Lessons Learned From Lessons Learned: The Fit Between Online Education "Best Practices" and Small School Reality

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Abstract

Schools of all types and sizes are exploring the merits and facets of online learning approaches; but, the online delivery literature has focused on "best practices" generated primarily through the experiences of larger schools that are on the leading edge of this innovation. Small public schools, on the other hand, are faced with unique challenges in profiting from the advice of these first movers. Small schools are hampered as a result of severely constrained resources, among which are personnel, money, infrastructure, and time. These factors limit the ability of small public institutions to fully adopt widely approved online best practices. This article reviews contemporary research on the implementation of online learning, examines one small public school's experience as a case study, discusses the disparities between the capabilities of large versus small public institutions of higher education, and outlines implications for other small schools that wish to pursue online education.

Introduction

Large institutions led the way into the online learning paradigm and continue to enjoy the largest student online learning enrollments (Allen & Seaman, 2008) of postsecondary educational institutions. Besides the largest institutions, the community college systems, often quite large themselves, are also early adopters of online education. The small colleges and universities, those with student populations under 3000 (as defined by the Sloan Consortium), have adopted online learning, albeit at a slower rate. Interestingly, a 2003 report (Conhaim) noted that slightly more than 80% of all higher education institutions offer at least one fully online or blended course, and 34% offer one or more complete online degree programs. Online courses are those courses where the instructor interacts with students exclusively via the Internet (McEwen, 2001), whereas blended courses use multiple media formats for delivering instruction. Almost every school has adopted some manner of a learning management system (e.g., Blackboard, WebCT, eCollege, Angel, etc.) to allow students to access more materials related to courses. Many smaller institutions are still debating the efficacy of offering fully online course delivery as opposed to the blended approach, whereby an in-class lecture is supplemented by the learning management system resources. The ongoing debate seems to validate the "question of how courses and degree programs should be designed for effective delivery via the Internet is a nontrivial concern and challenge" (Rungtusanatham, Ellram, Siferd, & Salik, 2004).

Typically, small colleges and universities tout their small student-to-teacher ratios that allow more personalized, focused, and engaged learning opportunities for the student—a community of learners with equal emphasis on community and learning (Carey, 2008; Fain, 2005; Schuman, 2005; Van Der Werf, 2008). Thus, online teaching had been viewed, by many small institutions, as the purview of institutions with large student bodies demanding more robust educational delivery methodologies.

Changes in demographics and technology as well as the confluence of those two items in combination with rising tuition costs, national economic trends, competition for students, and all the other driving forces of educational delivery result in small institutions realizing that the "question is not whether a school should pursue online education, but rather how it should strategically respond to this growing challenge" (Grandzol & Grandzol, 2006). As school administrators internally debate the need, desire, and feasibility of moving some courses online, many of those tasked with implementing the pilot programs react as true scientists—they commence reviewing the "Best Practices" and "Lessons Learned" literature found in journals that study the phenomena of online teaching and learning.

This article provides a brief review of notable research findings on the implementation of online learning. From there, we discuss the current status of online education in the United States. With that we segue to an examination, a case-in-point, of how one small public institution fared as it implemented online education in view of best practices delineated in the pedagogical literature. Finally, we follow with our own lessons learned from the experience, along with practical implications in our discussion and recommendations.

Literature Review

The best practices literature provides a plethora of insights concerning how other institutions moved forward in their quests to establish a presence online (Abel, 2005; Burke, 2005; Hunt, 2005; Levy, 2003; McLean, 2006; Parker, 2003; Piña, 2008; Skopek & Schuhmann, 2008; Sunal, Sunal, Odell, & Sundberg, 2003). A careful reading of the literature reveals an implicit assumption—that best practices for the large research university are the same as the best practices for a small liberal arts college which in turn are the same as the best practices for a community college. The Sloan Consortium (Sloan-C) recognizes that different size schools have historically implemented online education at different times. In its annual report on online learning, schools are differentiated based on total school enrollment: schools with (1) under 1500 students, (2) 1500 to 2999 students, (3) 3000 to 7499 students, (4) 7500 to 14999 students, and (5) 15000+ students (Allen & Seaman, 2008)(Allen & Seaman, 2008). Yet, in its sixth annual report on the state of online education, Sloan-C perpetuates the implicit assumption of best practices homogeneity across schools irrespective of size without testing its validity.

Suzanne Levy (2003), a community college professor, noted that there are six factors that every program looking to adopt an online course capability must address: (1) vision and plans, (2) curriculum, (3) staff training and support, (4) student services, (5) student support and training, and (6) copyright and intellectual property. These broad categories present a framework within which to consider the implementation of online courses and ensure that administrators, faculty, and support staff keep a broad perspective as they envision bringing online learning to their campus. In a similar vein, Lisa Burke (2005) kept her best practices framework broad as she bifurcated best practices into strategic and tactical considerations for administrators considering moving into online course delivery. Strategically, she argued that a school must address the "Why?" question. Once the institution understands the purpose for commencing an online program, then the tactical issues must be attended. The tactical issues included selection of faculty, faculty compensation, training faculty in online course design, class size and cost, accessibility of online faculty, intellectual property rights, quality control and evaluation, and accreditation issues.

Abel (2005), in discussing best practices, examined 21 self-described successful institutions and noted eleven characteristics that were the ingredients for success encompassed in three broad areas (i.e., motives and leadership, focus on programs, and faculty support and student services). The motives and leadership success factors articulated by Abel are analogous to the strategic considerations of Levy (2003) discussed above. The primary determinants of success ranged from executive leadership and support to faculty and academic leadership commitment to financial planning and resources to an adaptive learn-as-you-go attitude (Abel, 2005). Noting his most significant finding, Abel stated, "institutions that focused on putting full programs online were about four times as likely to perceive that they had achieved 'overwhelming success' as institutions that focused their efforts at the individual course level" (p. 76). From understanding what made programs successful, Abel subsequently defined five best practices to ensure that there was support by the faculty and that students were supported with the services necessary for successful online learning. First, he noted that the faculty should be committed to the commencement of online teaching through the nurturing of faculty grass-roots ideas. Any faculty member who desires to venture online must be fully provided with all support services required. Second, there must be support in online technology and pedagogy so that interested faculty members have the greatest opportunity to be successful in engaging their students through a medium new to the institution. Third, for faculty, there must be a commitment to one-on-one instructional design consultations. Faculty must be allowed to experience online courses from a student's perspective and then be offered guidance in developing online offerings. The fourth best practice requires that there be institutional recognition of faculty who expended effort to bring a course online.

Finally, the administration must continue reinforcing to both faculty and students why the institution is pursuing the new venture — why the move to online learning is an important contributor to the institutional mission (Abel, 2005).

Though Grandzol and Grandzol (2006) titled their article, which aggregates notable online learning literature since 1997, as addressing the best practices for online business education, the results were not business-specific but rather a general discussion of best practices across all academic disciplines. Like Abel (2005), Grandzol and Grandzol (2006) noted a long list of best practices, 33 to be precise, and managed to group their list of best practices into three over-arching sets of practices: Course design and delivery, student services, and administration. Course design and delivery addressed the physical development and administration of a single (non-specific) course itself. Best practices included issues such as the course's structural consistency, course completeness on the day class begins, and the necessity of navigational documents to benefit student engagement. Student services was the least researched and discussed of the best practices. This fact perhaps reflects that most literature to date, whether case-based or research-based, is more focused on ensuring that courses are successfully brought online as opposed to exploring the multivariate needs of students in online learning. Also, it might reflect the callow nature of online pedagogical research where broad avenues of research have yet to be investigated simply due to the abundance of available avenues. Finally, administration addressed a broader perspective as it looked at developing online courses from the standpoint of cultivating a coherent school-based package of courses. Issues such as quality control guidelines and faculty training in use of technology and delivery of instructional materials dominate. In our discussion below, we adopt with adaptations the three arch construct as articulated by Grandzol and Grandzol (2006) above and supported by the practices of previous researchers (see Abel, 2005; Burke, 2005).

The State of Online Learning as One Small Public School Prepared to Go Online

Echoing the argument propounded by Levy in 2003, the Sloan-C (Allen & Seaman, 2008) white paper, *Staying the Course*(Allen & Seaman, 2008), noted that over half of all institutions that provided online education felt it was of critical strategic import to the school's long-term goals. Using the Carnegie Classification, of schools currently offering online courses, Master's-granting institutions reported the greatest assessment that online education was strategically critical to their long-term strategy, at 65.8%, while only 35.4% of baccalaureate-granting institutions that are currently offering courses online viewed online education as strategically critical to their future mission success. While public institutions are the largest implementers of online education, it is interesting in this period of constrained state resources that such large percentages of schools with online educational offerings do not find their online courses strategically important yet continue to invest resources in online course delivery.

Seventy percent of public schools offering online courses believe that competition for students exists in online courses and programs (Allen & Seaman, 2008)(Allen & Seaman, 2008). In times of economic uncertainty, educators observe a correlation to increasing enrollments, and academic officers believe that same correlation is now carrying over into online education as well (Guess, 2008). The literature suggests that the growth in online courses is based on attracting a new and different base of students rather than cannibalizing current on-campus programs (Mangan 2001; Thomas 2001).

Of 2,577 institutions responding to the survey on online education, business programs continued to experience the highest online penetration rate of the eight academic disciplines (i.e., business, computer and information services, education, engineering, health professions and related sciences, liberal arts and sciences/general studies/humanities, psychology, and social sciences/history). Online programs had a penetration rate of 33% in business, while engineering experienced the lowest rate at 16% (Allen & Seaman, 2008). Public institutions lead in online program penetration with Master's- and Associate-degree granting institutions being the schools with the greatest degree of online program implementation. There is a strong correlation in the size of an institution (i.e., overall enrollment) and the expansiveness of its online activities. Allen and Seaman (2008) noted, "Larger institutions began their programs sooner, have a more positive view towards online and, typically, more extensive online offerings. This relationship is equally evident when we examine discipline-specific penetration rates by institutional size. There is a positive relationship between the penetration rate and the size of the institution for every discipline" (p. 14).

A review of the best practice factors relevant to the launch and success of an online program, as assessed by Levy (2003), Abel (2005), Burke (2005), and others led the authors to reconcile and distill their lists into the three overarching categories similar to those articulated by Grandzol and Grandzol (2006). Where Grandzol and Grandzol viewed the issues from the perspective of administrative issues, course design and delivery, and student

services, we folded the issue of student services into course design and delivery and added a different third dimension, measures of success, an issue regularly addressed in the literature but which was missing from Grandzol and Grandzol's framework along with the subordinate best practices. These factors constitute the component headings discussed later and are summarized in Appendix 1.

Thus, online education has established itself as a contemporary paradigm especially in the public higher education arena and among larger schools. So, as online education has become not a question of "whether" but rather "how" an institution should implement online education, we begin the examination of how one small public institution considered positioning itself online.

A Small Public School Prototypes Its Online Course Delivery

The school under consideration is a small public special-purpose institution of higher learning by almost any standards. Located in the Southeast in an urban environment, it has an undergraduate student body of approximately 2000 and graduate college of approximately 1000 students. The institution is divided into five academic schools: Business, Education, Engineering, Humanities and Social Sciences, and Science and Mathematics. Undergraduate life is very structured and exclusively residential. The AACSB graduate program, on the other hand, is similar to that of most conventional peer institutions. Although there are no full-time, day graduate programs, there is a robust evening program that caters to working adults who are completing their Master's degree during non-working hours. Thus, the college has two distinct sets of customers with virtually no overlap between the two programs.

At this school, increasing the school's online outreach in its undergraduate programs is challenging given the mandatory residential requirements. Online outreach is essentially limited to summer programs for undergraduates since more than half of the institution's student body consists of out-of-state or international students and most of these students return home for the summer or work in internships. Members of the student body who intend to gain credit hours during summer sessions have the typical concerns of ensuring that any classes taken at other schools would transfer back to the institution. Therefore, online courses for undergraduates during the summer months can provide a significant benefit. First, it provides an opportunity for those students to pursue courses that are in line with their normal course of study. Secondly, it provides the institution with the opportunity to generate additional revenues during the summer months as it recaptures hours students might have taken "back home." A third benefit is that the faculty would have no concern about the rigor of instruction or the material used in the courses taken elsewhere and transferred back to the institution.

The evening graduate program, offering the only immediate access to an AACSB-accredited MBA program within a hundred mile radius, has strong brand name recognition for the institution itself as well as for its Business program. The city and metropolitan support area are both growing and have a sizable adult population from which to draw. While the evening graduate program already has a large market, the potential for expanding that audience through online offerings is great. Also, an online program would provide students with the portability to complete a degree if transferred or required to travel extensively because of job demands.

Additionally, although a major military facility is located within fifteen miles of the campus, there have been impediments to fully serving the needs of the military population there. One key impediment to the traditional evening program for these military students is the continuous, rapid rotation of military members in and out of the area. These rotation policies prevent most of these students from being able to complete a course of study at one school, and required courses taken at one institution's program do not always transfer fluidly to another institution. An online program, on the other hand, would provide military students with the portability and flexibility needed to complete their degree program even as they transferred from one assignment to another.

Administrative Issues

Reflecting the trend of business courses to be in high demand for online learning (Abel, 2005; Parker, 2003), in Fall 2007 the Provost tasked the Dean of the School of Business Administration to prototype an online course delivery system to determine the acceptability, feasibility, and practicality for widespread adoption at the institution. Although there are scores of "best practices" models and recommendations for implementing such a program, the unique characteristics of the school rendered many of these suggestions problematic. Some of the same issues faced by this institution are faced by other small schools and/or specialty institutions. By means of a discussion of this institution's triumphs and challenges with the implementation of the online pilot program, we hope to add to the literature a set of "lessons learned" about some of these traditional "best practices."

Strategic Purpose

A recurrent theme in "best practices" recommendations is that institutions move towards online delivery as a means of increasing the channels of delivery for their educational programs (Abel, 2005; Allen & Seaman, 2008; Burke, 2005). As schools move toward online delivery, whatever their reasons, the best practices literature points out that each institution must be clear in assessing why it is proceeding online and everyone must have knowledge of the institution's strategic plans for the new paradigm. For the small institution, especially residential schools, confusion over goals can erupt. As our school engaged in the development of its online program, those faculty charged with implementing the program were unsure of the complexity of the administration's strategic reasons for taking the institution online. Was the program designed to expand summer programs? Was it a venue for outreach to graduate students? How did it mesh with the regular Fall/Spring courses? Was it intended to be an MBA sustainability push? Or was it a revenue enhancement endeavor that would eventually be deployed year-round?

Faculty Commitment and Resource Support

One of the first issues faced by the faculty in developing online programs was a relative lack of experience with online courses. In early Spring 2008, the Dean invited an expert in online course delivery to speak to the faculty about technology and best practices in deploying that technology. The presentation to the Business Administration faculty members generated awareness of potential software available that might be employed and the myriad means of using that software to enhance course delivery and interaction with students. In addition to the software demonstration, the Dean explained that the school had been asked by the Provost to prototype online course delivery; and, because it was a prototyping effort, no specific courses had been selected for online delivery. Rather, any professors who would like to teach during the summer session were asked to volunteer and select the course(s) they would be willing to deliver online. The presentation also raised concerns among faculty about their own familiarity with the technology of online course delivery and the availability of technological support for both faculty and students when classes were underway. With a faculty of 24 tenure-track professors, six opted-in to provide at least one course online during Summer 2008. Of the six professors who volunteered to initiate online course delivery, four were tenured, one was a tenure-track junior faculty member, and one was a professionally-qualified adjunct professor. All faculty had taught online at previous schools with the exception of one professor who engaged in online instruction on a team-teaching basis with another professor. Having no experience in online course delivery, the tenure-track professor expressed a desire to explore a different pedagogical model. The adjunct professor had taught online essentially since online teaching became possible and was a consultant for businesses developing online portals. Thus, the professors who brought their courses online reflected the tendency for online instructors to be senior, tenured faculty with experience (Hutti, 2007; Parker, 2003).

The courses slated for online delivery ran the gamut of undergraduate and graduate business school programs with some courses being required courses while others were electives. This approach was somewhat different than the typical practice of beginning online instruction with graduate classes (Piña, 2008). The online undergraduate courses consisted of: Building a Successful Internet Business, Business Finance, Business Statistics, and Personal Financial Management, while the online graduate courses were Building a Successful Internet Business, Human Resource Development, Personal Financial Management, and Quantitative Methods.

As this effort was a prototyping of the ability to deliver online courses, there was no development of a complete online degree program as recommended in the lessons learned literature (Grandzol & Grandzol, 2006; Hartman, Dziuban, & Moskal, 2001; Hunt, 2005; Levy, 2003; Piña, 2008; Strickland & Butler, 2005; Sunal et al., 2003). Rather, the course selection was determined through a two pronged method. First, the school identified instructors willing to take on the challenge of building online courses and, second, the school determined whether the courses these instructors proposed would find acceptance at the institution. Of the nine courses delivered, Business Statistics, an undergraduate course, and Quantitative Methods, a graduate course, were taught simultaneously as both a traditional class and as an online class, allowing direct comparison of the effectiveness of online delivery.

Faculty Training

Though Blackboard and WebCT learning management systems both perform well in delivering online instruction (Hensley, 2005), most instructors mentioned that there was additional software that would have improved the online courses they taught. Understanding the newness of the venture, the compressed timeframe to bring the courses online, and the administration's promise to support the necessary software purchases, some faculty expressed a desire for applications that were not available because, as one professor put it, "time simply ran out before anything was done." Examples of the specific software the instructors desired included screen-capture applications, conferencing software, and video-editing software. As one instructor stated, the administration has "done what they need to do to get us up and running, but not lavished [us] with resources." Instructor training on the software that was deployed in each course was primarily learned through self-instruction. To an individual, every instructor at the school commented that more extensive training well-prior to course implementation is a must for effective online course delivery. These comments echo the experience of other schools going online as cited in the lessons learned literature (Perreault et al., 2002) that instructor training continues to be observed more in the breach than in practice (Burke, 2005).

Faculty Incentives

There was early discussion of how to reward the instructors for agreeing to prototype their courses online. One faculty member, experienced with online course delivery, noted that tenured and tenure-track faculty often do not perceive a reward system for teaching online and may, in fact, see disincentives. The push to "publish or perish" means that the additional time that must be devoted to developing and maintaining online courses, relative to face-to-face courses, discourages participation. In the short-term, the professors involved in the prototyping effort asked about the traditional reward systems of additional compensation and technology stipends as did those cited in the literature (Betts & Sikorski, 2008; Fredericksen, Pickett, Shea, Pelz, & Swan, 2000; Grant & Thornton, 2007; Hartman et al., 2001; Levy, 2003; McLean, 2006). Recognizing that this endeavor was a trial, the instructors discussed longer-term rewards they would be interested in seeing, such as course copyright ownership and release hours from full teaching loads, both of which have been noted in the literature (Betts & Sikorski, 2008; Levy, 2003; Parker, 2003). The small school constraint that emerged was that there was no financial incentive, time, nor public recognition offered for being a pioneer. The rewards for the volunteers who were helping to move the school to online course delivery were mostly intrinsic and did not adequately compensate the professors for development efforts or time commitment.

Course Design and Delivery

Delivery Platform

One of the best practices cited in the literature is the use of a single consistent software platform for all courses (Grandzol & Grandzol, 2006; Hutti, 2007). The institution was in the process of transitioning to Blackboard from WebCT, and while the majority of professors used the new Blackboard system, a small number of instructors delivered their courses using the legacy WebCT system because their instructional materials were already in place on that system. Though not using a single, consistent platform across all courses violates the best practices recommendations (Hunt, 2005; Hutti, 2007; Levy, 2003; Piña, 2008), the IT staff was able to support both learning management systems with no service interruptions during the summer period. Although the institution had scheduled a transition from WebCT to Blackboard effective Spring 2009, many of the online instructors had to deal with the new online teaching environment as well as the new learning management system simultaneously. Despite this, the transition went smoothly and there were no reported technology-based interruptions during the summer courses. This was fortunate, as the limited IT support staff reflects the small size of the institution. The three individuals tasked with supporting the online endeavor (in addition to their normal duties) were not supplemented by any additional staff or compensated with additional pay. Therefore, the ramp-up of new online courses and the concomitant technological support necessary to support those courses resulted in no additional infrastructure development contrary to the best practices literature (Abel, 2005; Betts & Sikorski, 2008; Hunt, 2005; Levy, 2003; Piña, 2008).

Course Preparation

Consistently, the best practices literature state that all materials should be (1) online early—prior to classes beginning—in order for student familiarization, (2) organized clearly and meaningfully, and (3) direct the students to desired outcomes (Chin & Williams, 2006; Grant & Thornton, 2007; Hensley, 2005; Picciano, 2002). Though operating on a compressed schedule, instructors did manage to have their courses fully developed and online when the classes went active at the beginning of summer. Due to the compressed timeline to bring the prototype courses online, much of the instructional material was presented in a manner similar to that done in a traditional classroom setting, such as through PowerPoint slide presentations, previously videotaped lectures, and videotaped white board demonstrations. A number of the instructors commented that they would have liked more training on various software packages to enable them to have a more robust online learning opportunity versus essentially trying to deliver the same material the same way, but through a different teaching medium.

Pedagogy

Pedagogical issues arose for delivering courses online, especially with the graduate students. Whereas pedagogy primarily aims to allow a student, typically pre- to young adult, to acquire prescribed subject matter, androgogy is focused on the needs of teaching adult learners who are self-directed and interested in problem-centric rather than content-specific learning (Chin & Williams, 2006; Huang, 2002). The truncated time to develop the course materials necessitated delivering most of the materials in a pedagogical rather than androgogical manner even though half of the enrolled online students were graduate students. Many of the instructors lamented the developmental time compression that resulted in the principally online pedagogical delivery style and noted that online course delivery ideally freed the instructor to facilitate learning as opposed to being a "professor in a box" reflecting others lessons learned (Betts & Sikorski, 2008; Chin & Williams, 2006; Grant & Thornton, 2007). One instructor who taught both an undergraduate and graduate course noted that online education offered him the opportunity to improve the educational experience for his students, stating that there was a "better learning experience for all my students—underline all—versus one or two in a traditional class." There was a general consensus among the faculty that online learning improved the opportunity to expand the learning process outside the structured one-hour lecture period and allow the students to engage in "discovery learning."

Class Management

Students, especially those in online classes, desire frequent and personalized feedback (Grant & Thornton, 2007; Hannay & Newvine, 2006; Hutti, 2007; Martin, 2008). This aspect of online learning proved to be challenging to the small institution's faculty. As there was no release time for those teaching online or additional resources (e.g., graduate assistants) for addressing the myriad online course feedback demands, high levels of interaction were difficult to maintain. Most professors relied on chat-rooms and posted discussion questions where they required each student in the class to post substantive comments in order to receive credit for participation in class discussions. Yet, the instructors noted the sheer amount of time necessary to monitor discussion groups and the necessity to occasionally intervene to keep discussions on track and focused. Fortunately the technological platforms (Blackboard and WebCT) were stable enough that IT support for discussions, chat rooms, and instant messaging was never overtaxed during the prototyping classes. However, faced with a major disruption to the IT system, a small school would face considerable problems because the support staff for the various systems is only one-layer deep. An after-hours problem could exacerbate existing resource constraints (e.g., on-call IT personnel, money) in addressing the day-to-day challenges of maintaining the college-wide IT structure.

Measures of Success

Learning Success

Learning success for students is still being debated. As Grandzol and Grandzol (2006) note, many studies have concluded that there is no significant difference in students' learning between traditional and online teaching. Some empirical research has probed for differences based on age (Huang, 2002), gender (Ausburn, 2004; Nilan, 2000), student interactions (Picciano, 2002), and the mixture of students between traditional and non-traditional students (Skopek & Schuhmann, 2008). Although the sample size of online students from this institution was small for an empirical study, anecdotal evidence from the pilot project suggests that the experience was

consistent with that reported in the best practices literature.

At the graduate level, the students were serious about their studies, cooperative, and engaged. One instructor noted that he enjoyed the chat rooms and discussion groups because the students were able to develop more complex mental models and demonstrate a more robust understanding of the course material than he had observed in traditional classroom discussions.

At the undergraduate level, student learning appeared more sporadic. Instructors reported that online discussion groups had too many instances of "I agree" or "me too" mechanical responses with no true breadth or depth of discussion. The instructors expended more time than anticipated attempting to generate thoughtful discussion among students and to discourage "lurkers." Another issue that led to more limited success at the undergraduate level was the non-uniform degree of computer literacy among the student participants in the online courses. While this generation of traditional students have grown up using the computer, much of their interaction have been of a less structured form (Blocher, de Montes, Willis, & Tucker, 2002) and that experience does not necessarily translate into online classroom success. One instructor expressed disappointment that there was not a better screening process to ensure that the students allowed to take online courses were indeed prepared for online studies. The instructor reported that too many students signed up for the summer course because they were "too busy" to attend scheduled classes, and those students who had struggled in a previous class tended to do worse in the online course. Although the necessity of screening potential students for online classes is a well-known best practice cited in the literature (Hutti, 2007; Wang, Kanfer, Hinn, & Arvan, 2001), it became a "lesson learned" at this institution. One solution offered by an instructor was to require potential online students to take a how-to-prepare-for-online-learning course offered through the IT department prior to enrollment in online classes. Another suggestion was to add some form of screening criteria such as a recommendation from other instructors as to the student's maturity, grade point average minimum scores, or an interview process to increase the probability of success. One instructor had each student sign a learning contract at the beginning of the course to emphasize to the students the level of effort required to successfully complete the course.

Faculty Engagement and Success

The lessons learned literature consistently presents the successful online teacher as someone who is technologically capable, possesses a high-degree of self-motivation and organization, and is willing to adjust to a different teaching paradigm to engage students online as opposed to the traditional classroom presentation paradigm (Abel, 2005; Betts & Sikorski, 2008; Burke, 2005; Chin & Williams, 2006; Grandzol & Grandzol, 2006; Hartman et al., 2001; Levy, 2003; McLean, 2006; Moore, 2008; Parker, 2003; Savery, 2005; Shaw & Young, 2003). Because the development of the initial set of classes was essentially an experiment, this institution was less selective in choosing which instructors to use in the initial set of courses. Instructors were chosen based on their willingness to engage in the new format rather than on any innate ability, successful experience, or unique traits that marked them as well-suited for the task. Little preparation was devoted to getting the instructors ready for teaching online; they were just recruited based on their willingness to transfer their courses from one teaching paradigm to another. Administrative and IT support was available as the members requested it, but there was no single vision for the course development parameters.

The upfront development of courses and the day-to-day requirements to communicate with students made the courses much more time intensive than traditional classroom experiences, consistent with the best practices literature (Allen & Seaman, 2008; Burke, 2005; Grandzol & Grandzol, 2006; Grant & Thornton, 2007; Hutti, 2007). Although every instructor interviewed explicitly stated that they knew that the online courses would take more time, the actual time requirements still surprised them. The time compression of summer graduate classes was unexpected for the instructors. The graduate instructors lamented the necessity of compressing class duration during summer from 14 weeks to seven weeks necessitating two online class sessions per week. One professor noted that teaching a graduate course in seven weeks did not allow the fullest engagement on the part of students or instructors and added immensely to the amount of time the instructor had to devote to monitor and "sit-in" on all the required chat room discussions. Another instructor, discussing the typical summer class length, observed that multiple sessions during the class week exacerbated students falling behind since they needed eight to ten hours of non-class time (i.e., study and mental gestation time), and the hours needed to not be in a single block, between sessions for them to develop a robust and nuanced understanding about the issues raised in class. After the prototyped courses had run their route, all of the instructors stated they felt there was a need to further develop online teaching and they desired to be a continuing part of the online push.

Discussion and Recommendations

While best practices and lessons learned will continue to be developed as online teaching reaches deeper in the pedagogical environment, the lessons learned, to-date, have remained remarkably consistent over the past ten-plus years. Good teaching, whether it is the "sage on stage" or the "professor in a box," still requires the administration's committed support, commensurate facilities, and faculty willing to engage students in a learning style that meets the students' needs in order for any teaching to be efficacious.

Yet, the lessons learned by one school's faculty in reviewing other schools' best practices do require some adaptation of the recommended procedures for success. As noted earlier, best practices have been consistently reported from the earliest adopters of online instruction, and the early adopters are the largest schools—either large state schools or large community colleges. Implementing online teaching best practices at small schools, whether state or private, entails recognition of constraints from which larger schools appear to be buffered, especially during periods of regional or national economic weakness.

From an administrative standpoint, several requirements for success online are clear. A small school must be clear in its strategy for going online. Small schools typically pride themselves on the quality of the instruction and the low student-instructor ratio allowing a greater degree of student-faculty interaction. Without a focused online program that allows the school to retain students at risk for transferring/ dropping out or reaching out to a populace not currently served by the small school, the school faces the risk of cannibalizing its small on-campus classes by taking any student who will enroll in the online class. Large schools may be able to support multiple sections of both traditional and online classes of the same course. However, when a few students shift from a traditional course to an online one at a small school, it may be unable to meet dictated student numbers for both classes.

A concern over cannibalization can result when the intention of going to an online delivery system is motivated by the desire to generate new enrollment and hence tuition dollars. Of course, other motivations may precipitate the move to online course delivery. Sometimes the impetus for going online may be the wish to become more technologically current, or it may be that online offerings are part of a larger plan to build more flexibility into the ways and means of delivering the curriculum.

In the case of the small school under contemplation in this case study, no doubt some cannibalization of courses occurred, but the effect differed significantly between the undergraduate and the graduate program. During the second year of the program, undergraduate on-line enrollment during the summer more than doubled. A subjective review of the students' records indicated that as many as half of the students in a given course were taking the course because it was offered on-line. Over half the undergraduate population is out-of-state, and those students are more likely to take summer courses at home. Several out-of-area students were noted taking degree-completion courses. One of the strategic goals for implementing on-line delivery was to expand undergraduate summer school enrollments, and that has been achieved to some degree. However, cannibalization in the graduate program continues to be a concern. In the longer term, to be successful, the graduate on-line program must produce additional enrollment, rather than simply shift students from a desk in the classroom to a desk in their home. Still, the administration has not expressed concern yet, and the online program continues to gather steam.

Essentially, small colleges and universities are challenged as a result of severely constrained resources, among which are personnel, money, infrastructure, and time. These limited factors work against long-range planning, resource commitments, and systems in place to ensure comprehensive coverage of technological, training, and advisory needs. While the administration may be committed to developing an online program, the limited resources of the administration, including administrators' ability to commit money and their own time to directing the establishment of a comprehensive, focused online program, tends to leave much of the responsibility to the instructors themselves. This dearth of administrative oversight can result in a fragmented program where faculty are marching toward the same goal, but the paths (technological and pedagogical) chosen are disparate. Different software platforms employed by different instructors because of personal familiarity and preferences further exacerbates resource constraints since IT support is frequently thin.

A large school has the IT and faculty support staff to ensure that there is intensive instructor preparation on software and pedagogical differences encountered when transitioning to online teaching. Training in both software and pedagogy is critical for online teaching, yet a small school, again because of the resource constraints, may find that IT and faculty support staff are currently stretched just to support regular college technological requirements. Thus, the added responsibility of intensive instructor training can only be honored

more in the breach than in practice. This leads to instructors electing to participate more on an opt-in basis because they have prior experience, technology skills, or a unique desire to explore online instruction. Those instructors who want to expand their pedagogical skill set are a boon to the small school. Therefore, the selection of instructors for online teaching is not an active process, but rather a recruiting of whomever will teach. There is little preparation required to be an online instructor, just willingness.

Consistently, best practice literature notes that because of the increased (not decreased) demand on the instructors' time, rewards must be structured in such a way as to promote participation (Abel, 2005; Burke, 2005; Perreault et al., 2002; Schrum & Benson, 2000; Shea, 2007). Again, resource constraints frequently limit administration's ability to reward faculty for engaging in the new venture. At this institution, instructors' rewards were intrinsic. Small schools' administration, too frequently, must echo Tennessee William's Blanche DuBois in *A Streetcar Named Desire* and "rely on the kindness of strangers" (i.e., the good will of the faculty) as there can be no release time for developing an online course or any additional financial remuneration.

Even though faculty were aware that time requirements for the online courses would be greater than that required of a traditionally delivered course, almost to the individual, each of the instructors expressed surprise at the additional time commitment required in an online course. Without some release time, the faculty was challenged to achieve and maintain high levels of interaction with their online students. The best practice of providing regular, personalized contact and prompt feedback tests the personal resources of the faculty member who is the sole point of contact for the online course and is teaching other courses. These recommendations for small schools are summarized in the right-most column of Appendix 1.

Conclusion

Best practices, as reported in the online course delivery literature, are sound but aimed in an unfocused manner. The assumption that the school of 1000 students is able to replicate the practices of the school with greater than 25,000 students falters in practice. While resources and their constraints on the schools both drive and limit actions across all sizes of schools, small public schools tend to operate on a thinner cushion of support. This small school found that going online was a successful endeavor worthy of continued exploration even as the expected and unexpected challenges arose. For any small school constrained by resources, the best practice literature does provide a well-blazed trail on which to commence planning the journey online.

Best practices work, but they must be studied, evaluated, and tailored to the school and its resources. A school that attempts to implement others lessons learned without a sufficient understanding of its own position and constraints still has lessons to learn.

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Appendix A

Summary of Best Practices in Online Education When Applied to Smaller Universities

Best Practice	General Application	Problems for One Small University	Recommendations for Small Universities
Administration			
Reasons for adopting online strategies	The institution should be clear about why it is going online, e.g., outreach, revenue, etc.	There is often confusion about the goal of online learning and, hence, loss of focus	Small schools should insist that administration, faculty and support personnel "be on the same page," clearly grasping the impetus and goal for the mission; time for planning should be a non-negotiable
Commitment and support	Adequate financial support and technological infrastructure should be committed to the task	Because of limited resources, much of the responsibility for locating and securing resources is left up to the instructor	Top to bottom buy-in needs to be in place before launch; sufficient IT resources must to be committed to the task to ensure success; marketing should communicate a realistic sense of course demands
Training	Intensive instructor preparation for online teaching should be provided	Instructors tend to opt-in only if they have prior experience, technology skills, or a unique desire for online instruction	Effective selection of faculty and intensive technical and pedagogical preparation is essential, even if this means starting small and growing slowly
Faculty incentives	Rewards should be structured to encourage participation	Rewards are mainly intrinsic and do not adequately compensate for preparation time and effort	Even if extra pay is out of the question, rewards (course-release time, GA assistance, budget, or recognition) ought to be a deliberate part of the compensation package
Course Design and Delivery			
Selection of Delivery Platform	Deliberate attention should be devoted to selecting the platform to support the online course	Often the existing learning management system is imposed upon the course, regardless of fit; instructors must adapt	Small schools cannot afford the luxury of multiple course delivery platforms; a single serviceable multi-use platform that can serve the off-line, blended and online course formats is most effective
Course preparation	Materials should be available early, be organized and clear, be meaningful and relate to outcomes	Frequently instruction is delivered much as in-class, but posted online	Training may have to be delivered by off-campus sources, seminars, webinars or specialized conferences and training programs if on-campus resources are limited
Pedagogy	Active, collaborative learning that engages students in higher-level critical thinking should be the rule	Online learners are often adults, but instruction is frequently delivered in a pedagogical style	Special attention needs to be paid to teaching methods, recognizing that many of the courses will likely be directed at adult learners; special instruction in andragogy may be in order

Class management	Regular, personalized contact and prompt feedback should communicate high expectations; backup for failed technology should be in place	Instructors may not have the release time and resources to make high levels of interaction easily possible; technology support tends to be one-layer deep	Preparation needs to be devoted to the intense interaction that online learners require; uninitiated faculty should be apprised of the quantity of time needed to monitor, track, and reply to students without help from other personnel
Measure of Success			
Learning success	Qualified students should be recruited and selected for online learning; screening should occur to verify requisite skills	Whoever enrolls is accepted and instructor compensate or make do; there is a danger of online cannibalizing on-campus classes	Have mechanisms in place to address the technological competence of online students and student support resources; acknowledge the extensive amount of time required to meet student expectations for instructor access
Faculty engagement and success	Qualified faculty, those with requisite skills, preparation, teaching style, and temperament for online, should be recruited for these courses	Online faculty often consist of whoever is willing to take on the task; little preparation required, just willingness	Provide faculty with a proportional sense of the requirements of online teaching, materials preparation, teaching methods and incentives to pre-empt a failed sense of accomplishment; in faculty evaluation, acknowledge the experimental nature of the trail run