viewed as the barrier to their own success. Rather, she makes the case that persistence in online learning is "connected to the organization" and that in order to have an effective institution with the best interests of the students in mind, "staff attitudes, institutional structure and management views towards distance education seem to be critical."

In order for such engagement to take place, it is absolutely critical that demands for data not be unreasonable, nor the associated tasks of analysis and response not be overwhelming (and therefore self-defeating). Indeed, in beginning the process, we started with data that most faculty had already been collecting. Deductively, faculty and staff determined the value of their own data collection efforts, and, in most cases, they realized that improvements were necessary. The process must be valued by all (particularly through tangible support from administration), and perceived as integral to the ongoing mission of continuous improvement of education delivery. Most importantly, the process of collection, analysis, and planning must remain manageable. Again, we started with the data that was already being collected. If the process is designed and orchestrated in such a way that it becomes relatively seamless for faculty and staff who must already work with data regarding course and program effectiveness, there will be greater likelihood of continuous improvement for the online learning program, and increased possibilities for student success and retention.

These learnings from this study are broadly applicable, and they should serve as food for thought for any institution entering the realm of online learning. In many countries, such as Turkey, where most institutions are slowly entering the realm of online teaching, it is a critical issue to establish a data collection and analysis system with the intent of establishing reasonable persistence and retention numbers. To do so, a plan must be devised from the beginning, and an individual or individuals should be charged with this responsibility for both retention and student success (i.e. financial) reasons, as well as the ever-increasing demands of quality assurance required by exter-

nal bodies (e.g. Bologna Process and accrediting bodies).

Recommendations

As was stated at the outset, schools that have determined to offer online education should make a full commitment to the process. To offer online education, and yet to inadequately develop a monitoring process for that system could prove quite costly. Tuition-paying students are savvy; they will understand very quickly whether or not a course or program provides value-added. If the effectiveness of a course or program is not adequately monitored, then the institution risks losing a source of considerable revenue. Likewise, as increasing numbers of students turn to online education, such programs are coming under greater scrutiny by the students themselves as well as by external agencies, such as accrediting and funding bodies; indeed, some would argue that the spotlight on online learning is brighter than on traditional education. Thus, there is an ever-greater need by schools to demonstrate the effectiveness and value of online instruction.

In addition, students, faculty, and staff are likewise becoming increasingly sophisticated in online learning, effectively leading to a continuous “raising of the bar” when it comes to providing online instruction. Assessment techniques may change for online courses (e.g. e-portfolios are gaining advocates) and those charged with ensuring online education quality must remain diligent in seeking alternative assessment for online instruction.

One of the limitations of this study is that it is locked in time. Technology changes; course management software (CMS) developers are becoming attuned to the needs of their clients and CMS is evolving to provide ever-increasingly sophisticated means for measuring online instruction effectiveness. Thus, what may work today for assessment and evaluation may become quickly outdated.

Finally, the realm of online learning assessment and evaluation is still relatively young. While there is much potential for the field, there is also the need for continuous research into the assessment processes, metrics, and outcomes. Those charged at the institutional level with this responsibility have a daunting, but exciting task in front of them. They also share an opportunity to play a critical role in the success and retention of online learning students.

Özet

Giriş

Amerika Birleşik Devletleri’nde, rektör ve rektör yardımcıları üzerine yapılan çalışma araştırmaya katılanların %70’inin uzaktan eğitimin stratejik önemini vurguladığını ve yükseköğretim programlarına kayıtlı öğrencilerin %30’dan fazlasının en az bir uzaktan eğitim dersi almış olduğunu göstermektedir (Allen&Seaman, 2013).

Türkiye’de ise yükseköğretim öğrencilerinin %40’tan fazlası uzaktan eğitim derslerine katılmaktadır (Özkul&Latchem, 2011).

Uzaktan eğitime olan ilginin bu derece büyümesi konunun önemini daha da arttırmaktadır. Örneğin, uzaktan eğitimin akreditasyonu gün geçtikçe önem kazanmaktadır (Koçdar&Aydın, 2012). Ancak Huertas ve arkadaşları (2011) “e-öğretimin kalitesinin Avrupa’daki ülkelerde yapılan ulusal kalite standartları çalışmalarının düzenli ve önemli bir parçası içinde ele alınmadığı” tartışmasına dikkat çekmektedir. Yükseköğretim Kurulunca Türkiye’de uzaktan eğitimin kalitesinin nasıl değerlendirileceğine dair tartışmalar ve çalışmalar daha yeni başlamıştır. Pek çok eğitim kurumunda e-eğitimin göz ardı edildiği aşınadır (SNAHE, 2008).

Uzaktan eğitimin dikkatle incelenmesini gerektiren sebeplerin başında öğrenci tipleri gelmektedir. ABD ve Türkiye gibi ülkelerde, pek çok uzaktan eğitim öğrencisi risk altındaki öğrenciler olarak kabul edilmektedir ve bu öğrenciler ya çalışan, ya yarı zamanlı okula gelebilen ya da yaşları yüksek olan öğrencilerdir (Aud ve ark, 2011). Buna bir de uzaktan eğitim öğrencilerinin kendilerini motive edebilmeleri ve disiplinli olmaları gerektiği sorunu eklenmektedir (Brophy, 2010) ki bu da uzaktan eğitim dersleri alan öğrencilerin daha fazla çabalamalarını gerektirmektedir. Bu tür ders ve programlara kayıtlı öğrencilerin programları ve dersleri tamamlamaları konusunda yakından takip edilmeleri gerekmektedir.

Online eğitimin gelişimi son yıllarda yavaşlamış olsa da dünya çapında benimsenmesi artarak devam etmektedir. Giderek artan sayıda yükseköğretim kurumu bu eğitim metodunu tercih ettiğine göre, eğitim kalitesini garantilemek ve öğrencilerin okula devamını sağlamak için etkin denetleme sistemleri geliştirmek de elzem olmuştur. Bu amaçla, çok boyutlu bir nitel-nicel değerlendirme yaklaşımı önerilmektedir. Bu vaka çalışması, böyle bir denetleme çerçevesinin uygulanmasının zorluklarını ve başarısını gösterecektir.

Yöntem

Bu çalışmada Vaka Çalışması yaklaşımı kullanılmıştır. Stake (1998) araştırma birimini konum olarak, Creswell (2013) ise durum veya olgu olarak kabul eder. Bu çalışmada araştırma birimi bu ikisinin bileşkesidir. Temel veri toplama yöntemi olarak “Nirengi” (Üçgenleme) (Denzin&Lincoln, 1998; Creswell, 2013) kullanılmıştır. Bu çalışma ABD’de, 2000 senesinden beri online eğitim verilen küçük bir devlet üniversitesinde yapılmıştır. Bu çalışma başladığında, öğrencilerin %70’i en azından bir online ders almaktaydı. Fakat bu öğrencilerin sadece %66’sı bu derslerden başarıyla geçmekteydi.

Değerlendirme Çerçevesi

Analiz çerçevesini oluştururken atılan ilk adım, Council for Higher Education Accreditation (CHEA, 2002) ve Southern Association of Colleges and Schools

(SACS) tarafından yayımlananlar da dâhil olmak üzere hâlihazırda var olan uzaktan eğitim değerlendirme modellerini incelemek olmuştur. SACS'ın talimatnamesi uzaktan eğitim programlarının kampüs içinde uygulanan eğitim programları ve derslerle kıyaslanabilmesi üzerinde durmaktadır. SACS talimatnamesine göre ders başarısı, derslerin tamamlanma oranları, öğrenci anketleri, ders değerlendirmeleri, öğrenme çıktıları ve benzeri verileri içeren bilgiyi toplamak üzere okul tarafından belirli alanlar tespit edilmiştir.

Değerlendirme Çerçevesinin Uygulanması

SACS talimatnamesi, online eğitime kurumsal bağlılık, online programı değerlendirmek için kullanılan yöntemler ve fiili öğrenmenin gerçekleşip gerçekleşmediğine dair değerlendirmenin yapılmasına ilişkin birtakım şüpheler ortaya koymuştur.

Kurumsal Bağlılık

Bu vakada kurum, hâlihazırda bulunan stratejik planında online eğitime bağlılıklarının güçlendirilebileceğini fark etmiştir. Yenilenmiş misyon bildirgesi online eğitime bağlılığın daha güçlü olduğunu göstermektedir.

Program Çıktılarının Belirlenmesi ve Değerlendirilmesi

Bu iki kriter program çıktılarının belirlenip belirlenmediğini ve düzenli olarak değerlendirilip değerlendirilmediğini sorgular.

Kalite Değerlendirme Planı (KDP)

KDP, online verilen eğitimin kalitesini objektif bir şekilde değerlendirmek için ayrıntılı bir yönerge. Bu değerlendirme her bir online ders için bir hakem heyeti tarafından yapılır.

Başarı, Sebat ve Okula Devam Oranları

Bu terimler değişik çalışmalarda farklı şekilde kullanılmış olabilir. Ancak bu çalışmanın yapıldığı okulda, “Sebat” bir öğrencinin belirli bir dersi dönem sonuna kadar bırakmaması; “Başarı” dersten C veya daha üstü bir not alması; “Okula Devam” ise bir sömestirden diğerine okulda kalması, yani okuldan ayrılmaması olarak tanımlanmıştır. Bu üç ölçütün her biri bir online eğitim programının veya dersin ne kadar başarılı olduğunu göstermek için tek başına da kullanılabilir.

Öğrenci Anket ve Değerlendirmeleri

Online programlarla ilgili dönüt şu şekillerde de elde edilebilir: 1) Kurum çapında yapılan yıllık anketler; 2) Yıl sonu ders değerlendirmeleri; 3) Doğrudan online programın kendisi tarafından uygulanan anketler. Anketler hem nitel hem de yazılan

yorumlar sayesinde nicel veri sağlar. Anket sonuçları hedef gruplarda ya da birebir mülakatlarda konuşulmak üzere kullanılabilir.

Modalite Kıyaslaması ve Not Dağılımı

Modalite Kıyaslaması ve Not Dağılımı analizleri nispeten basit olmakla beraber çok bilgilendirici olabilir. Bütün derslerden yıl sonunda gelen veriler öğretimin modalitesine (geleneksel, online, ve/veya hem geleneksel hem online) ve sebat ve başarı oranlarına, not dağılımlarına ve diğer birçok değişkene göre ayıklanıp incelenebilir.

Program ve Bölüm Değerlendirmeleri

Programın gözden geçirilip değerlendirilmesi öğretim üyesi ve görevlilerinin eldeki veriler ve online eğitimle ilgili kendi deneyimleri üzerinde derinlemesine düşünmelerini ve bu bilgiyi gerekli değişiklikleri yapmak üzere kullanmalarını sağlar. Program ve bölüm değerlendirmeleri de iyi bir nicel veri kaynağıdır.

Öğrenci Öğrenme Çıktıları

Öğrenme çıktıları online eğitim programının verimliliğinin (işe yararlığının) değerlendirilmesindeki en önemli ölçütlerden biridir. Öğrenme çıktıları üç seviyede değerlendirilebilir:

- Kurumsal seviyede öğrenme çıktıları: Öğrenme geniş bir perspektiften kurumsal seviyede değerlendirilir. Bu değerlendirme genellikle programların hepsinin bütün öğrencilere öğretmesi beklenen, bilgi okur-yazarlığı, teknolojik okur-yazarlık ya da eleştirel düşünce gibi alanlarda yapılır.

- Program seviyesinde öğrenme çıktıları: Öğrencilerin sadece belli bir programı tamamladığı zaman öğrenebileceği ve özellikle o program çerçevesinde öğretilen bilgi, beceri ve davranışlar üzerinden değerlendirme yapılır.

- Ders seviyesinde öğrenme çıktıları: Bu seviyede çok faydalı bilgiler edinilebilir. Zira öğrenmenin meydana gelmek zorunda olduğu seviye budur. Eğer burada bir sıkıntı varsa çeşitli değişiklikler ve düzenlemeler yapılabilir. Ayrıca bu seviyede yapılan değerlendirmeler öğretim üyelerinin/görevlilerinin ne şekilde davrandığı konusunda tek tek bilgi vereceği için de hassas bir konudur. Kurumların bu veriyi nasıl ele alacağı çok önemlidir.

Sonuçlar

5 yıllık proje süresince sebat (yani dersin tamamlanması) oranları sadece online yapılan derslerde %78'den %85'e, hem geleneksel hem online eğitimin yapıldığı derslerde ise %83'den %90'a yükselmiştir. Araştırmamız, öğrencilere daha fazla online hizmet sağlanması gerekliliğini göstermektedir. Ayrıca bu konuda öğrenciye sunulan servislerden biri "erken haber verme" yazılım programı olabilir (Khoury ve ark., 2011). Okul politikasındaki değişiklikler, öğretim elemanları ve öğrencilere sağ-

lanan mesleki gelişim imkânlarının artması da sebatın artmasında etkili olmuştur. Ayrıca araştırma sonucunda uzaktan eğitim vereceklerin profesyonel gelişimleri için en az 10 saat ek eğitim almaları gerektiği üzerine de fikirler geliştirilmiştir (Instructional Technology Council, 2010).

Sonuçların İrdelenmesi

Online eğitim öğrenciler ve okullar tarafından giderek daha da fazla kabul görmektedir. Brown (2012) kendi okulunda uzaktan eğitime yüz yüze eğitimden daha fazla kayıt olduğunu belirtmiştir. Sonuç olarak, kurumlar online ders alan öğrencilerin “okula devam” ölçütüne çok dikkat etmelidir (Allen&Seaman, 2013; Boston & Ice, 2011; Ice, 2012). Bu çalışmada yer alan okulun online eğitimde sebat, okula devam ve başarı oranlarını arttırmaya yönelik gayretlerini dikkatle değerlendirdiğimizde özen gösterilmesi gereken birtakım meseleler olduğu ortaya çıkmaktadır.

Veri Toplanması ve Analizi

Online eğitimde sebat ve okula devamın denetlenmesinde kurum türüne özgü farklılıklar olabilir. Kurum türüne özgü farklılıklar literatür kısmında tartışılmıştır (Hirner&Kochtanek, 2012; Boston et al., 2011; Boston & Ice, 2011). Ancak online eğitimin verimliliğini değerlendirirken “en iyi” diye tanımlanabilecek bir yöntemin olmadığı söylenebilir. Online programları ve dersleri değerlendirmek isteyen her kurum doğru bilgiyi edinebilmek için öğrenci başarısı adına ayıracağı kaynakları belirlemeye yarayacak (Prineas&Cini, 2011) çok ölçütlü bir yaklaşım (Ice, 2012) edinmelidir.

Görev ve Sorumluluklar

Veri toplama ve analizi sorumluluğunun tek bir kişiye verilmesi gerekir. Elbette veri toplama aktivitesi çok daha yaygın bir şekilde olduğu gibi öğretim elemanları ve idare tarafından da gerçekleştirilebilir. Bu vaka çalışmasında bahsedilen okulda, veri toplama ve analiz adımlarında öğretim elemanlarına yol gösterme işi tek bir kişiye verilmiştir.

Kültürel Bir Değişim

Bu kişi aynı zamanda “değişim mümessili” olarak da görev alır. Amacı yapılan işlerin “angarya” olarak değil, çok önemli bir iş olduğu konusunda öğretim elemanlarını ikna etmektir. Çünkü öğretim elemanlarının online ders alan öğrencilerin başarısında kurumun önemli bir rolü olduğuna dair inançları, desteği ve katılımı (Ekstrand, 2013) olmadan kültürel bir değişimin olması mümkün değildir (Ice, 2012).

Bu çalışmadan öğrendiklerimizin uygulanabilirliği fazladır. Ayrıca bu çalışma online eğitim alanına girmek isteyen kurumlara da üzerine düşünülecek bilgiler ve değerlendirilebilecek veriler sağlar. Uzaktan eğitimin yeni başladığı Türkiye gibi birçok ülkede yüksek sebatı sağlama ve okula devam sayılarını yüksek tutma amacıyla veri

toplama ve analiz sistemi oluşturmak aciliyeti olan bir meseledir.

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