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A LETTER FROM
THE PROVOST

Baylor University relentlessly pursues its mission to educate men and women for worldwide leadership and service. While sharing such a mission with other great universities, Baylor accomplishes its institutional vocation in a distinctive way—through the integration of academic excellence with an unapologetic Christian commitment, all in the context of a residential-based caring community. Not only does Pro Futuris, Baylor’s strategic vision, emphasize Baylor’s distinctive place on the landscape of higher education, Pro Futuris also capitalizes on decades of careful stewardship and bold planning. Baylor University is poised for continued growth. Even in a period of dramatic “disruption” in higher education—a disruption which, according to some pundits, will forever change the fundamental nature of higher education—the number of students seeking a Baylor education is on the rise. Baylor continues to deepen existing traditional academic programs while creating new ones. The hallmarks of a Baylor experience, transformational teaching and mentoring by a dedicated, full-time faculty, continue to form and inspire a new generation of students, even as faculty research productivity rises. Measured by any traditional metric, Baylor is healthy and its future bright.

That Baylor enjoys growth and health in a time when many colleges and universities are experiencing substantial economic strain does not relieve us of the responsibility of looking ahead. We must keep our eyes on the horizon to anticipate genuine challenges—and changes. The advent and popularity of for-profit models for higher education caught many by surprise. Today, Massive Open Online Courses (MOOCs) regularly dominate the headlines in the Chronicle of Higher Education and have earned column inches in papers such as the New York Times and USA Today. Some deem such free or low-cost higher education schemes that employ the web as a delivery tool to be the future—the only future. Advocates of MOOCs (or their many close cousins) argue that current pedagogical practices at most universities are ineffective, that the cost of traditional higher education exceeds its value, and that the emerging economy will value competence over earned degrees. While the extensive claims made by some still await validation, there can be no question that the sheer number of online companies entering the higher education market will impact the traditional university, Baylor included.

In fall 2012, I commissioned the Teaching, Learning and Technology Committee to research the current state of online higher education and offer proposals for Baylor’s engagement in technology-enhanced learning. This report is the result of their inquiry. I applaud the work of this Committee and its findings. The direction proposed in this report preserves Baylor’s distinct mission, values, and ethos. By accepting the Committee’s recommendations, we will embrace a future that will increase our reach and broaden the world’s access to a Baylor education.

Dr. Elizabeth Davis
Executive Vice President and Provost
Baylor University
INTRODUCTION

In fall 2012, Provost Davis commissioned the Teaching, Learning and Technology Committee (TLTC) to examine Baylor’s current use of technology platforms and tools for technology-enhanced teaching and learning and explore possible innovations in this area. Specifically, Provost Davis asked the Committee to evaluate emerging, online instructional models that are in accord with Baylor’s mission and ethos and might, therefore, benefit Baylor. This report articulates the findings of the Committee based on its exploration in several different areas. These areas include: a review of the online landscape, discussions with guest speakers and vendors for online learning, conducting faculty, staff, and administrative focus groups, an analysis of current technology tools and resources as well as future needs, and planning for future pilots and opportunities for technology-enhanced learning. More specifically, these objectives included:

- Reviewing the emerging trends in online and technology-enhanced learning by creating an annotated bibliography of relevant articles on this topic as well as a glossary of terms

- Inviting leaders with national academic reputations to meet with the TLTC and provide lectures in spring of 2013 to provide external context that informs our Baylor community about new approaches and emerging trends, and also inviting vendors to share what they can provide for Baylor if selected as an outsource partner

- Encouraging input from faculty members, staff, and administrators through committee meetings, discussion sessions, and formal focus groups to determine internal context, faculty attitudes, readiness for online/distance learning and best approaches to provide the distinctive Baylor education online

- Investigating tools and commercial partnerships that could be implemented strategically to support courses offered online for credit, for professional development, for certification, and for continuing education for constituents

- Identifying two or more pilots with Baylor deans to implement in fall 2013/spring 2014 as well as consider administrative needs for providing online/distance courses and support to a population that is not the traditional degree-seeking student. Consider various models for admission, registration, revenue, support, tracking, credentialing, etc.

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Gone are the days when nearly all Tier One academic institutions viewed online educational endeavors with disdain. Many of the most prestigious universities in the country are now offering some online degrees and a multitude of online courses. One of the most recent trends is for these schools to offer Massive Open Online Courses (MOOCs) on a variety of topics. A recent executive briefing noted that “twelve-two of the institutions listed in U.S. News and World Report’s top-25 best-colleges rankings for 2013 offer MOOCs or similar free offerings, including Harvard, Princeton, Yale, Columbia, MIT, Stanford, Duke, University of Pennsylvania, Cal Tech, Dartmouth, Northwestern, Johns Hopkins, Brown, Rice, Notre Dame, Vanderbilt, Emory, UC Berkeley, Carnegie Mellon, UCLA, and University of Virginia.” Since this briefing was published in September 2012 the remaining three universities now offer a MOOC or some form of online education. While education in the residential setting is still strong at these schools, they are using online education to expand their reach to non-traditional students, extend their brand, provide greater educational access to traditional students through online summer courses and other supplemental online courses, and explore how technology is affecting pedagogy and learning.

With one exception, all of Baylor’s peer institutions, Texas Baptist schools, and other private schools contacted during our study (see Appendix A) are pursuing various endeavors related to online education. Many peer institutions, like Boston College, are offering several online degrees while others, like TCU, have a more limited scope. USC has partnered with 2U, an eLearning service provider, to offer two online programs: a master’s degree in Social Work and two master’s degrees in Education. While several of the Texas Baptist schools are in the initial stages of online offerings, two schools have extensive offerings. Dallas Baptist University leverages several online delivery methods: traditional courses with numerous online components, hybrid courses, and completely online courses. Jim Denison, a popular Texas Baptist speaker and cultural theologian, will be offering DBU’s first MOOC in the near future. Wayland Baptist University offers all of its degrees online and has just begun to offer the Master of Divinity, M.A. in Religion, and the Master of Christian Ministry degrees in an online format. A number of reputable seminaries, including Fuller Theological Seminary, enable their students to take a significant number of their courses online (up to 50% for Fuller). While Liberty University is not one of Baylor’s aspirant institutions, their 80,000 online students offer an example of how an institution can extend its reach throughout the U.S. and the world through its online programs. Wheaton College was the only school that, according to its Registrar, does not offer or plan to offer any online courses.
Types of Technology-Enhanced Learning

Technology-enhanced learning currently exists in several different forms. One of the most basic and common is the addition of online elements within traditional courses. The incorporation of asynchronous discussion boards, blogs, and wikis, as well as synchronous elements such as an online chat session, are a few examples of ways in which courses at a residential institution can be enhanced using online tools. In fact, all of the tools that are part of a learning management system such as Blackboard may be used as part of a traditional course to provide technology-enhanced instruction. When these tools are used by the instructor to prepare the students for the classroom topic prior to their arrival, the instructor is using online tools to “flip” the classroom. In this way, the instructor may use class time to discuss rather than deliver content. “Flipping” the classroom is similar to having the students arrive thoroughly prepared by reading the assigned pages of a textbook. However online elements (videos, discussion boards, chats, etc.) tend to be more engaging and create a higher probability that the students will actually participate in pre-class preparation.2

A second form of online education is the blended or hybrid learning approach. Here, the course is composed of both online class sessions as well as face-to-face sessions. These sessions may be formulated in a number of different ways to accommodate both students and instructor. Some courses structured on a hybrid model meet online every other week. Others will have online sessions prior to a concentrated number of face-to-face sessions followed by additional online sessions. The structure of a hybrid course depends on the needs and objectives of the course.

A third type of technology-enhanced education is the course that is completely online. The students never meet as a group with the instructor in a traditional classroom setting. All of the course content, instruction and evaluation is completed online. These online courses may be relatively small with 10 to 15 students and include some virtual classroom sessions using videoconferencing, or the courses may be a MOOC with somewhere between 30,000 and 200,000 students working through readings, videos and online course assignments.

Is Technology-Enhanced Education Effective?

A survey of articles about online education indicates that the answer to this question is mixed. Deanna Marcum, in her keynote conference presentation at Cornell University, concluded that, based on the research, faculty concern about learning outcomes suffering under online instruction is “not well founded.”3 Just as traditional courses can be effective or ineffective, online instruction can facilitate student learning or fail to engage. The learning outcomes depend on the instructor and how well the course integrates the online components. The research that has been done in this rapidly emerging space suggests that students must be technologically prepared and highly motivated in order to experience successful learning outcomes. The less prepared and less motivated the student, the lower the level of learning and the higher the dropout rate will be. MOOCs often attract large numbers of students, an average of about 50,000, but the completion
rate is usually less than 10 percent. Because the courses are open (i.e., there are no requirements or prerequisites for enrollment), many students are not prepared. Because the courses are free and offer no credit, students are not highly motivated to do well or even complete the course. Online courses that require a financial commitment and offer credit have much better retention rates and higher levels of student learning. Courses with excellent online instruction and highly motivated students do provide significant opportunities for excellent learning outcomes.

Alongside concerns about the pedagogical effectiveness of MOOCs is the question of their economic sustainability. The recent move by many MOOC providers to offer certification upon course completion for a fee indicates that this pedagogical experiment is now seeking an economic foundation. A recent report by CIOs from member schools of the Committee on Institutional Cooperation cautions that the “path to monetizing ‘free’ courses at Internet Scale remains unclear.” Because of the rapidly evolving economic models being tried by different MOOCs, the CIOs suggest that this is “a time of caution for any long-term deals.” Most agree that a sustainable economic model for MOOCs will emerge in time, but in the current climate the economic structure is uncertain.

Who is Engaged in Technology-Enhanced Learning?

If we consider the entire spectrum of approaches to technology-enhanced education, thousands of undergraduate and graduate students are engaged in some form of technology-enhanced education at Baylor and other institutions. At Baylor, 96% of students have at least one course that leverages Blackboard resources and the average student has five courses per term that use Blackboard. In fact, for many years traditional students have been engaged in some form of online education. According to Joel Hartman, Vice Provost for Information Technologies and Resources at the University of Central Florida, they began offering online courses in 1996 and have experienced a high level of both student and strategic success. Hartman cites a Babson Research Group study from January 2013 that shows one-third of all college students take at least one course online. While the Babson study stated that these online courses vary in quality, traditional students engaged somewhere on the spectrum of technology-enhanced learning is nothing new. What is new in the current arena of online higher education is the attraction of MOOCs. The research on who is taking MOOCs is still in process, but initial data indicates a wide range of people including professors interested in exploring the pedagogy of others in their field, college students looking to deepen their understanding of a subject or expand their horizons, ambitious high school students, professionals looking to hone their skills and a variety of other people who are interested in learning but do not want a certificate or degree. The ability of MOOCs, iTunesU courses and other forms of free online pedagogy to engage a broad range of publics explains the interest of many major universities entering into this space. While the initial universities participating in MOOCs were in the U.S., Coursera, EdX and other providers recently began reaching out to universities in Australia, the United Kingdom, Switzerland, France, China and other regions, giving member universities access to a
truly international audience. While the current climate is one of geographic expansion for global reach, which institutions remain engaged once a cost and certification structure emerges in the MOOC space and such programs become less “open” remains to be seen. Until then, for those universities who can commit the resources to engage in technology-enhanced education, opportunities abound to extend their institutional reach, to better understand online learning, and to expand learning opportunities.

**Baylor as an Environment for Technology-Enhanced Learning**

Baylor has continuously distinguished itself as a leader in educational technology. From being recognized as one of the most wired campuses in the 1990s, to being named one of the most “unwired” campuses in 2004, to our recent success in deploying Blackboard Mobile Learn, which boasts 13,270 unique faculty and student users, technology-enhanced learning has been a hallmark at Baylor for many years.

Based on this track record, it is no surprise that the administration consistently encourages instructors to incorporate online features into their courses, providing technology-enhanced instruction and opportunities to “flip” the classroom through online preparation. In fact, 80% of our current faculty use Blackboard to support their teaching. There are currently several initiatives across the university to extend our engagement with technology-enhanced education. For instance, the Baylor Law School is currently assessing online education in preparation for the development of a distance learning policy. The new Ph.D. degree in Social Work, which launches in June 2013, will use an innovative hybrid curriculum that combines infrequent short meetings on the campus or at agreed-upon locations with classes taught in virtual classrooms by high definition videoconferencing. The Louise Herrington School of Nursing offers hybrid courses in its accelerated undergraduate program for second degree students seeking a Bachelor of Science in Nursing. In addition, the graduate programs offer some courses online or in hybrid format. The Master of Science in Nursing Neonatal Nurse Practitioner program offers their curriculum delivery with a synchronous online delivery option for students who are located at clinical sites away from campus. In 2014 they plan to pilot the FastBacc and Master of Science in Nursing - Nursing Administration program.

**Conditions for Technology-Enhanced Learning**

Before an institution engages technology-enhanced education, a number of important issues must be investigated and resolved: types of courses and credit, partnerships with online service providers, incentives for faculty, and legal and accreditation issues. The type of course offered often determines the type of credit awarded. Some courses/programs of study are structured to provide continuing education certificates, often at reduced tuition costs. Other courses/programs are equivalent to residential courses and receive full credit. While some colleges offer online courses (especially in the summer) at reduced rates, tuition may remain the same for online courses even though some reduced costs are usually derived through a reduction of certain fees. Arranging appropriate partnerships with online service providers is crucial to the success of
an extensive online program because these companies may facilitate course development, ensure technical support, and do much more. The development and teaching of online courses requires a significant time investment on the part of the faculty, so appropriate incentives and protection of intellectual property is essential. Careful consideration of library resources is also important since licensing agreements for online materials may restrict access to remote students. Beyond these issues, online education must be careful to have adequate staff support and avoid possible legal and accreditation problems.

Summary

The recent and rapid emergence of new trends in technology-enhanced education inspired by MOOCs has spawned a lively debate both in higher education and the broader culture. The immediate impact of these conversations on traditional, residential institutions of higher education like Baylor remains to be seen. However, if a recent editorial in The Baylor Lariat by Paula Ann Solis is reflective of the student body, our undergraduates would like to have access to some online courses, especially in the summer.9 The Graduate Program in the Department of Religion also discovered a need for more training in online teaching for its Ph.D. students. One of the findings from a study funded through a Wabash grant revealed that all 10 of the Religion Ph.D. alumni surveyed indicated that their teaching load consisted of at least one online course annually. The report suggested that given the expansion of online education, the department should consider ways, both individually and systematically, to ensure our current graduate students are prepared to utilize online tools for instruction so that they are competitive in the job market. Beyond pragmatic considerations for our undergraduate and graduate students, Baylor could also benefit from extending its brand beyond the residential campus to benefit others in both the U.S. and abroad by providing a quality Baylor education to those who are not able to become residential students. There are certainly challenges to extending technology-enhanced education both within and beyond Baylor, but also many opportunities.

4 Katy Jordan, “MOOC Completion Rates: The Data,” http://www.katyjordan.com/ (viewed May 1, 2013). This is an excellent resource that is tracking available statistics on MOOCs.
7 MIT was awarded a grant to analyze the edX MOOC, “Circuits and Electronics,” which attracted 154,763 students. The final report should be released in May 2013.
In an attempt to better understand the internal context for teaching and learning at Baylor, the attitudes toward innovative course models at Baylor, and the readiness for online/distance learning at Baylor, input was gathered from faculty members, department chairs, deans and administrative personnel. Committee meetings, discussion sessions, and formal focus groups were held throughout the spring 2013 term. These conversations yielded insights critical to Baylor’s engagement of the future of higher education.

Four focus groups targeting different constituencies within the Baylor community were convened:

1. **Ad Hoc Faculty Focus Group**

   This was a mixed group with representatives from each academic unit and various academic ranks. Helen Harris (Social Work) facilitated the group meeting.

2. **Administration Focus Group**

   This was a mixed group of administrators from Institutional Research and Teaching, Information Technology Services, the Electronic Library, Registrar, Academic Technology Directors, and related units. Ashley Palmer (Sociology and ATL) facilitated the group meeting.

3. **General Education Committee**

   General Education Committee members are listed on the Committee on Committees 2012-13 Report. Gaynor Yancey (Social Work) facilitated the group meeting.

4. **Undergraduate Curriculum Committee**

   Undergraduate Curriculum Committee Members are listed on the Committee on Committees 2012-13 Report. Dr. Dennis Myers (Social Work) facilitated the group meeting.

Harris, Palmer, Yancey, and Myers are formally trained in focus group methodology and have extensive experience conducting focus groups. Their expertise, organization, and integrity were essential to the success of the focus groups. Although the focus groups represented a broad cross-section of the university, they do not necessarily represent a statistical consensus of campus-wide faculty and staff opinions.

Focus group discussion was structured around information gathering in two domains: (1) current practices in online instruction at Baylor and (2) possible innovations in online instruction at Baylor.
Principal Themes

(1) Implementation of online learning in any format should be consistent with Baylor’s mission and identity

Focus group participants underscored the importance of face-to-face, instructor-student contact to Baylor’s mission and identity. Having students and instructors face-to-face adds value to education. The residential experience is part of Baylor’s identity, and essential to “transformational education.” Whether Baylor offers distance-learning programs or uses technology to enhance synchronous courses, these methods must demonstrate the same educational integrity for which Baylor is known.

Online education initiatives must attend to and value students’ needs. Their implementation must consider (i) the financial impact on students, (2) the academic rigor of online courses and (3) the empowerment of students as self-paced learners. In short, the question arose, “how will online education at Baylor promote transformational learning?” The following response reflects a common sentiment among focus group participants:

“I think all kinds of technologies are useful accoutrements to the kind of transformational education that is classroom-based and more recently residentially-based, for undergraduates at Baylor. And my sense is that a totally online course distribution model would [put the cart before the horse]. I’m not saying that education can’t happen that way. But, I think it would be a compromise of long-standing principled commitments to personal engagement, a kind of mentoring that depends upon proximity and conversation and interaction and care for the whole student, that sort of holistic education where we care about an intellectual, moral and religious formation. It’s a lot harder to imagine delivering [holistic education] with integrity and success purely through an online education. But we’re all doing good things with technology—the tools that it [technology] provides for students—and that is a given. It’s just a matter of how extensive that is and how far we’re willing to push it before we think, ‘Now we’re beginning to see the tools supplanting the proper end here.’”

(2) Blended and hybrid models of online education were broadly supported; fully-online programs were only supported in certain cases

Consistent with the notion that online teaching and learning methods should reflect Baylor’s mission and identity, focus group participants expressed broad support for blended and hybrid models of online education which maintain face-to-face contact with students. Focus group participants were uniformly in favor of “technologically-enhanced” teaching, but reluctant to embrace education that is wholly asynchronous.

The term “online education,” had a negative connotation or ambiguous meaning for many focus group participants because of its association with fully asynchronous programs. However, many faculty members use and endorse technology in their teaching and express support for expanding online technologies to supplement classroom teaching. In one participant’s words:
“I cannot imagine a wholly online course, even in the graduate school. And when I heard about the opportunity to come to Baylor, that was one of the things that the Baylor faculty talked about—that we do have online components but we’re really not going in the direction of online, distance education. That was appealing to me because I was just coming out of an environment where they were really pushing for more online—totally online—courses and distance education.”

(3) Effective online teaching and learning will require cultural and structural support

Faculty need support structures to develop and adapt their teaching methods to online platforms. Focus groups participants discussed this support in a variety of ways including: (1) sufficient training and technical support for learning and implementing online teaching and learning tools/models; (2) release time (or time otherwise factored into faculty workload) for learning technology platforms for online education; and (3) formal mechanisms through which to address and discuss the challenges related to assessment, intellectual property, academic freedom, and the development of curricula in online learning environments.

Participants suggested many methods for creating a sufficient IT support structure for online instruction. These included expanding IT staff, forming strategic partnerships with educational technology vendors to offload content creation, retiring older technologies to free up existing staff, redirecting existing staff to help new distance learning initiatives, and providing IT support teams to assist faculty with the development of online curricula. One participant said:

“I think the success of an online program will only be as good as its support. Once you say we’re taking [a] course online or we’re building an online component, you need more expertise than just the faculty member’s expertise to design the course.”

(4) The implementation of new distance learning programs should begin on a small, strategic scale

Online education/distance learning programs may not be appropriate for all student groups. Focus group participants questioned whether most undergraduates were sufficiently mature as learners to benefit from the necessarily self-directed nature of online learning. While blended and hybrid models received the broadest support in focus groups, participants also pointed to areas that could be well-served by fully online courses. Distance learning programs in strategic areas such as summer school, continuing education programs offering certifications, and graduate courses were named as potentially fruitful starting points for piloting online programs. As one participant noted:

“There is a demand for [K-12 teachers] to take new courses and to keep their certification. There is a demand for nursing practitioners to be reaccredited by their various organizations. So there is a lot of that sort of need for online continuing education. And the things you start doing well there you can take into an undergraduate summer course, then you can branch off into a full semester course or a graduate course....”
**Summary**

Based on focus group feedback, there appears to be broad faculty support for the following tools, platforms, and/or online educational models:

1. **Hybrid and blended models of online education**
   - Examples given involved teachers who use technological tools and platforms to enhance or supplement face-to-face experiences with students in the classroom, such as blogging.
   - Representative courses included synchronous and asynchronous elements.

2. **Online programs, certificates, and/or degrees at the graduate, professional level**
   - There was a consensus view that such programs begin as small scale, pilot programs.

3. **Summer courses were suggested as a good starting place**

Though the support for online courses for undergraduates was not as robust as the support for blended learning environments and online graduate programs, there was some support for online summer courses for enrolled undergraduates. These courses would be designed for matriculated undergraduates who leave campus for the summer.

Focus group participants raised the following concerns for further exploration and consideration:

1. Assessment of student interest in online courses
2. Reassessment of faculty workloads and expectations
3. Creation of incentives for faculty to teach online
4. Assessment of finances associated with online education
5. Evaluation of legal concerns over online storage of information
6. Clarification of what is meant by 'online education'
7. Increased IT support to assist online instructors

In sum, focus group participants recommend that Baylor be proactive, strategic, and thoughtful in the choice and implementation of online programs.
PARTNERSHIPS IN SUPPORT OF TECHNOLOGY-ENHANCED LEARNING

Baylor occupies a strong position within higher education. *Pro Futuris* rightly affirms that we are “set apart by an unwavering Christian identity, an enduring dedication to transformative education, and a strong and growing commitment to research.” In light of the many recent changes in higher education motivated by economic pressures, disruptive technologies and increasing requirements for compliance, universities are being called to remain more diligent than ever about holding affordability and accountability in balance. Another factor challenging the university is the consensus among experts that the current wave of experimentation with technology-enhanced learning will have an immediate impact on the higher education landscape. Precisely how the plates will shift is uncertain, but in order to understand how Baylor can maintain its position we must engage and not ignore these emergent forms of technology-enhanced education. To this end, the Teaching, Learning and Technology Committee conversed with several experts in the field with extensive experience in technology-enhanced learning.

Dr. Paul Lingenfelter is President of State Higher Education Executive Officers (SHEEO). While visiting the Baylor campus as the Distinguished Lecturer for the School of Education, he addressed the Committee on the topic of the state of higher education changes as it relates to online and technology-enhanced courses. Many Committee members also attended his public lecture. In his address to the Committee, Dr. Lingenfelter confirmed recent studies which claim that the emergence of MOOCs and other accessible forms of online learning is transforming cultural expectations about higher education. Competitive universities, he suggested, would be wise to overcome any fears about online learning and discover how it best fits within the mission and future vision of the institution.

Susan E. Metros is Associate Vice Provost and Associate CIO for Technology Enhanced Learning at the University of Southern California and is responsible for the highly successful online educational initiatives at USC. She visited by video teleconference with the Committee to help understand the best practices in technology-enhanced education. She discussed the benefits of engaging a vendor partner to establish, manage and maintain online programs. Joining her for the call was Joan Falkenberg Getman, Director of Educational Technologies in the Center for Scholarly Technology at USC. They discussed factors important for a successful program and a matrix of factors to assist universities in selecting vendor partners and assigning roles and responsibilities. 2U and Pearson Embanet, two key national vendors for online education, created the courses USC offers online and worked with officials at USC to implement their online program. Metros and Getman discussed selecting a vendor partner,
their own working relationship with their partners, key decision points along the way to establishing an online education program and essential factors for a successful program.

Dr. Brian Coppola is the 2012 recipient of the Robert Cherry Foster Award for Great Teaching at Baylor University. Dr. Coppola is the Arthur F. Thurnau Professor of Chemistry at the University of Michigan. He joined the Committee for a breakfast conversation about great teaching and the advantages and disadvantages of online education. We discussed the current state of online education, the factors most important to preserve as faculty transition to technology-enhanced learning, and the impact that technology may bring to a Baylor education.

The Committee also consulted with analysts from Gartner, Inc., an information technology research and consulting firm, to identify and evaluate key vendors with which to initiate conversations about launching several pilot initiatives at Baylor. Several other vendor options were also recommended by Baylor faculty and administration. The following vendors were investigated through phone conferences, webinars, on-site visits or online trial evaluations:

- Academic Partnerships
  http://academicpartnerships.com
- 2U (formerly 2tor)
  http://2u.com/
- All Campus
  http://www.allcampus.com/
- Blackboard Consulting Services
- Deltak (Wiley & Sons, Inc.)
  http://deltak-innovation.com
- Hobsons
  http://www.hobsons.com/
- Hot Chalk
  http://www.hotchalk.com/higher-education/
- RBC Ministries
  http://rbc.org/
- Pearson Embanet
  http://Embanet.com/

Based on conversations with analysts from Gartner, Inc., vendors visits, feedback from faculty and staff attending presentations, technical evaluations by staff from Information Technology Services, and the vendor responsibilities matrix provided by Metros and Getman, the Committee selected three vendor partners that offer the best fit for Baylor: Academic Partnerships, Pearson Embanet and 2U.

Academic Partnerships is a Dallas-based company that works primarily with online graduate and professional programs. They have demonstrated success extending the reach of more than 40 graduate programs both in the State of Texas and beyond.

Pearson Embanet provides comprehensive and à la carte services for developing online programs. They have a national reach and twenty years of experience. They focus primarily on graduate professional degrees online. This partnership would offer a suite of services
that could be contracted to supplement Baylor’s own efforts in offering technology-enhanced courses.

2U has successfully assisted major universities including the University of Southern California, Boston College, Emory University, the University of Notre Dame and Northwestern to create rigorous top-tier graduate courses online. At this time they are not accepting any additional graduate course work but are supporting the Semester Online Consortium to develop a rigorous array of undergraduate courses at nine top tier universities. The Semester Online initiative is an attractive option for Baylor because, as one of a very few charter affiliates, this partnership allows us to broaden our national exposure in technology-enhanced learning. As part of the consortium of schools in the Semester Online program, Baylor would provide our undergraduate students the opportunity to enroll in rigorous courses online for transfer credit while representatives from our own faculty would be able to be part of the online learning research initiatives and program development.

More detailed information on these three vendor partners is available in Appendix C of this report.

Alongside assessing vendor partners, the Committee also evaluated some of the tools suggested by these vendors that are not currently part of Baylor’s suite of technical resources. We evaluated Instructure’s Canvas learning management system, Pearson’s Open Class Courseware, Pearson Embanet’s online course management solution, Box—a secure and integrated cloud-based, file storage system—and Jenzabar’s Higher Reach module for enterprise management of non-degree programs such as continuing education, professional development, MOOCs or certificate programs. These tools were evaluated in conversation with key Baylor personnel who would be impacted by the adoption of any of these solutions.

Finally, the Vice President for Information Technology and Dean of University Libraries, Pattie Orr, who serves on the Committee and was integral to its work on this project, met regularly throughout the process of research with her fellow deans and administrative colleagues at Baylor. She used these meetings to inform the deans and the administrators of the work of the Committee and encourage them to be engaged with possible future pilot efforts. Through these meetings Orr discovered that there was excitement across the schools and academic divisions for specifically targeted ventures into online education. The most interest was shown for professional graduate degree programs, certificate programs, and limited numbers of online courses for transfer or summer school credit when students are away from Baylor. Constituents were interested in ways to extend the reach of Baylor and enhance its educational mission without changing its primary identity as a residential university.

From experts to vendor partners to university administration and faculty, the success of any venture Baylor may make into enriching technology-enhanced learning depends on the quality and commitment of each of these key partnerships. For this reason, the careful time and energy spent investigating the quality of vendors, the durability of available tools to support
online learning, and fostering positive relationships with deans and faculty has been invaluable to the success of this exploratory process.

ENGAGING THE FUTURE OF HIGHER EDUCATION AT BAYLOR

After thoughtfully considering the information gathered in this process, the Teaching, Learning and Technology Committee recommends moving forward with several pilot programs beginning in the 2013-2014 academic year.

First, the Committee recommends joining 2U’s Semester Online consortium as a charter affiliate to pilot rigorous technology-enhanced courses to undergraduates on a small scale during summer or while they are abroad. These courses would count as transfer credit for Baylor students and would be subject to the current transfer policy.

Second, we recommend executing a three-year contract with Academic Partnerships, a full-service online higher education vendor, to develop pilot degree programs, certificate programs, and professional development courses online in at least two different Baylor professional schools. These online programs would launch in spring 2014.

Third, the Committee recommends executing an agreement with Pearson Embanet as an alternative full-service online vendor to develop pilot degree programs and à la carte instructional design and support services.

Finally, we recommend signing an agreement with Jenzabar to license their Higher Reach solution that will allow for registration, payment, and consistent customer relationship management for non-degree seeking Baylor constituents such as those enrolled in professional development courses, certification programs, MOOCs, camps, continuing education courses, seminars and other non-academic Baylor-affiliated programs. Higher Reach would supplant the current model of using internally generated web forms that do not enable Baylor to capture this significant constituent data. It would provide an online entry portal for all Baylor online programs, and would function similarly to an implementation at Rice University.¹¹

Discussions are already underway with the deans of the School of Business, the School of Nursing, the School of Social Work and Truett Seminary to consider plans for pilots with at least two professional schools. Academic Partnerships met with the core MBA faculty and staff in the School of Business and with selected faculty in three graduate degree programs within the School of Nursing (Doctorate of Nursing Practice, Master of Science in Nursing and the FastBac program). Discussions have also been held with Truett Seminary deans and selected faculty in regard to both a certificate program and a Doctor of Ministry degree online.

The Dean of the School of Social Work has identified the interest of her faculty in developing two
technology-enhanced courses that are components of the second year of the Master of Social Work degree. Outcomes of these sections, taught synchronously with videoteleconference, will be compared to the classroom-taught sections of the same courses. The lessons learned will be applied to a possible pilot effort in which the entire second year of the Master of Social Work program would be offered in a technologically-enhanced format. In 2014, the School of Social Work plans to develop a Certificate in Gerontology by offering online, synchronous and asynchronous seminars for healthcare professionals, congregational leaders, and private and public-sector administrators. It is expected that these courses will be taught using Baylor’s Blackboard Learning Management System and may take advantage of the à la carte services offered by Pearson Embanet.

While each of these pilot programs will be built in partnership with a vendor, Baylor will require additional staffing to strengthen support for technology-enhanced learning overall at Baylor. The Committee recommends hiring at least two additional Online Teaching and Learning Services professional staff members in the Electronic Library to support faculty and serve as project managers/liaisons with our vendor partners. These staff members will assist those who use technology in courses and will help with the development of course design. Adding these professionals to our existing Online Teaching and Learning Resources team will maximize our vendor relationships and would serve as a catalyst for future development.

Since these pilot programs are experimental, it provides Baylor an opportunity to explore new generation online learning management systems. Instructure’s Canvas LMS provides a hosted solution that is completely compatible with Academic Partnership’s systems. This emergent platform offers an intuitive, device-agnostic interface, full integration with social tools already used by faculty and students, a robust dashboard that tracks learning analytics, and a host of tools that can expand the learning experience. The Committee recommends securing additional licenses to pilot the Canvas system with three to five additional individual courses in order to explore Instructure’s approach to offering flipped classroom and technology-enhanced learning as part of a residentially-based education.

As Baylor pursues these pilot opportunities, the Committee also recommends examining faculty workloads, expectations, and incentives for technology-enhanced learning. A model needs to be developed that incentivizes not only the university but also the academic units. If these pilots are successful and Baylor follows the pattern of many higher education institutions, more faculty will engage in forms of technology-enhanced learning, from asynchronous course activities to completely online courses. As this shift occurs, the university must continue to explore ways to strengthen support models for instructional design, media development, assessment and analytics. Additional considerations for moving forward with these and any future pilots include an assessment of the financial models associated with online education, legal and policy concerns, and issues related to integrating
technology-enhanced courses with administrative systems handling admissions, student information, registration, financial aid, and library services.

**Pro Futuris**

As the Teaching, Learning and Technology Committee looks beyond the launch of these pilot programs and the implementation of the other recommendations above, it also asks that the University consider two additional initiatives: certificate programs and online summer school courses.

Several schools have expressed a desire to offer professional certificate programs for online students. A certificate program would allow many employed professionals the ability to enhance their skills or gain the continuing education credits they may need for licensing or credentialing within their career fields. Academic Partnerships has expressed an interest in working with Baylor on certification programs, and we believe this will benefit Baylor by expanding its reach and its cultural influence.

Second, as noted in this report, our students have expressed an interest in taking Baylor courses toward their degree during the summer while living at home and working. Based on feedback from many individuals involved in the TLTC focus groups at the faculty, staff, and administrative levels, there was a strong sentiment for offering technology-enhanced courses in summer school for these students. The Committee would like to initiate a task force to look into the possibility of making this an option for Baylor (and possibly other) students for summer 2014.

In addition, the Committee recommends that the university explore the benefits of extending the Baylor brand by offering some type of free, online educational resources. By using emerging technologies in innovative ways, the university can reach a variety of constituents in a low-cost and sustainable manner.

Following successful engagement with online pilot programs and courses, we believe that implementing these initiatives will enhance the Baylor residential learning experience through the use of innovative tools and technology-enhanced pedagogies. Additionally, these initiatives would make some form of a Baylor education more accessible to those who may not have considered Baylor before, and would extend our graduate programs to regions where we have not previously had an influence.

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11 See the Susanne M. Glasscock School of Continuing Studies offerings at http://gcses.rice.edu/.

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ANNOTATED BIBLIOGRAPHY

GENERAL ARTICLES


“Although many colleges with distance-education programs are seeking authorization to operate in other states, a majority are turning away students in certain states as a way of avoiding the high cost of applying to operate in them . . . . The chief obstacle for many colleges is the fees to apply for authorization in each state, which could cost an institution tens of thousands of dollars if it sought authorization in all 50 states.”


In this article, the authors cite various university administrators to foreground a widening split between students who can afford to attend brick and mortar universities and those whose economic situations force them to choose an online education. The authors predict that mid-sized state institutions and less selective private universities will suffer the most financially as more students are drawn to online secondary education. The authors reference experts that underscore the importance of the academic support that traditional universities offer their students. Comparatively, support staff like tutors, librarians, healthcare personnel, academic advisors, financial aid advisors, etc. are almost impossible to replicate online.


Faculty at UC Santa Cruz have raised concerns about intellectual property rights and Coursera courses. Twelve years ago the Santa Cruz Faculty Association lobbied for a state law that faculty retain IP rights to their class materials. Before teaching Coursera courses, faculty were asked to sign away this right. Fears are raised as to who truly owns this content, and this concern ranges beyond UC Santa Cruz to other faculty groups. However, some faculty are not concerned, feeling comfortable to share their learning through Coursera courses. Coursera is also sympathetic with issues of faculty governance and willing to adjust contracts to reflect an institution’s concerns.


“For the universities that create free online courses, mainly major colleges with A-plus brands, relationships with Coursera, Udacity and edX could pay dividends. Mega classes, which can draw hundreds of thousands of students, may aid faculty retention, providing a perk for star professors. And all MOOC marketers promise to share revenues with partner universities, although the path to profitability is murky.” Wallis notes that some believe that free online courses will eventually emerge in ways that will form free degree programs which may cut into the profits of for-profit online degrees and certificate programs. Others believe that MOOCs will serve more as a means of attracting students to an initial course or two that may be followed up with paid online courses to complete the certificate or degree.

PEDAGOGY


In this article, the authors explore flexibility and self-regulated learning as attributes in online learners. Based on their research,
the authors make recommendations as to the most important pedagogical approaches to online courses. The results show the positive effects of flexible learning and its three factors, time management, teacher contact, and content, on self-regulated learning strategies (cognitive, metacognitive, and resource-based). Groups that have high flexibility in learning indicate that they use more learning strategies than groups with low flexibility.


Online education increasingly puts emphasis on collaborative learning methods. Despite the pedagogical advantages of collaborative learning, online learners can perceive collaborative learning activities as frustrating experiences. The purpose of this study was to characterize the feelings of frustration as a negative emotion among online learners engaged in online computer-supported collaborative learning (CSCL) experiences and, moreover, to identify the sources to which the learners attribute their frustration. The analysis of the students’ sources of frustration in online CSCL is followed by a list of recommendations to the distance education stakeholders, aiming to reduce students’ frustration and improve the quality of their experiences in online CSCL contexts such as the UOC.


“Making technology such as online learning accessible is ethically appropriate, economically sensible, and self-serving, as everyone may need accessible technology as the population grows older. And it is also the law…. A number of laws, standards, and guidelines exist to help make online courses accessible to students with disabilities” (p. 47). “Students with disabilities cannot be denied the opportunity to take online courses, assuming they meet the academic prerequisites required of all students for the course. However, like all other students, those with disabilities should consider their own preferred learning style to determine if an online course provides a good fit” (p. 48). Article discusses the advantages and disadvantages of online learning specifically for students with disabilities.


Despite the high popularity of personal use of online social media, a low percentage of students and instructors use them for educational purposes. This qualitative study explores the use of social media among faculty in the discipline of public administration in the United States. This study provides qualitative empirical support for social learning theories while offering strategies for and examples of how social media can be used to connect formal and informal learning.


Virtual schooling is a recent phenomenon in K-12 online learning. As such, the roles of the online teachers are emerging and differ from those of the traditional classroom teacher. Using qualitative interviews of eight virtual high school teachers, this study explored teachers’ perceptions of their online teaching role. Teachers expressed a sense of disconnection from their students, the profession, and their peers as a result of limited interactions due to significant institutional barriers. Researchers discuss the implications of this disconnection as well as future avenues for research.


Michael Marcinkowski, a third-year doctoral student at Penn State’s College of Information Sciences and Technology, is researching how different technologies actually shape student-professor interactions. “[O]nline educational tools are not simply a means to an end but serve as part of the dialogue between instructors and students.” While face-to-face interactions are lost in online or distance education, many new opportunities arise in the online space, and the range of these
opportunities depend upon the way the technological “bridge” shapes the encounter between professor and learner. Analyzing the different “bridges” that are appearing with the expansion of MOOCs and other emergent online education platforms will help design future learning interfaces. The technologies leveraged in online education change the nature of education - both in general and specifically - as people interact with these systems. Using the analytics gathered from MOOCs will help improve online education and further tailor the learning experience to each student.


Connectivism has been offered as a new learning theory for a digital age, with four key principles for learning: autonomy, connectedness, diversity, and openness. In this paper the authors draw on personality and self-determination theories to gain insight into the dimensions of individual experience in connective environments and to further explore the meaning of autonomy, connectedness, diversity, and openness. The authors suggest that definitions of all four principles can be expanded to recognize individual and psychological diversity within connective environments. They also suggest that such expanded definitions have implications for learners’ experiences of MOOCs, recognizing that learners may vary greatly in their desire for and interpretation of connectivity, autonomy, openness, and diversity.


Marcum is the managing director of ITHAKA http://www.ithaka.org/people/deanna-marcum and a previous Associate Librarian of Congress. ITHAKA is the organization behind JSTOR and Portico etc. that is focusing its research on pedagogy related to online courses. One of its recent studies concluded, “No groups of students particularly benefited from or were harmed by the hybrid format consistently across multiple learning outcomes.” Students “learned just as much in the hybrid format” as in the traditional format in terms of course completion, course grades, and performance on a national test. These results suggest that the most common reason given by faculty for resisting the use of ILO-type [Interactive Learning Online] instruction—fear that learning outcomes “will be hurt”—is “not well founded.”


Significant advancements in online learning have dramatically affected pedagogy for distance learning. “While online learning technologies have advanced dramatically, the quality of the teaching and learning experience online has not. Much online learning still emulates the one-way communication of correspondence and television by capturing the classroom lecture or requiring student to slog through tomes of uploaded written material.” This essay offers practical advice, based on the authors’ experiences at USC, for institutions that plan to partner with vendors in order to create high quality online programs.


This article recognizes building rapport as vital in distance education (DE). The authors identify six categories of rapport-building in DE as follows: Recognizing the person/individual; Supporting and monitoring; Availability, accessibility, and responsiveness; Non text-based interactions; Tone of interactions; Non-academic conversation/interactions. The authors break the categories into subcategories and provide indicators for each one.

The authors present a case study of learners’ perspectives and experiences in an online course taught using the Elgg online social network. Findings from this study indicate that learners enjoyed and appreciated both the social learning experience afforded by the online social network and supported one another in their learning, enhancing their own and other students’ experiences. Conversely, results also indicate that students limited their participation to course-related and graded activities, exhibiting little use of social networking and sharing. Additionally, learners needed support in managing the expanded amount of information available to them and devised strategies and “workarounds” to manage their time and participation.

Tauber, Todd. “The dirty little secret of online learning: Students are bored and dropping out.” Quartz. 21 March 2013.

“Online education has been around for a long time. But massive open online courses are finally making it respectable. Maybe even cool. Let’s not forget, though, that they are still experiments. And despite being ‘massively overhyped’ (even in the eyes of their most dyed-in-the-wool supporters), they are not actually having a massive impact on students. . . Yet most of today’s online courses basically consist of reading assignments, lecture videos, homework problems and quizzes. They might be broken up into short lessons, but they still follow the same old linear, 14- to 20-week long structure of a semester.” Tauber recommends that online education needs to grab and hold the learners’ attention and become much more mobile, personal and social.


Tucker explains that the central idea behind the “flipped classroom” is to “flip the common instructional approach: With teacher-created videos and interactive lessons, instruction that used to occur in class is now accessed at home, in advance of class. Class becomes the place to work through problems, advance concepts, and engage in collaborative learning. Most importantly, all aspects of instruction can be rethought to best maximize the scarcest learning resource—time.” One teacher noted that while some students still fail to come prepared for class, flipping the classroom has fostered “better relationships, greater student engagement, and higher levels of motivation.”

MOOCs [Massive Open Online Courses]


This article explores how Google’s first foray into online education might affect the market place. Arnold argues that Google’s announcement regarding beta testing of an open source education module to be used with Google+ and Google Hangout, is a well calculated move that brings Google’s advertising centered revenue model to bear on open source education. Arnold also offers a general view of the current players in open source education.


In this article, Bell explores connectivism in relationship to MOOCs. What this article does best, is help explain what cMOOCs are and why they are important to online education. Because of its presence in massive open online courses (MOOCs), connectivism is influential in the practice of those who take these courses and who wish to apply it in teaching and learning. Thus connectivism is perceived as relevant by its practitioners but as lacking in rigor by its critics. Five scenarios of change are presented with frameworks of different theories to explore the variety of approaches educators can take in the contexts for change and their associated research/evaluation.


Carey prompts attention to the future of MOOCs, evaluating their benefits. He questions how people are able to take these courses yet are not allowed to receive credit. He also addresses how higher institutions like Harvard and MIT are joining the “bandwagon” and shows how public perception is taking MOOCs seriously, thus proving the real role that MOOCs will play in the future of education. He concludes that the “interesting questions now revolve around financing, quality assurance, and—most important—credit.”
“Massive open online courses (MOOCs) will not replace universities but will force them to rethink how they educate their students.” This insight offered by Coursera founder Andrew Ng and edX President Anant Agarwal was the characteristic sentiment of a panel discussion during SXSWedu. While there is a lot of hype around MOOCs right now, which the panelists suggested is a good thing since it centers on education, they will create a more open environment for access to higher education. The MOOC founders distinguished these platforms from correspondence courses because of the tools that allow for student collaboration. The two continue to experience challenges as MOOCs develop. While math-based courses lend themselves to easy computer scoring, humanities courses do not, so a peer grading environment has been developed that will be employed in these environments. These innovations will give MOOCs increased credibility as they are considered for college credits. The panelists do not see MOOCs and online education supplanting the traditional university, but certainly challenging its pedagogy and expanding its socioeconomic and geographic reach.


This article relates the findings of the “largest-ever survey of professors who have taught MOOCs . . . [showing] that the process is time-consuming, but according to the instructors, often successful. Nearly half of the professors felt their online courses were as rigorous academically as the versions they taught in the classroom” with 81 percent indicating that teaching a MOOC caused them to divert time from other duties such as research, committee service, or traditional teaching. The median number of students per class was 33,000. The average pass rate was 7.5 percent, and the median number of passing students was 2,600. In lieu of credit toward a degree, most professors offered certificates of course completion.


This article provides an overview of several key facilitators for MOOCs (Khan Academy, Udacity, Coursera, and EdX) as well as an assessment of their effectiveness. Delbanco offers caution about the usefulness of such courses and also points out some of the harmful secondary effects caused by the creation of megastar professors. He concludes, “No matter how anxious today’s students may be about gaining this or that competence in a ferociously competitive world, many still crave the enlargement of heart as well as mind that is the gift of true education. It’s hard for me to believe that this kind of experience can happen without face-to-face teaching and the physical presence of other students. . . . In one form or another, the online future is already here. But unless we are uncommonly wise about how we use this new power, we will find ourselves saying, as Emerson’s friend Henry David Thoreau said about an earlier technological revolution, ‘We do not ride the railroad; it rides upon us.’”

EDUCAUSE. “What Campus Leaders Need to Know About MOOCs.” An EDUCAUSE Executive Briefing. EDUCAUSE. edu, 2012.

This briefing notes that MOOCs are “courses delivered over the web to potentially thousands of students at a time. . . . the business models and return on investment are still evolving. . . . most MOOCs rely on traditional lecture approaches . . . . Institutions may experiment with MOOCs as a brand extension; others must determine how MOOCs fit their instructional portfolio. . . . MOOCs may catalyze new approaches to credentialing.”

Gartner is the world’s leading information technology research and advisory company which reports that Massive Open Online Courses allow anyone anywhere to take a class or course online for free. MOOCs present the opportunity for education CIOs and IT leaders to re-examine their institutions’ position on content, course delivery and the total cost of an education.


The University of Central Florida began offering online courses in 1996 and has continued to do so with a high level of both student and strategic success. He argues that for all the fuss by higher education institutions about the emergence of MOOCs, online learning “has been an increasing part of the higher education experience for years and has accumulated a convincing body of evidence supporting its effectiveness.” He references the Babson Research Group study from January 2013 that shows that on average nearly 1/3 of all college students take at least one course online. He then goes on to discuss the positive impact of online learning from both a student and institutional perspective, even suggesting in the face of current faculty resistance that taking courses online facilitates learning in measures “equal to or slightly higher than in face-to-face courses.” Online higher education is not new and MOOCs simply provide an opportunity to learn more about this mode for learning and engagement and to expand institutional reach.


Jordan provides a fairly comprehensive list of MOOC courses and their completion rates. The average size of a MOOC is about 50,000 students, and the completion rate averages less than 10 percent. “My draft graph synthesising everything I’ve found so far can be found here: http://www.katyjordan.com/MOOCProject.html Clicking on any of the data points will pull up a bubble with more information about that course, and a link back to the data source.”


This article reports the findings of a survey of professors (103 of 184 respondents) who have taught at least one MOOC. The survey found that these professors invested a significant amount of time into their MOOCs, often at the expense of other responsibilities including research and administrative duties. Nevertheless, MOOC professors are optimistic about the potential benefits of these courses with most thinking that MOOCs will reduce the cost of education even though they and their institutions are still reluctant to offer credit for these courses.


Explores the decision of Amherst College faculty to reject an invitation to offer MOOCs through edX. Faculty were concerned about the information dispensing model of education assumed in MOOC-like endeavors. They were also worried about the threat MOOCs pose to vulnerable colleges through the centralization of higher education and creating conditions that make the B.A. degree obsolete. The final concern was the privatization required to offer online education when Amherst has the resources to initiate these ventures on their own if they choose. Richard Garrett of Eduvenutres believes this decision may mark “the early stages of that honeymoon period coming to an end” as universities take a more cautious stance to the MOOC phenomenon. Peter Stokes of Northeastern University believes this caution comes from schools beginning to understand the costs involved in offering MOOCs – both fiscal and institutional.


This paper examines how emergent technologies could influence the design of learning environments. It pays particular attention to the roles of educators and learners in creating networked
learning experiences on massive open online courses (MOOCs). The research shows that it is possible to move from a pedagogy of abundance to a pedagogy that supports human beings in their learning through the active creation of resources and learning places by both learners and course facilitators. This pedagogy is based on the building of connections, collaborations, and the exchange of resources between people, the building of a community of learners, and the harnessing of information flows on networks.


“MOOC mania...shows no sign of abating.” This article explains current developments made by companies such as Udacity and Coursera, by institutions like MIT and by individual professors. In the past, online education did not consistently provide quality education or results; however, improvements are being made and new ideas are being tested. For example, Sebastian Thurn of Udacity wants to “develop a MOOC model in which students learn by solving problems, not by listening to a professor tell them how to solve them.” Mangan holds that the beginning of credentialing also ensures the quality as well as profitability of online education. The article, however, concludes that “MANY questions REMAIN,” and there is a caution that we cannot have the “knee-jerk reaction...that MOOCs are going to save us.”

Marklein, Mary Beth. “College council to weigh in on granting credit for online work,” *USA Today*, Nov. 14, 2012.

The American Council on Education is determining the merit of MOOCs, specifically regarding whether the “quality of courses offered through MOOCs are equivalent to courses offered in traditional classrooms” as well as the “long-term potential.” Acceptance by the ACE would “enhance the value of MOOCs to universities.” One of the council’s plans is the creation of “teams of faculty that will examine the content and rigor of particular courses to evaluate whether they should be recommended for college credit.”


Article observes the influx of interest and attention to online education by higher elite education (e.g. Harvard, MIT, Notre Dame), investment foundations and MOOC companies, such as edX, Udacity and Coursera. It raises questions about the quality and future of online courses. These are concerns raised by other universities, such as Vanderbilt, that are cautious about entering into this arena.


In the past MIT provided “free lecture videos and other course materials published online,” but now MIT “plans to release a fresh batch of open online courses—and, for the first time, to offer certificates to outside students who complete them.” This is part of a new venture called MITx [which began in spring 2012]. MIT will charge a “modest fee” for certificates, which is the crucial difference, and students will need “to demonstrate the mastery of the subject...just like an MIT student does.” These two factors will help to evaluate the long-term sustainability of such programs. Lastly, MIT hopes that this idea will spread, and they are willing to share their “open-learning software at no charge, so other educational institutions can adopt it.”


“Online education has been around for a long time. But massive open online courses are finally making it respectable. Maybe even cool. Let’s not forget, though, that they are still experiments. And despite being “massively overhyped” (even in the eyes of their most dyed-in-the-wool supporters), they are not actually having a massive impact on students. . . . Yet most of today’s online courses basically consist of reading assignments, lecture videos, homework problems and quizzes. They might be broken up into short lessons, but they still follow the same old linear, 14- to 20-week long structure of a semester.” Tauber recommends that online education needs to grab and hold the learners’ attention and become much more mobile, personal and social.

Vardi offers a pithy editorial concerning the future of the college campus in the face of online education. Citing libraries as having undergone a similar struggle, Vardi sounds a hopeful note, predicting that as long as campuses continue to offer students valuable services and engaging environments, students will continue to desire the brick and mortar experience. However, those campuses that offer little in the way of university culture, will suffer and many will fail.


“This paper is based upon a presentation given to the board of directors of the Association of Governing Boards of Universities and Colleges. Mr. Voss is the vice president and CIO at the University of Maryland’s flagship campus in College Park and also a member of the EDUCAUSE board of directors, serving as vice chair for 2013.” Voss provides a succinct overview of MOOCs and their current and potential impacts on university-level education. In particular, he notes that MOOCs are simply one of the many forms of online education and that the key point about online education is not about information technology but rather about teaching and learning. Pedagogy is changing even for residential courses as they incorporate more online elements. The paper also highlights several of the key issues related to online education and provides a brief survey of the online learning landscape and explanations of a few online terms and concepts.


State universities in CA are looking to MOOCs to reduce education costs and system debt. Working with Udacity, they are creating a test system of open online courses with the option of receiving credit at reduced costs ($150 versus $450-$750 regularly). Udacity seeks to ensure that students will complete the courses, which may prove challenging, and they are considering the role of mentors to hold students accountable and other forms of assistance. The University of California system is also deciding about this option.

DISCIPLINE-SPECIFIC ARTICLES


“The educational process was ‘fixed-location,’ meaning that learning occurred primarily within the confines of the law school classroom space, and was generally propelled by Socratic-type questioning methods of students. . . . New learning environments can be created by using available and accessible technology or by refocusing the use of technology from an administrative aid for faculty to a tool for teaching. . . . The real potential of podcasting is best achieved by developing podcasts of supplementary materials designed specifically for the format of the class. . . . Promoting portable learning to law professors raised in a traditional 20th century environment will be difficult and sometimes insuperable.”


This paper demonstrates online education can be effective for STEM courses. The article content is somewhat “clinical,” but it demonstrates effective “dual mode” education in a basic engineering course. “...content is delivered simultaneously to on-campus students and online students (dual delivery mode) using a combination of Tablet PC functionality and Elluminate Live! software...”


This article posits the idea that law schools are getting left behind in a national trend to add distance education to the higher education curriculum to the detriment of legal education.
and law students. Approximately half the article describes reasons for the growth in distance education in non-law academia, followed by reasons why distance education has not impacted law schools. The remainder of the article discusses three changes taking place that will bring distance education to law schools. Specifically, students expect more, students are seeking a less expensive alternative to the brick and mortar law school, and a student population with non-traditional goals and demographics is starting to enter law school.


This paper presents a survey of students and educators regarding perceptions among engineers as to the effectiveness of online engineering education. While many studies show that online and dual mode courses can be highly effective for engineering education, many engineering educators refuse to embrace online instruction methods or approaches. The nuances of the design process, engineering laboratories, and effective communication are key concerns of both educators and students.


“For a long time, teaching technology, or more correctly its absence, made the physical aggregation of students the most efficient arrangement, with teaching a wholesale (lecture) rather than retail (individual tutorial) activity, partly because the incremental costs of adding another listener are quite low, and partly because it generates positive network effects by students encouraging and teaching each other. ... If alternative instructional technologies and credentialing systems can be devised, there will be an out-migration from classic campus-based higher education. ... The tools for such alternatives could be, in particular, online multimedia lectures by outstanding scholars and teachers; electronic access to interactive reading materials and study exercises; some electronic interactivity with the faculty and teaching assistants; “virtual” clinical exercises, and electronic exams when the student is ready. ... All of these favor personal interaction both between teachers and students, and among students themselves. ... But the major problem is the economics of face-to-face education. ... The result will be a law school environment with fewer schools, lighter resident staffing, higher student count, greater specialization and differentiation, more electronic techniques, greater import and export of instruction, more legal programs aimed at non-lawyers (including to other countries), a much greater role for for-profit institutions, more public/for-profit collaborations, and more international collaborations.”


“The course was a pilot project arranged through the Brandeis School of Law in Louisville and Georgia State University College of Law. ... Some of the questions asked were: would the interaction be equivalent to a live classroom?; how would I meet with students before and after class?; was the technology sufficient to have a class discussion between the two groups?; and how would the exam work? An overriding concern expressed by some who were bold enough to voice these concerns was whether distance learning would cause us to lose our jobs. ... This question emphasizes the need to include extra time in the class schedule. ... It was good to meet the students at Louisville and for the students at Georgia State to be on the receiving end in a reverse distance learning setting. ... Depending on the technology being used, it may require looking at students both in the classroom and also at the other location who are on a screen. ... There are also some strong positives to teaching a distance learning class. ... When seeking the approval of a distance learning course from faculty, the one response you can give to the faculty member who has concerns that the technology will replace his or her job is that he or she can feel very secure.”


This paper focuses in on Problem Based Learning (PBL) as an effective means for online education in STEM courses. The approach presents yet another method for teaching technical information online.
**GLOSSARY**

(* indicates key terms)

2U*
Formerly known as 2tor, Inc., develops high-quality online programs in partnership with world-class universities. Founded in 2008 by a team of education veterans, 2U provides universities with the web technologies, infrastructural support and capital they need to transform their on-campus programs into state-of-the-art web based programs. One of its projects, Semester Online, enables students who are part of a consortium of schools and affiliate schools to take online courses within this network.

Academic Partnerships*
An online higher education service provider, partnering with universities to develop strong online degree programs. Partner universities maintain control of the admissions, enrollment, curriculum, accreditation and credentialing. Meanwhile, Academic Partnerships works behind the scenes to help faculty convert their courses to an online platform. Academic Partnerships helps recruit online learners and provide hands on support to ensure that students move through their degree programs to graduation. Through a partnership with Academic Partnerships, universities are able to increase access to higher education and attain global reach.

ALISON
ALISON, which stands for “Advance Learning Interactive Systems Online,” is a free online learning resource for basic and essential workplace skills. ALISON provides high-quality, engaging, interactive multimedia courseware for certification and standards-based learning. The mission of ALISON is to enable anyone, anywhere, to educate themselves for free via interactive, self-paced multimedia. Its creators believe that through ALISON, the cost of access to high-quality education can be removed. ALISON is a capable platform for all certifiable or standards-based learning for every subject and can be made available for free online. ALISON believes that Article 26 of the United Nations Universal Declaration of Human Rights which states “Everyone has the right to education. Education shall be free...” will, through ALISON, become a reality.

asynchronous learning*
When learners participate in an online learning course at different times, it is known as asynchronous learning. This might also be called eLearning or web-based training (WBT). Asynchronous learning allows learners to go through a course at their own pace and on their own schedule.

audio conferencing
Audio conferencing refers to a connection between three or more locations that involves a voice-only connection. This can be done via telephone or via the computer. When the audio conference occurs between computers over the Internet, it uses a technology known as VOIP (Voice Over Internet Protocol).

blended learning*
Blended learning (also called hybrid learning) is an instructional approach that includes a combination of online and in-person learning activities. For example, students can complete online self-paced assignments by a certain date and then meet on-site or online for additional learning activities.

Canvas (Instructure)
Instructure is an educational software company based in Sandy, Utah. It is the developer of the Canvas learning management system, which is a comprehensive software package that competes with such systems as Desire2Learn, the Blackboard Learning System, Moodle, and the Sakai Project.

cMOOC*
cMOOCs (or connectivist Moocs) focus on knowledge creation and generation rather than knowledge duplication. See connectivism (An example of a cMOOC course outline can be found here: http://ck11.mooc.ca/how.htm)
certificate program*  
A college certificate is a quickly obtained credential awarded by an educational institution. Often lasting just a few months, certificate programs are shorter than two-year associate or four-year bachelor’s degree programs and usually allow students to enter the workforce much more quickly by focusing exclusively on a particular line of work.

craft approach  
The traditional approach to teaching where individual teachers are fully responsible for course design, development and instruction. (See Moore & Kearsley (1996) p. 7)

distance education (DE)*  
Teaching and learning in which learning normally occurs in a different place from teaching. Distance Education (or Distance Learning) occurs when students and their instructors are in different geographical locations and the instruction occurs on an electronic device, such as a computer or mobile phone. The learning can occur in a synchronous environment, in which all participants are connected at the same time or in an asynchronous environment, when participants are engaged in learning at different times.

EDUCAUSE*  
EDUCAUSE is a nonprofit association and the foremost community of IT leaders and professionals committed to advancing higher education through research, publications, conferences, and career development.

coursera*  
Coursera is an educational technology company founded by computer science professors Andrew Ng and Daphne Koller from Stanford University. Coursera works with universities to make some of their courses available online, and offers courses in engineering, humanities, medicine, biology, social sciences, mathematics, business, computer science, and other areas. The contract between Coursera and participating universities contains a “brainstorming” list of ways to generate revenue, including certification fees, introducing students to potential employers and recruiters (with student consent), tutoring, sponsorships and tuition fees. As of March 2012, Coursera was not yet generating revenue. That July, certification and the sale of information to potential employers was being explored. Thus far the company has been funded by $16 million in venture capital awarded in April 2012.

dedx*  
edX is a massive open online course platform founded by Massachusetts Institute of Technology and Harvard University to offer online university-level courses in a wide range of disciplines to a worldwide audience at no charge. The two institutions have each contributed $30 million of resources to the nonprofit project. edX launched in fall 2012 and builds on MITx, a similar project launched by MIT in December 2011. The “learning platform” will be developed as open-source software and made available to other institutions of higher learning that want to make similar offerings. edX announced a plan to open source all the code by summer 2013. There are plans to allow other schools to offer courses on the edx website also. Plans are to create online learning software that moves beyond videos of lectures to interactive experience. For a modest fee certificates of successful completion will be offered but not college credit. Neither MIT nor Harvard students may take the online courses for credit; they will be used to enrich their learning experience. In addition to educational offerings the project will be used to research learning and distance education.
**eLearning***
eLearning (short for electronic learning) is an umbrella term that refers to all types of training, education and instruction that occurs on a digital medium, like a computer or mobile phone.

**flipping the classroom**
Flipping the classroom refers to the use of online tools by the instructor to prepare students for the classroom topic prior to their arrival. In this way, the instructor may use class time to discuss rather than deliver content.

**for-credit certificate programs**
Certificate programs in which students receive college credits for each class that can be used towards a degree, if they choose.

**instructor led training (ILT)**
ILT typically refers to providing instruction in a classroom environment where the instructor and learners are together at the same time and in the same physical location.

**interactive multimedia***
Interactive multimedia allows learners to provide input to an online course and receive feedback as a result of the input. The input might consist of a mouse click or drag, gestures, voice commands, touching an input screen, text entry and live interactions with connected participants.

**Khan Academy***
The Khan Academy is a non-profit educational website created in 2006 by American educator Salman Khan, a graduate of MIT and Harvard Business School. The stated mission is “providing a high quality education for anyone, anywhere.” The website supplies a free online collection of more than 4,000 micro lectures via video tutorials stored on YouTube teaching mathematics, history, healthcare, medicine, finance, physics, chemistry, biology, astronomy, economics, cosmology, and organic chemistry, American civics, art history, macroeconomics, microeconomics, and computer science. Khan Academy has delivered over 240 million lessons.

**learner-focused**
Descriptive of a humanistic perspective in education in which the learner is assumed to have a high degree of autonomy.

**learning management systems (LMS)***
Synchronous and asynchronous learning environments that incorporate tools for teaching and learning management (i.e. Blackboard, WebCT, Angel, Canvas, etc). They are electronic platforms that can be used to launch and track e-learning courses and enhance face-to-face instruction with online components. Some also manage classroom instruction. They are sometimes called virtual learning environments (VLE) or course management systems (CMS). Corporate learning management systems are also designed to manage classroom instruction.

**mobile learning**
Learning that takes place on a hand-held device, such as a mobile phone, that can take place anytime and anywhere.

**multimedia**
Multimedia refers to the presentation of information and instruction through a combination of graphics, audio, text, or video. Multimedia instruction is often interactive.

**MOOC***
A Massive Open Online Course designed for a very large enrollment, offered on the World Wide Web by an educational institution and typically free of charge. See xMOOC and cMOOC

**non-credit certificate programs**
A certificate program in which students do not receive college credits for each class, which means classes cannot be counted towards a degree. Students may receive CEUs, or Continuing Education Units, which may be used to fulfill some professional requirement. Classes are usually taken through a department called Continuing Education, Continuing Studies, or Professional Studies.

**online learning**
The term online learning is often used synonymously with eLearning. It is an umbrella term that includes any type of learning accomplished on a computer and usually over the Internet.
**Online Learning Exchange (OLE)**

Online Learning Exchange, created by Pearson publishing, is a web and mobile-ready environment where high-quality content combined with flexible tools enable you to exchange ideas, collaborate, and enhance your teaching and improve your students’ learning experience. OLE allows users to quickly search for K-12 content by keyword, course, and standard; build customized lessons and tests; upload content right alongside Pearson content; collaborate with students and teachers; access eTexts, and track student progress via homework and tests.

**Peer to Peer University (P2PU)**

Peer to Peer University (P2PU) is a nonprofit online open learning community which allows users to organize and participate in courses and study groups to learn about specific topics. Peer 2 Peer University was started in 2009 with funding from the Hewlett Foundation and the Shuttleworth Foundation, with its first courses in September of that year. An example of the “edupunk” approach to education, P2PU charges no tuition and courses are not accredited. However, some courses in “The School of Webcraft” provide the opportunity for recognition of achievements through the Open Badges project. P2PU offers some of the features of massive open online courses, but is focused on people sharing their knowledge on a topic or learning about a topic offered by another user with aDIY wiki-type mentality. Unlike typical massive open online courses anyone can create a course as well as take one. Additionally because of its less hierarchical nature, P2PU activities need not necessary be Courses; the admin of the learning environment can select from Study Group and Challenge as well as creating their own term.

**Self-paced learning**

Self-paced learning refers to the type of instruction that allows a person to control the flow of the courseware. It implies the learning environment is asynchronous.

**Semester Online**

Semester Online is the first-of-its-kind program offering rigorous, for-credit courses from prestigious colleges and universities to top undergraduate students — online. The Semester Consortium includes top-ranked schools including Boston College, Brandeis University, Emory University, Northwestern University, the University of North Carolina at Chapel Hill, University of Notre Dame and Washington University in St. Louis. Semester Online offers the opportunity to access great professors and schools and still work, travel, participate in off-campus research programs or manage personal commitments that in the past would have meant putting studies on hold. The program is delivered through a virtual classroom environment and interactive platform developed by 2U.

**Social media learning**

Social media learning refers to the acquisition of information and skills through social technologies that allow people to collaborate, converse, provide input, create content and share it. Examples of social media learning can occur through online social networking platforms, blogs and microblogs (like Twitter), online talk radio and wikis.

**Streaming media**

Streaming media refers to video and audio that is downloaded to a computer from the Internet as a continuous stream of data and is played as it reaches the destination computer.

**Synchronous learning**

When learners participate in an online learning course at the same time but in different locations, it is known as synchronous learning. Synchronous learning allows learners to interact with the instructor and other participants. This is done through software that creates a virtual classroom.

**Teacher-focused**

An approach to education in which the teacher is the holder of knowledge to be dispensed to students; can be contrasted with “learner-focused.”

**Telecourse**

In distance learning, a course that consists of a radio or television broadcast.
**transactional distance**
Theory developed by Michael Moore which emphasizes that distance is a pedagogical/andragogical phenomenon which must be addressed by design, curriculum, forms of communication and interactions, and management of distance education programs.

**Udacity***
Udacity is a private educational organization founded by Sebastian Thrun, David Stavens, and Mike Sokolsky. According to Thrun, the origin of the name Udacity comes from the company’s desire to be “audacious for you, the student”. Udacity is the outgrowth of free computer science classes offered in 2011 through Stanford University. As of 4 February 2013, Udacity has 20 active courses. Thrun has stated he hopes half a million students will enroll, after an enrollment of 160,000 students in the predecessor course at Stanford, Introduction to Artificial Intelligence, and 90,000 students had enrolled in the initial two classes as of March 2012. Udacity was announced at the 2012 Digital Life Design conference. Udacity is funded by venture capital firm, Charles River Ventures, and $300,000 of Thrun’s personal money. In October 2012 the venture capital firm Andreessen Horowitz led the investment of another $15 million in Udacity.

**Udemy**
Udemy serves as an online platform that allows instructors to build online courses on topics of their choosing. Using Udemy’s content platform, they can upload video, PowerPoint presentations, PDFs, audio, zip files and live classes to create courses. Instructors are also allowed to engage and interact with users via online discussion boards. Students can take courses across a breadth of categories, including business and entrepreneurship, academics, the arts, health and fitness, language, music, and technology. Most courses on Udemy are free, but some are paid. Paid courses typically range in price from US$5 to $250.

**video conferencing**
Video conferencing refers to the use of video technology (both hardware and software) to create a virtual meeting between two or more people in different physical locations. Participants can see and hear each other through this technology.

**virtual classroom**
The virtual classroom refers to a digital classroom learning environment that takes place over the Internet rather than in a physical classroom. It is implemented through software that allows an instructor and students to interact.

**Virtual learning environment (VLE)***
Used instead of the term Learning Management System. Software-mediated interface that supports online learning.

**Virtual learning platform (VLP)***
The course management system that supports online learning using Blackboard, Moodle, or WebCT.

**Vlog**
A blog based on video content.

**web conferencing**
Software applications that enable meetings over the Internet. They add presentation, visual, audio, and group interaction tools to chat functions.

**webinar**
A webinar is a seminar or workshop in which the facilitator and participants view the same screen at the same time. Usually the webinar has an audio component that the facilitator controls and functionality that allows participants to chat by entering text, answering polls, raising their hands and asking questions.

**web based training (WBT)**
WBT refers to all types of digital instruction in which the learning material is presented via the Internet.

**xMOOC***
xMOOCs are based on the traditional classroom teaching model where the teacher teaches and the students learn and consume the knowledge from the course (reading texts, watching lectures, etc.). Students are then assessed on what has been taught or covered in the videos. xMOOCs focus on knowledge duplication.
APPENDICES
APPENDIX A:
ENVIRONMENTAL REVIEW OF ONLINE EDUCATION

Peer Institutions

Boston College
Has a unique online portal and an Extended Education office consisting of instructional designers, video producers, and support staff who specialize in online education. They offer a host of Master’s degrees, Doctoral degrees, Online Graduate Certificates, Non-Credit Professional Certificates, Professional Certificates, and a few online undergraduate and graduate courses.

Fordham University
Fordham currently offers two online degrees and a Graduate Certificate through the Graduate School of Religion and Religious Education (GSRRE). Their programs are a joint effort between Fordham’s Academic Departments and the Department of Instructional Technology Academic Computing (ITAC).

Northeastern University
Northeastern offers over 60 online programs including certificates, associate and bachelor’s degrees, master’s degrees, and doctoral degrees. Northeastern is a private, research university with a residential campus that is similar to Baylor’s in terms of the number and quality of undergraduate and graduate students. It also offers some helpful demos and explanations about online courses.

Northwestern University
Northwestern is part of the Semester Online consortium which partners with 2U in order to offer a limited number of high quality online courses. They are “part of a consortium [Semester Online] that includes Brandeis University, Emory University, Northwestern University, The University of North Carolina at Chapel Hill, University of Notre Dame, University of Rochester, Vanderbilt University and Washington University in St. Louis. The consortium is partnering with 2U, formerly known as 2tor . . . [to offer online courses that] will feature the same faculty and curricula as their brick-and-mortar counterparts, and they are delivered live on an interactive, online platform. Through a state-of-the-art virtual classroom, students would collaborate with peers and be guided by [consortium faculty].” A limited number of students from consortium schools and affiliate schools will be able to take these courses.

Notre Dame University
Notre Dame is also part of the Semester Online consortium which partners with 2U in order to offer a limited number of high quality online courses.

Rice University
Rice has partnered with Coursera to offer free online courses. “The Center for College Readiness department offers online programs designed to meet the needs of busy educators around the world.
These high-quality programs will use Owl-Space, Rice University’s online and easily accessible learning management system, to provide professional development opportunities for teachers. Participants completing the programs will receive Continuing Professional Education (CPE) credits or Continuing Education Units (CEU).”

**Southern Methodist University**
SMU offers an online Certificate of Professional Development. “CAPE partners with national leaders in online teaching and learning to offer a growing library of self-paced, practical, career-enhancing courses available at your home or office desktop.” Courses are available through LERN or MindEdge.

**Stanford University**
Stanford Online promises to provide high-quality educational experiences to its students and to people around the world while expanding its understanding of teaching and learning in new contexts, experimenting with innovative approaches to online teaching and learning, developing new educational programs and options within existing programs, exploring the possibility of extending resources to other universities and providing public global access to selected learning experiences as a public service. Stanford Online also imagines it will support faculty innovation in teaching through researching new teaching and learning models, developing innovating course content and leveraging effective online learning interfaces.

**Syracuse University**
Syracuse University offers a number of undergraduate and graduate online credit courses that may be used toward degree programs at SU or other schools. It is the responsibility of the student to verify that SU credits will transfer to their home school. These classes are conducted over the course of a semester. Online dialogue with the instructor and discussion with your classmates are integral parts of these courses. Basic computer skills are important: sending and receiving e-mail messages, posting to online discussion forums, and downloading files from a web site.

**Texas Christian University**
TCU’s Office of Extended Education provides non-credit opportunities for personal and professional development to the community. Courses and programs are offered at the TCU Campus, throughout the community and online.

**University of Southern California**
USC has two major online programs, master’s degrees in Social Work and Education, facilitated through its partnership with 2U which provides universities with the web technologies, infrastructure support and capital they need to transform their on-campus programs into state-of-the-art web based programs. The University of Southern California School of Social Work is the first among elite research universities to offer its highly regarded Master of Social Work degree online. Available nationally through the Virtual Academic Center, the MSW@USC engages students in various web-based learning activities and hands-on, supervised traditional field instruction in local communities where they live and work. Taught by renowned faculty and leaders in the field of social work, the MSW@USC curriculum mirrors the academic
The program provides both synchronous and asynchronous elements, with students expected to be online at specific times for some activities but able to participate in others on their own schedules.

Aspiring teachers can also earn a Master of Arts in Teaching degree online at USC. Current educators can earn a Masters of Education in Advanced Instruction degree. These programs feature live, interactive class sessions delivered online in an intimate face-to-face setting, self-paced coursework, face-to-face office hours with faculty in a live, online format, an interactive online community, and the flexibility to participate and learn from anywhere with Internet access.

**Texas Baptist Schools**

**Dallas Baptist University**
DBU has pursued a number of online delivery methods. Most courses that are offered for the traditional classroom setting also have been developed for online delivery. Every traditional course must have at least one online class session. Multiple programs offer degrees that may be earned online. In addition to online course offerings, DBU also has a number of hybrid courses and other courses that emphasize “flipping” the classroom. Jim Denison, a popular Texas Baptist speaker and cultural theologian, will be offering DBU’s first MOOC in the near future.

**Hardin Simmons University**
Hardin Simmons has some online courses and plans to add more. HSU is working toward being able to offer an entire graduate degree online.

**Wayland University**
Wayland has extensive online education; all degrees can be earned online. Wayland’s School of Religion and Philosophy has also just begun to offer the Master of Divinity, MA in Religion, and Master of Christian Ministry degrees in a completely online format.

**Other Texas Baptist Universities**
Baptist University of the Americas, East Texas Baptist University, Houston Baptist University, Howard Payne University, University of Mary-Hardin Baylor each have some online courses or have plans to offer some online courses and/or degrees in the future. They have not, however, developed these courses/programs to the extent of DBU and Wayland.

**Other Private Schools**

**Abilene Christian University**
ACU offers a number of online degrees and certificates in partnership with Pearson Embanet. ACU Online is a program designed for working professionals at the graduate level. ACU uses a compressed semester approach in which students concentrate on one course at a time. The academic year has three semesters consisting of two session starts per semester for a total of six online session starts per academic year. The online courses are not self-paced, but rather are designed to accommodate flexible scheduling to meet the needs of busy professionals while still allowing
for a high level of interaction. ACU is beta testing Pearson’s new Open Class LMS for both their distance and residential courses. During the summer of 2013, ACU is planning on offering 17 new undergraduate summer school courses included in their block tuition model.

**Azusa Pacific University**
APU offers a selection of online degrees (undergraduate and graduate) as well as certificate programs.

**B. H. Carroll Theological Institute**
Offers all of its degrees (M.Div., M.Div. in Chaplaincy Ministry, M.A. in Counseling, M.A. in Christian Education, M.A. in Worship, M.A. in Theology, M.A. in Religion, D.Min., and Ph.D.) through online or blended (online and face-to-face) format. While B. H. Carroll is accredited by the Association for Biblical Higher Education (which is not as rigorous as the Association of Theological Schools), it is still noteworthy that this Institute, developed initially with a group of highly qualified former professors from Southwestern Baptist Theological Seminary, has focused its course delivery system through online or blended formats which has enabled them to expand globally with extension centers in countries like Vietnam and Kenya.

**Dallas Theological Seminary**
DTS offers a number of masters level degrees (Th.M., M.A. in Biblical Counseling, M.A. in Biblical Exegesis & Linguistics, M.A. in Christian Education, M.A. in Christian Leadership, M.A. in Cross-cultural Ministries, and an M.A. in Media Arts and Worship) that students can earn by taking up to two-thirds of the coursework online. ATS currently requires that one-third of the coursework be completed in residence.

**Fuller Theological Seminary**
Fuller allows students to take up to 50% of their coursework online for many of its degrees. A number of courses are offered in a hybrid/blended format (i.e., a mix of online and face-to-face learning).

**Liberty University**
Liberty has extensive online education, offering many degrees that can be earned entirely online. As they advertise on their site, Liberty Online has more than 160 fully accredited programs, is America’s largest, private, nonprofit university, has all courses taught from a Christian worldview, and has the lowest tuition rates among top online universities. While Liberty has about 12,500 residential students, Liberty Online has more than 80,000 students enrolled in its programs.

**Mercer University**
Mercer offers one degree completion program, a graduate certificate program, as well as a number of general education, elective, and major courses in totally online format. Students may choose among face-to-face, hybrid, and totally online courses as they complete their degree programs.

**Ouachita University**
Although Ouachita does not offer an online degree program, they do offer online courses periodically. The types of courses vary from semester to semester and are not numerous.
**Wake Forest University**
Wake Forest is also part of the Semester Online consortium which partners with 2U in order to offer a limited number of high quality online courses.

**Wheaton College**
Wheaton does not offer any online degrees or online courses.
**APPENDIX B:**
TECHNOLOGY RESOURCES IN SUPPORT OF TECHNOLOGY-ENHANCED LEARNING

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<td></td>
<td>2U, Academic Partnerships, Blackboard Online Service, Bright House, Pearson Embanet</td>
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<td>Partners that provide support and resources for online education</td>
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<td>DESCRIPTIONS</td>
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<td><strong>Video Editing &amp; Productions</strong></td>
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<td><strong>Gradebook</strong></td>
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<td>Grade Keeper</td>
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<td>EasyGrade Pro</td>
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<td><strong>Lecture Capture</strong></td>
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<td>Panopto</td>
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<td>Tegrity</td>
<td>MediaSite</td>
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<td><strong>Video Conferencing</strong></td>
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<td>Room-based or device-based solutions that enable point-to-point audio and video communication</td>
<td>Cisco/Tandberg</td>
<td>Fuze</td>
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<td>Polycom</td>
<td>LifeSize ClearSea</td>
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<td><strong>Personal Capture</strong></td>
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<td>Software solutions that enable users to capture desktop activity, video and audio for online content creation</td>
<td>Camtasia</td>
<td>Adobe Captivate</td>
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<td>Echo360</td>
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<td><strong>Content Authoring Tools</strong></td>
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<td>Softchalk</td>
<td>Articulate</td>
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<td>Adobe Presenter</td>
<td>KnowledgePresenter</td>
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<td><strong>Blogging</strong></td>
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<td>Hosted platforms that enable faculty and students to create and manage blogs</td>
<td>EduBlogs</td>
<td>Blogger</td>
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<td><strong>Video Asset Delivery</strong></td>
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<td>Cloud-based, online platforms for hosting video content</td>
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<td>Cisco</td>
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<td>YouTube</td>
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<td><strong>Classroom Response Systems</strong></td>
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<td>Hardware and software systems that allow for live, in-class polling</td>
<td>Turning Technology iClicker</td>
<td>eInstruction</td>
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<td><strong>Assessments (Secure)</strong></td>
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<td>Software solutions that allow faulty to create, deploy and monitor exams online</td>
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<td><strong>Survey Distribution and Analysis</strong></td>
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<td>Platforms that allow for the creation, deployment and analysis of respondent data</td>
<td>Qualtrics Blackboard Atlas-TI NVivo</td>
<td>QuestionPro Survey Monkey Vovici Zoomerang</td>
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<td><strong>Wiki</strong></td>
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<td>Online platforms that allow groups to collate and edit information</td>
<td>Blackboard Bearspace</td>
<td>Atlassian Confluence Media Wiki Mindtouch WikiSpaces</td>
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<td><strong>Discussion Boards</strong></td>
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<td>Online collaborative environments that enable group discussion</td>
<td>Blackboard phpBB</td>
<td>myBB Phorum QuickTopic vBulletin</td>
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<td><strong>Voice-Based Discussion</strong></td>
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<td>Cloud-based applications that enable asynchronous online conversation using a variety of media</td>
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<td>Collaborate Voice Authoring Voxopop VoiceThread Wimba Voice</td>
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<tr>
<td><strong>Publisher Content</strong></td>
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<tr>
<td>Vendors that license eTexts and other digital content</td>
<td>Cengage Elsevier NBCLearn Macmillan McGraw-Hill MERLOT Pearson Wiley</td>
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<td>DEScriptions</td>
<td>CURRENTLY OWN OR PLAN TO PURCHASE</td>
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<td>Compliance Management &amp; Portfolios</td>
<td>TaskStream</td>
<td>Blackboard Outcomes</td>
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<td>Platforms that allow faculty to gauge student</td>
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<td>Edumetry</td>
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<td>performance over their academic career</td>
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<td>WEAVEonline</td>
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<td>Bibliography Tools</td>
<td>RefWorks</td>
<td>EndNote</td>
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<td>Browser-embedded tools that streamline the</td>
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<td>process of collecting and collating</td>
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<td>bibliographic information for research</td>
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<td>Social Bookmarking</td>
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<td>Online platforms that enable collation and</td>
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<td>sharing of Internet content</td>
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<tr>
<td>Electronic Book &amp; Document Readers</td>
<td>CafeScribe (Follett)</td>
<td>Adobe Acrobat</td>
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<td>Interfaces that enable several levels of</td>
<td>CourseLoad (McGraw-Hill)</td>
<td>Blio</td>
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<td>engagement both with and around digital texts</td>
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<td>CourseSmart</td>
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<td>DocsToGo</td>
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<td>OverDrive</td>
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<td>Stanza</td>
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<td>Student Information Systems</td>
<td>Banner</td>
<td>DataTel</td>
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<tr>
<td>Enterprise-level systems designed to collect and</td>
<td>PeopleSoft</td>
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<tr>
<td>manage large, complex data sets and generate</td>
<td>Jenzabar Higher Reach</td>
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<tr>
<td>reports</td>
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Blackboard Learn is an online course management system that helps instructors place course content, documents, and other materials online for students to access 24/7. Blackboard brings efficiency to day-to-day course management tasks like grading and attendance-taking while providing engaging and interactive tools like blogs, online tests, and discussion boards.

Baylor self-hosts Blackboard Learn on a reliable, highly-scaled, and redundant cluster of servers. This configuration gives faculty and students uninterrupted access to the system, even during periods of high network traffic. In most cases, normal system maintenance can be performed on individual servers without disrupting the existing connections to the redundant application servers.

Students access course documents in multiple formats, read announcements, submit assignments, take online tests, create discussion threads and posts, upload media to discussion boards and blogs, and collaborate in real-time with classmates. Instructors can post course content, manage grades and attendance, monitor and review student progress, and contact students via email directly from within Blackboard.

Faculty use Blackboard Learn in a variety of ways. Shane Zolin, a Yoga instructor in the HHPR (Health, Human Performance, and Recreation) department, uses the Wiki tool in Blackboard to create media-rich guides illustrating various poses and techniques that students can use to practice outside of class. Dick Campbell, an instructor in the Engineering & Computer Science department, uses the Podcasting tool in Blackboard to create audio podcasts of his lectures for students to review on their own outside of class.

### Fall 2012 Stats

<table>
<thead>
<tr>
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<th>Courses Made Available</th>
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<tbody>
<tr>
<td>Total</td>
<td>3068</td>
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<tr>
<td>(56% of Courses)</td>
<td></td>
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<tr>
<td>Total Students Enrolled (no duplicates)</td>
<td>14981</td>
</tr>
<tr>
<td>(96.48% of Students)</td>
<td></td>
</tr>
<tr>
<td>Total Students Enrolled (with duplicates)</td>
<td>80267</td>
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<tr>
<td>(average # of courses per student is 5.36)</td>
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<tr>
<td>Total Instructors</td>
<td>1409</td>
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<tr>
<td>(77.5% of Instructors)</td>
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</table>

Additional usage statistics available online at https://bbtools.baylor.edu/stats/BBstats.php
BLACKBOARD MOBILE LEARN

Blackboard Mobile Learn is an app that installs on mobile devices like tablets and smartphones that gives students and educators access to their courses, content and organizations on a variety of devices including iPhone, iPod touch, iPad, Android, BlackBerry and Palm smartphones.

Blackboard Mobile Learn extends Baylor’s existing Blackboard Learn implementation by making much of the core Learn content available in an engaging and intuitive way on mobile devices. Mobile Learn apps are available from each device’s unique app store, and the apps access information from Baylor’s Blackboard system.

Students and instructors can access documents in multiple formats, post announcements, create discussion threads and posts, upload media as attachments to discussion boards and blogs, create content items within the course map, and comment on blogs and journals. Students have instant, on-the-go access to the latest course announcements, and instructors can post announcements anywhere, anytime.

Mobile Learn is used by Baylor students to check their courses for new content while on the move. Many students also use the app to instantly receive notifications when new content or announcements are added to one of their courses.

Blackboard Mobile Learn usage statistics are available online at https://mlas.medu.com/api/b2_registration/analytics_share_form/?share_key=9do2c2da45a1c6d1f696df859f15a8
Online survey software allows faculty to create and administer web-based surveys for research purposes and to teach survey research methodology to students. Online surveys may be created with nothing more than a web browser, distributed via email, and analyzed in almost real time as responses accumulate.

Baylor has contracted with Qualtrics, a leading provider of online survey software to colleges and universities. Qualtrics has long been a favorite tool among faculty researchers at Baylor, so the university now offers enterprise-level access to this system. Faculty can access the system with institutional credentials at baylor.qualtrics.com and even co-author surveys with fellow researchers at other institutions.

Faculty use Qualtrics to create online surveys for research purposes, but this system is also used by our Institutional Research & Testing department for in-house survey needs. In fact, Dr. Chris Pullig, associate professor and chairman of the Marketing Department in the Hankamer School of Business, uses Qualtrics not only for his own survey research, but to teach survey research to his marketing students.
Baylor has 16 different videoconferencing systems, or “endpoints.” Most are fixed in classrooms and most offer high definition video. Endpoints purchased and installed in the last 4 years are all by Tandberg, a company recently acquired by Cisco. Cisco offers a complete range of sophisticated videoconferencing products, and all of our endpoints are standards-based, which means they can connect to any brand of videoconferencing equipment that adheres to certain industry-wide standards. 2 years ago, Baylor also purchased licenses for Cisco’s Jabber software, which allows faculty, staff and students to videoconference from their computer.

Graduate students who live and work in other cities use desktop videoconferencing to connect to their “virtual classroom,” where they can interact with their instructors and classmates. Researchers use this technology to connect to research labs across the globe. Faculty and staff save hours of driving time by using videoconferencing for meetings located in other cities. Departments utilize this service to interview applicants for open job positions.

LeAnn Gardner, a lecturer in the school of social work who lives in North Carolina, uses Jabber to conduct class with 7 to 10 graduate students. These students are also not located in Waco and have internships in locations throughout the country. Faculty and staff at the School of Nursing use videoconferencing to attend committee meetings on the Waco campus.
Unlike traditional video conferencing, which is typically done on large TVs in conference rooms, Web conferencing allows two or more individuals to communicate over the Internet in real-time from their desktop computers. In addition to offering standard voice, video, and text chat tools, Web conferencing systems often feature collaborative whiteboards, desktop or application sharing, and participant polling. Web conferencing is used for meetings, training events, lectures, or presentations.

Baylor uses a web conferencing service called Blackboard Collaborate by Blackboard, Inc. Collaborate is hosted in Blackboard’s datacenters and provides web conferencing capabilities for anyone associated with Baylor. Web conferencing sessions may be scheduled from within Blackboard Learn, the campus learning management system (LMS), or through the Collaborate server directly. Participants can join sessions from their desktop PCs or mobile devices like iPads or iPhones.

Faculty who wish to use Collaborate may schedule web conferencing sessions from within the Blackboard Learn system, where students have easy access to upcoming sessions. Other faculty and staff may schedule web conferencing sessions from Collaborate’s website directly, where participants join the meeting from a special link contained in an email meeting invitation. Students are unable to schedule their own web conferencing sessions, but they are often the largest group of participants in web conferencing sessions scheduled and hosted by their course instructors.

The Baylor School of Social Work is one of the most active users of Elluminate. Faculty in this program use Elluminate to conduct weekly meetings and consultations with their interns, who often work in other states. In addition to their weekly meetings, interns are assigned to give group presentations to their other classmates using Elluminate.

In addition, Dr. Benjamin S. Kelley, dean of the School of Engineering and Computer Science, is teaching an Engineering Biomechanics course to Hanoi University of Technology students through a Vietnam Education Foundation grant. Through these partnerships Baylor is contributing to the advancement of biomedical engineering in Vietnam. The first and last two weeks of the course are taught onsite at HUT, while the middle 11 weeks are taught from Baylor using Web Conferencing.

Since the upgrade to Blackboard Collaborate in January 2013, we have hosted 265 active sessions with 1,167 participants.
Lecture capture describes any technology that allows instructors to record what happens in the classroom and then make it available to students digitally. A lecture capture might just be an audio recording of a lecture, or it could be a recording that captures audio, video, and computer content.

At Baylor, we use Echo360 for lecture capture. Echo360 products are used by 400 colleges and universities in 28 different countries. Echo360’s range of solutions includes a hardware device that records audio and video and captures activity from a desktop computer screen; an additional software-only solution allows instructors to capture audio and computer desktop activity using a laptop or desktop computer. We have 7 rooms equipped with standalone hardware devices, and in these locations the professor has the ability to walk into the classroom, pick up a mic, and start teaching. The capture process is scheduled to begin and end at the appropriate times. The captured content is automatically uploaded to the server and posted to Blackboard, generally within the hour.

Some instructors choose to capture their classroom lecture so students can go back and review it as many times as they like. Other instructors create recordings outside of class that students can use as supplemental material for class. Faculty and staff have utilized this technology to capture training courses so those who are unable to attend in person can still receive the required training at a later time.
BLOGS

Blogs are interactive web sites that allow authors to post articles, images, and other multimedia in conjunction with academic assignments.

In the world of blogging and personal publishing, WordPress is a very popular platform due to its flexibility and ease of use. Baylor has contracted with a company called Edublogs, which specializes in hosting large-scale WordPress instances for colleges and universities, to run a pilot for academic blogging.

Many faculty are now requiring their students to blog as a way of getting them to think more critically about lectures and reading assignments, and also as a way to encourage them to exchange ideas with their peers. Many professors have courseblog sites that aggregate blog posts from all the students in the class. In addition, some schools and departments have started using WordPress for student ePortfolios.

Examples of how this technology is being used by faculty and students.

- Dr. Brooke Blevin’s (SOE) “Student as Historian” project using WordPress blogs - http://blogs.baylor.edu/studentashistorian/
- Philosophy 5312 courseblog by Dr. Anne-Marie Schultz - http://blogs.baylor.edu/phi531201s12/
- Dr. Lydia Bean’s Sociology 4391 courseblog - http://blogs.baylor.edu/soc439101spr12/
- Dr. Kristen Pond’s British literature site - http://blogs.baylor.edu/britlit/

Since launching the Edublogs pilot in August 2011, more than 1,300 faculty, student, project, and class blogs have been registered. In addition, 37 class blogs have been created for faculty across many disciplines.
Online file storage systems allow files to be accessed securely from any computer on the Internet through a web browser. These systems may also be used to share these files with friends, colleagues, collaborators, project team members, and others, both on and off campus. Access to files may be restricted to “read-only” or “read-write,” providing for controlled access and collaborative editing.

BearSpace is Baylor’s implementation of Blackboard Xythos’ Digital Locker product. Xythos was acquired by Blackboard in 2008 and is considered a leader in the market for online file storage systems. Baylor purchased Xythos in 2004 because it was the only product at the time that offered all of the features Baylor needed in an online file storage product. Xythos integrates with the university’s enterprise authentication system (Active Directory), uses standard (non-proprietary) technology, allows for file sharing both inside and outside of the university, and offers a clean, easy-to-use interface.

BearSpace gives students, faculty, and staff a secure, backed-up place to store all of their important documents. It is an excellent alternative to carrying around an easily-lost flash drive. Faculty and staff use BearSpace in the same way, but also use it to collaborate and share documents with colleagues both inside and outside the university.

![BearSpace Users](image-url)
KODIAK HIGH PERFORMANCE COMPUTING CLUSTER

Kodiak is a high performance computing (HPC) system used by Baylor researchers to perform computationally intense calculations. With 1024 processors, a fast network and large amounts of disk space, Kodiak enables researchers to run hundreds of calculations simultaneously, thus allowing them to tackle large projects such as simulating the effects of a large city on the atmosphere.

Kodiak is a type of HPC system called a “high performance computing cluster”. A HPC cluster is simply several ordinary computers, called “compute nodes”, that are networked, or “clustered”, together. Through the use of special software, the clustered computers can be used as one bigger computer. Kodiak, purchased in 2007, is a HPC cluster that has 128 compute nodes with a total of 1024 processors, giving it the equivalent computing power of approximately 1.1 trillion hand-held calculators.

Researchers use Kodiak to address computational problems that require greater computing resources than a typical personal computer can provide.

Some examples of how Kodiak is used by Baylor’s researchers include the following: Simulating the flow of atmospheric systems through environmental and urban topologies; searching for the “Higgs boson” in data produced by the CERN large hadron collider in Switzerland; performing pharmaceutical studies; modeling “dusty plasma (cosmic dust bunnies)” in space, and performing quantum chromodynamics calculations.

In 2008, six researchers were using Kodiak and today 45 faculty utilize this resource. In 2007, 600Gb of space was used on the cluster and by 2012 that data grew to 100,000Gb.
APPENDIX C:
VENDOR PARTNER PROFILES

Academic Partnerships (AP)
http://www.academicpartnerships.com/

Academic Partnerships (AP) provides comprehensive services customized to meet the unique needs of universities to increase access to high quality, online post-secondary education with integrity and excellence. The company began in 2007, and maintains a 100% retention rate with their partner universities. AP has recruited over 60,000 students for the partner programs (over 26,000 currently enrolled). They have supported more than 700 faculty members in the development of over 1,250 unique online courses across 50 degree programs delivered in English, Spanish, and Portuguese language formats. AP is headquartered in Dallas, Texas with nearly 300 employees that allow AP to scale their services and processes to match growing enrollments at their partnership institutions.

The set of services provided by AP include marketing and recruitment for online students, program planning, course design and development and faculty support and student enrollment, retention, and technology support. AP will market the program both digitally and on the ground in the specific field of the program to recruit online students who meet Baylor admission requirements. Additionally, AP will provide first-level support for students in online courses on technology and logistics to help encourage the students to stay in the program until graduation. While AP does not create the online courses, their professional instructional design staff works closely with faculty to redesign curricula and courses for online delivery. Once the course has been created, AP will provide professional development to prepare the faculty for online instruction. AP has a proven track record with 40 public institutions.

Structure of the Partnership

Overseen by a Managing Director working in ongoing collaboration with the university, AP will create an annual action plan that reflects the university’s goals and priorities for the online program. Other key personnel that form the AP program team include the following:

- Curriculum Support Director works with faculty to advise them on program and course design, conversion and ongoing course optimization.
- Enrollment and Student Services Directors work with university admissions and student services departments to ensure online students have a positive experience and progress smoothly from inquiry to graduation.
- Integration Services Director works with the registration, IT, and other related administrative offices to ensure proper data integration and reporting.
- Program Planning Directors have an in-depth understanding about each of the program sectors and are available throughout the program planning, launch and ongoing optimization efforts.
- Marketing Directors work with the university’s marketing and communications divisions to approve marketing strategies, brand tool kits, generate PR news releases and produce and distribute quarterly performance reviews. These reviews will include lead generation, student applications, enrollments and retention.
AP offers the following advantages:

- A strong focus on academics
- Allows Baylor to set the requirements for admissions, quality and growth of its online programs
- Allows Baylor faculty members to have complete control of the course content.

AP’s experience as a full-service vendor will help fast track Baylor’s entry into the online education market. Lead time is expected to be 4 to 6 months. The AP contract would be a 3 year term. Although this is a pilot, the online degree program would be allowed to continue long enough that students accepted into the degree program could have the opportunity to finish. To stop the contract, Baylor would stop admitting students into the online program.

**Pearson Embanet**


Pearson Embanet has been in business since 1965 and has 34 academic partners and supports over 107 academic programs at a wide variety of higher education institutions. The Compass-Knowledge Group, a pioneer and provider of distance-learning services to nonprofit higher education institutions, merged with Embanet in 2010 to create EmbanetCompass and later was purchased by Pearson to become Pearson Embanet in 2013.

Pearson Embanet and AP offer many of the same basic services for the full service partnership. However, Pearson Embanet will also allow an academic partner to purchase some specific services such as course design, technology hosting or student technology support.

Pearson Embanet provides the institution with a local community liaison and an instructional technologist, but supports the program with assigned staff from its headquarters in Toronto. It provides upfront funding to the university to provide faculty with incentives to serve as subject-matter experts, working with its staff to convert traditional courses to an online format. Pearson Embanet prides itself in offering a unique and robust support network that includes enrollment advisors to guide students through the application process, student-services managers to serve as personal advisors, program facilitators to help with matters involving course content and requirements, and technical support staff available 24/7.

**Semester Online Consortium**


Semester Online is the first-of-its-kind program offering rigorous, for-credit courses from prestigious colleges and universities to top undergraduate students – online. Created by a Consortium of top-ranked schools including Boston College, Brandeis University, Emory University, Northwestern University, the University of North Carolina at Chapel Hill, University of Notre Dame and Washington University in St. Louis. Semester Online offers students the opportunity to access great professors and schools as they work, travel, participate in off-campus research programs or manage personal commitments that in the past would have meant putting their studies on hold.

The Semester Online consortium invited Baylor to join as a charter affiliate. As a charter affiliate, Baylor is able to allow our students enrollment preference to the courses offered by the consortium. Committee members believe joining the consortium offers the following advantages:

- Select undergraduate students will have opportunities to take outstanding, innovative online courses offered by the consortium members.
- The courses are rigorous and students apply to enroll in the courses. Some courses require a specific
GPA or prerequisite courses. The requirements for enrollment for charter affiliate students is the same as for the consortium students.

- These online courses are taken as transfer credit following Baylor’s transfer policies.
- Baylor will determine by its current transfer credit policies which courses from the consortia we will accept for credit.
- Students will be able to take the Semester Online courses while they are away from campus during study abroad trips, internships or over the summer.
- The program is delivered through a virtual classroom environment which provides for a high level of personal collaboration.
- Baylor undergraduate students may register for courses at the same time as consortia students.
- Baylor representatives will be able to attend consortium symposia to discuss issues related to delivering high quality online courses in higher education.
- Baylor will gain access to all research data generated from the Semester Online pilot.
- Being an affiliate member does not limit Baylor from creating and delivering our own online courses. We are free to join other consortia if we choose to do so. The initial term for the membership as a charter affiliate is 3 years.
- As an affiliate member, Baylor joins the rank of many prestigious universities, including Boston College, Brandeis, Emory University, Northwestern University, and University of North Carolina at Chapel Hill, University of Notre Dame, and Washington University in St. Louis.