# BLENDING AT SMALL COLLEGES: CHALLENGES AND SOLUTIONS

*Ying-Hsiu Liu*
University of Missouri-Columbia
*Mark Tourtellott*
Mount Saint Mary College

**ABSTRACT**

Implementing blended accelerated learning programs or courses requires a systematic approach, not just the addition of new technologies. Small colleges face challenges when they move toward blended learning because of already-constrained resources. In this article, we will survey issues faced by small colleges in moving to blended learning, document a case on how a small private college (student enrollment less than 3,000) implemented a blended accelerated learning program, and provide recommendations for small colleges looking to move toward a similar direction.

**KEYWORDS**

Small Liberal Arts Colleges, Blended Learning, Accelerated Learning, Adult Education, Institutional Goals, Change Management, For-Profit Universities

## I. INTRODUCTION

The landscape of American higher education has changed significantly during the past two decades. Today, the compounded effects of several trends—the economic downturn, the need for lifelong learning, globalization, more diverse student backgrounds, and advancement in technology— have a great impact on American higher education. With all these changes and challenges, universities and colleges have strived to innovate to become more competitive and to provide better education.  One of the main challenges for institutions is how to use technology strategically to empower faculty to carry out their duties and to provide student support.  Advanced technologies have enabled higher education institutions to reach beyond geographic limitations to prospective audiences, including traditional and non-traditional students, and to offer more accessible courses or programs to students.  Evidence has shown that enrollment in online education has steadily increased [1, 2, 3], and the number of returning adult students contributes to the growth of continuing education. Demand for flexibility is reflected by the rapid growth of for-profit higher education institutions which have structured their courses, programs and delivery to meet learners'—especially adult students'—needs. For adult students who regard education as a means to improve personal life and professional performance but are limited by their job and family duties, a more flexible delivery format has allowed them to return to school and complete their studies in a shorter time. The success of flexible design and delivery has caused greater recognition of the challenges higher education faces [4, 5], including course and program quality assurance and support for non-traditional students.

Educating local and workforce communities is often a primary mission for small colleges who serve working adults.  Unfortunately, most small colleges rarely have booming adult student enrollments, and must innovate to compete for enrollments.

## II. THE STRUGGLES OF SMALL COLLEGES

Small, private colleges looking to bring the benefits of blended learning to their faculty and students must address several challenges. Lovvorn and colleagues point out that so-called best practices often come from large institutions [6]. Small colleges looking for solutions need to adapt rather than implement these best practices for their institutional needs. Unlike large institutions with greater funding, endowments, and larger student enrollment numbers, the challenges small colleges struggle with are naturally different. With an understanding of the current state of small colleges, we identify particular issues that would greatly impact the success of blended learning initiatives.

## A. The State of Leadership and Culture

Researchers remind education administrators that, to survive in today's competitive market, small colleges must become more responsive and student-centered (customer-driven). Administrators and leaders need to take action to overcome internal and external challenges they are facing today. With the global economy and economic downturn, students are seeking programs that offer quick turn-around and flexible schedules and enable them to advance in their career. It is impractical to ask adult students to commute two to three hours (one way) to school and take the courses that may not be helpful in their current workplace. Leadership and wisdom are greatly needed in initiating changes in any organization. Small colleges need to listen to what local students need and provide services to them effectively and efficiently. In the planning stages, institutions also should be careful to balance business and academic needs. Avoiding financial motivation plays a great role in integrating either an online or blended approach, which may lead to a more business-centered choice rather than an academic-centered one.

## B. Financial Motivation: "Fast and Narrow" or "Slow and Broad," That is the Question

Financial challenges have greatly limited small colleges' capacity and innovation, especially small private colleges whose budget mainly relies on student tuition and public donations. With a tight budget, small colleges tend to provide bare-bones facilities, instructors, and student supports. With limited resources, small colleges have to make the decision to either go for "fast and narrow" or "slow and broad" strategic approach. The fast-and-narrow approach means the college puts the available resources in certain programs. The keys to this approach are to identify what programs interest students and offer them quickly. The course development is programmatic and cohesive, and the course offerings are prepared quickly. This approach is expected to make courses more accessible and attractive to students, ultimately increasing student enrollment numbers generating revenue in a short turn-around time. However, finding academic program partners may be challenging because faculty may not appreciate the blended learning approach.

On the other hand, the slow-and-broad approach refers to putting available resources toward institutional-wide teaching and learning excellence. The goal of this approach is to bring faculty up to speed in teaching with technology, and foster a culture of professional development and technology literacy. This learning community brings the stress level of adopting technology as low as possible for that institution. Offering blended or online programs may be possible in later stages. The scope is larger than the "fast and narrow" approach, and its impacts may be hard to quantify and will take a longer time. With this plan, administrators cannot see the change immediately, so earning administrator buy-in could be difficult. These two strategic approaches are distinctively different, and there's no right or wrong. However, small colleges should be aware that each choice locks the college into a definite path, each with its benefits and obstacles.

## C. Change Management

Colleges must realize that "The ways and means of a blended learning initiative could entail vast institutional change and enormous demands on resources, or they could have very localized and limited impact" [7, p19], understanding that the initiative is experimental, especially for the fast and narrow plan. Some units may not be ready for change, so the communication and coordination are extremely

important.  No matter which plan a college chooses, it will involve a dramatic culture change.  This is part of the learning and soul searching that needs to happen at the planning stages.

## D. Fierce Market Competition

 The mission of small colleges is to provide quality education services to local traditional students and the workforce.  [8]. Small colleges have been getting pressure about student enrollment.  Online learning has enabled for-profit and large public universities to enter the local student market.  Students have more options in selecting higher education institutions they would like to attend and geography has a less significant impact on their decision.  For the past seven years, online student enrollment has rapidly increased [3].  For example, student enrollment in the nation's largest for-profit university, University of Phoenix, an institution targeting adult students, has gone from 75,057 in 2000 [9] to 420,700 in 2009 [4].  Clearly, the size of and the brand name of the institution influences students' decision making [3].  For example, large institutions have enjoyed nearly 64 percent of all online students enrollment [3]. This "coat-tail effect" has put   great pressure on small colleges, especially the ones whose income relies primarily on student tuition.  Blended courses or programs seem to offer promising delivery format for colleges to serve local students' needs, because blended learning offers a flexible schedule and retains the benefits of human touch.  Especially in an accelerated learning format, students are required to master the course content and technology skills within a very short period of time, which can be challenging for some students.

## E. The State of Technology Infrastructure and Support

Before moving toward blended learning, the college should assess its technology readiness for delivering partial instruction online.  The technologies here include the course management system and the technology infrastructure.  If the technology or IT infrastructure isn't ready, are colleges willing to invest in these technologies?  Furthermore, what technologies should colleges invest in?  In addition to the tangible hardware, colleges also need to assess what IT support services they can offer students.  Small college students often need remedial support.  This remedial support not only refers to subject matter knowledge, self-management skills, but also includes technology training.  In addition, there is a fundamental lack of education in the area of media and technology literacy across all generations of learners. This is due to a disconnect in how we as an education community view technology. The Y generation has overcome the fear of technology that the older generation has, but they still learn the tools poorly through self-taught, trial-and-error methods. Most students entering college at any age cannot adequately differentiate between a data file or file, what is an application or program, and what is an operating system or file system, and what is the relationship between them? Without this underlying understanding, they will be forced to re-learn all their referential patterns any time technology advances. For returning students, this adds a significant layer of stress that may lead to them dropping out of Internet-supported course or only choosing regular classroom classes.

This issue of student lacking foundational technological skills also puts a huge strain on staff for technology training that goes beyond the scope of the online tools provided. Colleges need to find solutions for these questions and lay out a plan accordingly. With a small staff with small resources these issues can become wildcards in planning and allotting resources and time.

## F. Communication and Empowering Staff

Small colleges deal with a small number of staff and limited resources.  Thus, ensuring clear communication and empowering staff are critical to success.  A small department in a small institution needs to develop effective work flows and communication channels so that staff members can respond to issues and challenges quickly.  In particular, the department in stake (such as distance education office) should use both a formal system, and a much more dynamic informal system. A formal communication system includes a set of scheduled review meetings, formalizing changes that need to be made, and changes based on these evaluations. An informal communication system is a much more liquid process of personal communication, questioning, and creativity needed to quickly adapt to problems or issues. In a

small department, there may not be enough resources to spend on large amounts of quality assurance. There needs to be more risk taking in the development stage and risk management through informal channels.

# III. BLENDED ACCELERATED LEARNING

Continuing education has been proliferating, and its student enrollment growth has been very steady. For example, in 1999-2000, only 28 percent of undergraduate students were traditional students [10]. A traditional undergraduate student is defined as someone who "earns high school diploma, and immediately enrolls full time immediately after finishing high school" (p. 1). In contrast, non-traditional students are older and mostly working professionals. The multiple roles they play and limited available time are two particular characteristics that prevent adult students from returning to or pursuing their education [10, 11]. Unlike traditional students, adult learners must juggle various roles and responsibilities such as work responsibilities, and family obligations. Because of these unique characteristics, those traditional 16- or 15-week long, campus-based programs are not able to accommodate adult students' needs. The accelerated learning format then is specifically designed to serve adult students and to provide them alternative ways of learning and completing the degree within a relatively short period of time. The accelerated courses or program are "structured for students to take less time than conventional programs to attain university credits, certificates, or degrees." [11, p. 6]. Students who enroll in accelerated courses or programs can complete their degree in less time than the traditional program requires. Researchers (12, 13, 14, 11] have pointed out that the elements of lesser time (fewer contact hours) and intensified learning define accelerated learning and differentiate accelerated learning from traditional courses and programs. Although accelerated learning has been the focus of relatively less research, researchers [15, 16, 17, 18, 11] have found that the success of accelerated learning depends on the students services, course design (active and authentic learning), and most importantly, social connection and positive peer interactions. The social support and connections are the main factors that help students persist through the degree completion journey [11].

The advancement of technology has put continuing education, specifically, accelerated learning on a new page. The online delivery format not only offers accessible educational opportunity but also enables learners a more flexible schedule. The online courses have attracted adult learners' attention, and student enrollment number has been rising rapidly. However, when small colleges look into ways to better serve their local adult students, online education may not be the best way to go. There are internal and external reasons:

- The college may not have the capacity to fully provide online education, which requires the institution to invest a tremendous amount of money and staff power on infrastructure, technologies integration and maintenance, faculty and students training, student services, and more.

- Not all students prefer or are ready for a fully online education. They may prefer the face to face contact and spontaneous and dynamic interaction. In addition, students may not be ready to take online education courses that require certain technology literacy and self-regulation skills. Students who have limited computer competencies may experience tremendous pressure in taking online accelerated course.

Because of the reasons mentioned above, blended learning seems a very promising solution for the challenges small colleges face. But unlike online education, it doesn't require a large-scale financial investment or urge dramatic institutional change. It offers a flexible schedule and maintains human interactions, which allows for social bonds and community support to form easily, and reduces anxiety level when students encounter technological issues.

The desire to create blended learning environments has recently gained popularity in higher education [6, 19]. Blended learning combines face-to-face and online delivery format and offers benefits [19] such as improving educational access, enhancing teaching and learning, increasing the accessibility of education

services, and increasing localness [8].

The role of administration and its support of technology across campus are essential when developing a blended online program. The spectrum could be from the wild-wild west (the course instructors design the course content and also provide some sort of technical supports to students) [6] to the institutions providing greater leadership and support in integrating the technology in teaching and learning. Researchers [4] have also suggested that the approach should be sustainable and cost-effective.

# IV. THE CASE

The presented case is a not-for-profit, small, private, liberal arts college in upstate New York. There were 2,565 students enrolled in the college (2,224 traditional students, and 341 non-traditional students) in fall 2010. The college has 74 full-time faculty and 57 adjunct faculty. One of the college's missions is to provide accessible education to regional adult learners. The college has remained strong in regional higher education, and student enrollment is steadily increasing. However, while trying to "blend in" the technologies in teaching and learning, the college is facing similar weakness identified in the literature. The college offered a voluntary minimal set of online tools for many years that could be used, but were not part of a greater college plan with minimal instruction for its use. It was left to the instructor to create value in their own teaching. When the individual who was managing the distance education office retired, the administrator felt it was time to take a greater interest in the possibility of developing online courses. To that end, they hired a director of distance education. The office remained a single individual for a year. During that time, there was a push to start getting faculty to buy into the tools and begin some pilot programs. At the time (2007), the course management system (CMS), WebCt, was replaced by Moodle in order to make a long-term choice to invest time and energy into a CMS that would ideally be around. The process lasted a year. The director moved on to other work, and in the interim the online system was managed by technology specialists in the library. After the second year, a new director took over. This time a business plan was formed and the intention to grow the office became a shared goal throughout the administration. From this plan, an office of two full-time and two part-time employees as well as two graduate students has grown.

Similar to the results from several previous studies [20, 21, 22, 23, 24] that identified factors affecting the success of online program implementation, we found these factors are also applicable to blended learning. Small colleges that intend to launch blended learning initiative should assess the current state of the college in these three areas and how they plan to respond to these challenges. These three areas are: institution needs, students and faculty support, and program and course delivery. These three issues are not separate from each other but intertwined to affect the success of the program. The institution needs drive the blended learning initiative goals and plan which would impact the implementation of the "students and faculty support" and "program and course delivery." In the following section, we will discuss how this systemic approach was employed to design the program and ensure the right blend to meet high-quality expectations.

## A. Institutional Needs

In this case, the college has not changed much over the years. With the value proposition of students and pressure to meet students' needs, the crucial questions college administrators and leaders have to answer are: how do we grow and evolve and pass where we are? How do we do things with less technology to resolve the current challenges the college faces? How do we enhance teaching (quality) with technology? How do we reach out and attract prospective students? Realizing that the college needed to become actively involved in the online learning arena, the distance education department was revamped and a formal process of developing some form of blended learning program was begun.

In 2008, the college decided to increase its educational offerings to adult students by transforming its existing program to a blended learning accelerated format. The business program was chosen as the first program to redesign and transform to the blended online delivery format. As a small liberal arts institution that focused on a strong direct connection to its students, a blended learning program allowed both online

technology and learning spaces to be introduced and kept the face-to-face environment already being cultivated.  For adult learners who are less computer literate and appreciate peer support, this delivery format not only fits their busy schedules but addresses their social and technical needs.

## B.  Program and Course Delivery

### 1.  Program Planning: Blending the Talents

In order to standardize the program course creation and launching process, the college has adapted the existing instructional design model and processes. The college adopted an online education development model: "one course, many sections" [25]. In this model, a standardized course is being developed and populated into scheduled live sections. This model governs the course-production process, yet the core concept is inclusion and collaboration. Course instructors are adjunct faculty who are field experts and have extensive teaching experiences.   Course instructors are being carefully chosen by the business division chair and the distance office based on their expertise, technology competencies, and experience in online teaching.   The adjunct faculty serve as content experts and work closely with instructional designers and multimedia specialists to design and develop course content. In addition, a course-review system ensures the courses meet the quality of the business division's academic standards and expectations. In each course, an appointed full-time faculty has been assigned to review the course content and design, and to provide guidance and support to the course instructor. The course reviewers usually have taught the course before, and they understand the local student characteristics and culture, which is very beneficial for instructors who are new to this college. The collaboration processes ensure course quality by having each talented person focus on their expertise area (subject content, online pedagogy, and technology) and maximize the effectiveness of blended learning.

### 2.  Course Structure and Design

The traditional accelerated courses are structured in an intense learning format. Students come to campus on certain weekday evenings or during the weekend.  This format accommodates adult students' tight schedule, but the flexibility is still an issue, and in addition, most learning and student/and course instructor interactions occur at the "contact hours."  Blended learning provides promising solutions to these challenges, giving students a more flexible schedule.  Most importantly, students' learning experiences would go beyond the on-campus classroom boundary and the interactions among course instructor and peer classmates are continuous without geographic restriction.

In the blended online business program, each course lasts for eight weeks. The course delivery is structured with six on-campus and two online synchronous formats. Below is a general description of the two delivery formats respectively:

- The on-campus classes: In an on-campus class, students are expected to attend the class on campus and meet with the instructor and classmates face to face. An on-campus class will last for 105 minutes.

- The online synchronous classes: Online synchronous classes will be delivered through WebEx. The course instructors are encouraged to employ various instructional strategies such as lecturing, Q and A, poll, group discussions to engage students. The online synchronous classes are structured, and each online synchronous session will also last for 105 minutes.

Researchers have [26, 27, 28] pointed out the potential of blended learning in promoting deep-and-meaningful learning, increasing accessibility, and cost efficiency. However, to get the maximal effect of blended learning, researchers [27, 29, 30] have warned that designing blended learning environment requires a thorough analysis and redesign rather than just move part of existing instructional components on line.  Designing effective blended learning requires a fundamental understanding of human learning and the delivery formats.

Considering the time constraints created by the accelerated format, the unique characteristics of adult learners, and the institutional issues, several core design principles have been applied across the courses.

Detailed information is provided in Table 1.

| CHARACTERISTICS | DESIGN PRINCIPLES |
|---|---|
| Learner level:<br>The unique characteristics of adult learners | Provide program orientation to give students and instructor opportunities to socially connect with each other. Also provide technical training to students to familiarize them with the online environment.<br><br>Promote a non-threatening and friendly learning community. Every course is designed based on active learning; students are encouraged to share ideas and feedback, and collaborate with team members.<br><br>Promote authentic learning experiences. The course is designed in a way that allows students to apply new knowledge in real world. Practical authentic problems are introduced in the course, which link students from static information to the real world and their daily life. |
| Program level:<br>Intensive learning format | Optional readings and resources are provided to students for future reference.<br><br>Scaffolding material (documents, videos, and multimedia) is under development to help students quickly grasp the essence of knowledge. With careful design, these materials can release the instructor from lecturing, and focus on concept clarification, coaching, modeling or engaging students in learning activities that facilitate higher order thinking abilities. |
| Institution level:<br>Limited resources and tight budget | Use open educational resources, online video streaming services, YouTube, etc.<br><br>Identify components in course creation processes that are suitable for automation, so that staff time can focus on higher- level design components. |

**Table 1. Core Design Principles**

# V. FACULTY AND STUDENT NEEDS

Faculty and students are two main audiences directly involved in the blended learning environment where teaching and learning occur. The technology required for online education and a blended learning program is the same. So the instructor and students will need technical training and support but maybe in a lesser degree compared to the pure online education. Thus, the college has cast a safe net to ensure faculty and students are successful and have an enjoyable learning experience.

## A. Faculty Support

A significant part of the course development hinges on getting the instructor up to speed with the technology and the specific pedagogies that are common components of online learning. To ensure course instructors are equipped to teach online, the college is developing a required certification course for online teaching and learning. In addition, instructors are also required to take technology training workshops to help them master the learning technologies integrated in the course. The college is reorganizing its staff to align course instructors' needs, in the hope that instructors will be well-prepared before they teach any blended courses.

## B. Student Support

Students' computer literacy, specifically, their comfort level of using integrated learning technologies is a

core factor affecting their learning experiences and satisfaction. To familiarize students with these technologies and overcome possible technical barriers, several strategies are employed to prepare students to become comfortable in the blended learning environment:

### 1. Student Orientation

Two orientation sessions are offered to students before the course is officially launched. These orientation sessions serve multiple purposes such as (a) creating a social space for students and course instructor; (b) familiarizing students with the campus and program; and (c) training students in using the course management system, so that they will feel comfortable and less anxious.

### 2. Open-Synchronous Session

The course is delivered in six on-campus and two synchronous classes. To prepare students be successful in the synchronous classes, in addition to providing a formal technical training session, a testing session is offered to students to test their home computer compatibility and orient students for the real synchronous classes.

### 3. Walk-In Hours and Help Desk

Walk-in hours are available when students encounter technical difficulties. A help desk, along with other strategies, is also being developed to provide assistance and support to students.

## VI. CONCLUSION

Although constrained by limited resources, with proper planning, small colleges still can enjoy the success of blended learning. Below is a list of recommendations for small colleges. Institutions should take an honest look at how their organization would respond to these critical issues.

- The institution must have a clear view on the role of blended-learning in achieving the institution's long-term goals.
- In the planning stages, when the resources of manpower, money, and time are finite at a small institution, the choices made should get both faculty and administration support to save time and effort in later implementation stages.
- Administrators should assess where the college stands in terms of support capacity and its faculty and students' technology literacy.
- In order to maximize limited assets, all the technology-dependent departments, especially distance learning and information technology, need to collaborate at a higher level to succeed. This requires breaking down traditional divisiveness found in most cultures forced to evolve on their own without the strong support of the college community.
- The blur of contact time and constraints of policies. Computer technology enables instruction to be offered without geographic constraints. Students can access the course anytime and anywhere, and learning is not restricted to bricks and mortar. With all these changes, administrators and educators need to revisit and validate some policies that greatly impact course design and delivery, such as the appropriateness of the contact-hour policy in blended learning courses in which students learning experiences go beyond classroom boundaries [10].

Adapting learning technologies to enhance learning and teaching has been a trend in American higher education, but the implementation and execution can be costly. For resource-limited liberal arts colleges, it is not only important to find innovative ways to use resources wisely to achieve institutional goals but also to recognize the need to restructure the organization to provide quality services.

## VII. ABOUT THE AUTHORS

**Ying-Hsiu Liu**, Ph.D., is an Academic Technology Liaison and Instructional Design Specialist-E-Learning at University of Missouri-Columbia. She received her Ph.D. in instructional systems at

Pennsylvania State University. Previously, she worked as an instructional designer for the Distance Education department at the College. She took the leadership role in establishing instructional design procedures and frameworks for course and curriculum development, designing blended courses, verifying course following quality assurance standards, and faculty development.

Dr. Liu has been involved in designing learning experiences for online, and blended learning environment for more than eight years. She also has extensive experiences in online program planning and administration, and faculty development. Her research interests are online program planning, administration, and evaluation, and learning experiences design, and mobile learning.

**Mark Tourtellott** is adjunct faculty teaching art and design courses in the Art department at Mount Saint Mary College. He also works for the Distance Education department at the college as a lead trainer, course developer, technologist, web designer and media designer.  He has extensive experience in learning technologies and in implementing an institution-wide course management system.  In the past, he also worked extensively with adults and children with special needs. Mark earned an MBA from Mount Saint Mary College, in the Spring of 2010, BFA in Illustration from the Hartford Art School, Hartford University in 1994 and an associates in graphic design from the Sage Jr. college of Albany in 1991.

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