Blended Learning Technology: Connecting with the Online-All-the-Time Student

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Executive Summary

Education is undergoing a dramatic transformation. Technology plays a powerful role in the life of today's students and institutions can no longer meet their needs through classroom-based instruction alone.

Blended learning is one way institutions can prepare themselves for the next era in education. It combines face-to-face and online instruction by integrating technology into their curriculum.

Many educators agree that the blended approach is beneficial. It delivers a flexible experience and supports learning by allowing students to learn at their own pace. Meanwhile, use of this model helps maximize instructor efficiency, increasing engagement inside the classroom while simultaneously enabling them to reach more students. Institutions see the benefits as well. Retention rates increase, recruitment efforts improve and early evidence suggests that use of this approach can improve grades. The ME2U research project, conducted at the University of Sussex¹, found that students using blended learning technology to view recorded content prior to assessment often produced higher scores.

ME2U Project Findings on Blended Learning

- Blended learning increased student understanding of course material
- Recorded content that explained key concepts was rated highly by students
- Accessing recordings improved assessment performance of some students
- All staff who participated in the project would recommend the technology to colleagues

With these advantages, it's no surprise that blended learning is experiencing a dramatic upsurge in popularity. Today, student demand for blended learning courses continues to outpace most institutions' ability to meet the growing need. Eighty-four percent of surveyed students would like blended learning technology offered in more of their courses.²



Executive Summary

While these facts highlight the demand for blended learning instruction, they also indicate a shortfall in availability of courses utilizing this method. But even if schools generated enough blended learning courses to meet the demand, what is the best mode to deliver this instruction to students?

Currently higher education is cluttered with point solutions that address one piece of the learning technology ecosystem, but lack an all-inclusive approach in tackling a more strategic problem. Course management systems are effective portals, but unless properly utilized by instructors, are scant in the content required to serve as effective teaching platforms. Online course providers attempt to harness content, but the student experience is incomplete in the absence of valuable interaction and feedback of peers and instructors found in the classroom setting. Their experience accessing instruction through mobile mediums can be equally as frustrating. Tablets, phones and e-readers offer countless benefits, but using them as a primary gateway to course content without features that mimic the classroom can result in an isolating learning experience.

The first section of this paper highlights data supporting student preference for blended learning as a primary source of instruction. The second part examines the use of fragmented online tools by students to augment their studies. This speaks to a need for a comprehensive blended learning technology solution that meets student demand, adapts to their digital and diverse learning and communication styles and interfaces with instructors in a manner that best replicates the live classroom environment.

The Case for an Integrated Blended Learning Platform



- Use of blended learning technology has been shown to improve test scores of students
- There is a gap in institutional ability to meet increasing demand for blended learning courses, with students turning to fragmented resources to augment their learning experience
- A clear need exists for an all-inclusive blended learning solution



Survey Method

Numerous surveys have been published by colleges, universities and vendors surrounding student use of blended learning and lecture capture. The data published as a result of these surveys has proven to be highly valuable in advancing the understanding of the technology. However, given the limited reach of some studies (either in terms of surveying students only within a particular discipline or a type of institution), it can prove difficult to extend the findings across different disciplines of study and normalize results across surveys.

The Feedback Loop is a student survey program supported by Echo360 that aims to provide both institutions and the higher education industry as a whole with a consistent tool to measure ongoing perceptions about blended learning and lecture capture. The survey can be issued at the discretion of the institution, aggregated across schools and tracked over time.

The same Feedback Loop survey and questions were used across universities for consistency and to simplify tallying of responses. This paper shares the aggregated results from surveys issued at the end of the Spring and Fall 2011 terms. The survey results linked to each institution are not revealed in this paper.

Student survey responses are anonymous and in no case can a participating student be identified. Survey completion was not linked to course performance or grades, and incentives were not offered to students for completing the survey.

The paper draws on the results of a student survey issued at 11 institutions during the 2011 academic year. These institutions include: Aiken Technical College, Boise State University, Columbia University, Michigan State University, Monash University, Portland State University, University of Arkansas, University of Illinois Chicago, University of Kentucky, University of the Incarnate Word, and University of Tasmania.





Respondent Profiles

A total of 2,835 respondents from 11 institutions in the United States and Australia participated in the survey.

Key demographic data includes:

- 63 percent of respondents were female and 35 percent were male; two percent opted not to define
- 60 percent of the students were 17-23 years old; 20 percent were 24-29 years of age; the remaining 18 percent were 30+ years of age; with two percent choosing no response
- 87 percent of the surveyed students were enrolled full time
- 51 percent of students attended courses only on campus
- 35 percent of students attended a combination of online and on campus courses
- Seven percent of students attended all courses online
- 89 percent were undergraduates while 11 percent indicated they were seeking advanced degrees (graduate or doctoral)
- 61 percent of the surveyed students were working either full-time or part-time jobs
- Three percent of students had learning disabilities and three percent had physical disabilities

Department	% of 2,835 Students
Business and Economics	9%
Pharmacy	9%
Medicine, Nursing and Health Sciences	8%
Arts	7%
Science	7%
Law	6%
Health Sciences	5%
Engineering	4%
Pharmacy and Pharmaceutical Sciences	3%
Education	3%
Medicine	2%
Other	18%

Table 1: 18 percent of students surveyed selected "other" as the course department offering blended learning technology, indicating that use of this platform is balanced across disciplines.

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Instruction delivered through a blended learning model increases understanding of course concepts

Eighty-four percent of students surveyed responded that the ability to study both online and in class improves their understanding of course concepts. The important role blended learning technology plays in helping students retain curriculum is reflected in the considerable number of students using it to reinforce their comprehension of concepts presented in class.

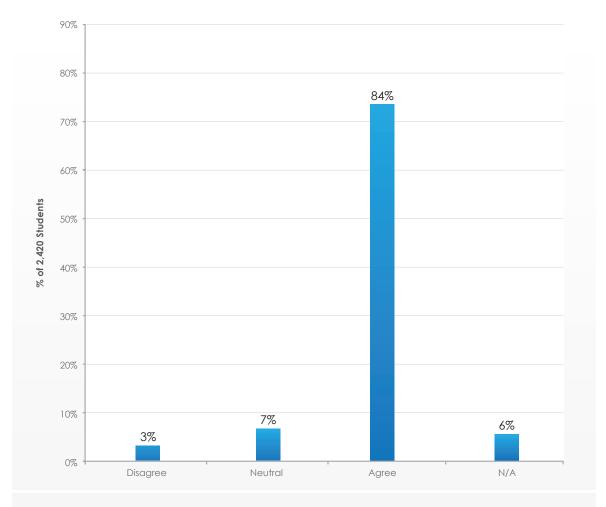


Figure 1: Students indicate increased comprehension with blended learning. Of the 2,420 surveyed students, 84 percent agree that blended learning improves their understanding of course material.

b

Students prefer the blended learning method as compared to solely face-to-face or solely online only

The case for blended learning is corroborated by their preference for this model versus receiving instruction in-class only or online only.

Sixty-three percent of students indicated their preference for a blended learning model over only inclass learning, while 69 percent prefer this model to an exclusively online delivery method.

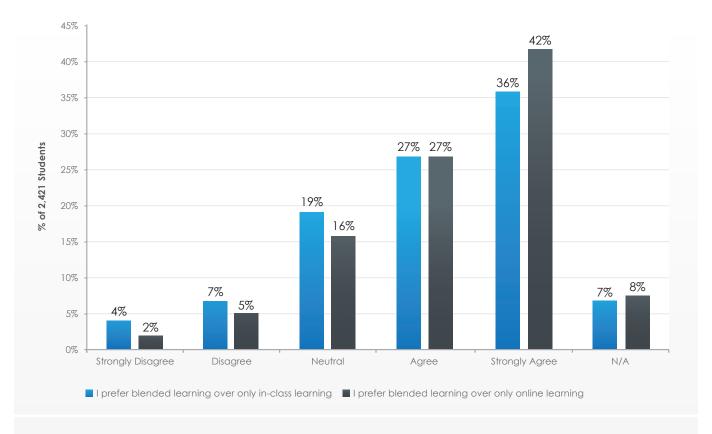


Figure 2: Students prefer the blended learning model. Forty-two percent of students said they strongly agreed with the statement: I prefer blended learning to only online learning.



The flexibility of blended learning helps students manage academic and outside responsibilities

Use of blended learning technology gives students more control over their academic experience, providing them with the flexibility to learn at their own pace and better manage course loads and other outside responsibilities (62 percent of surveyed students hold part-time jobs). Seventy-two percent of students expressed satisfaction with the flexibility attained through the use of online blended learning tools.

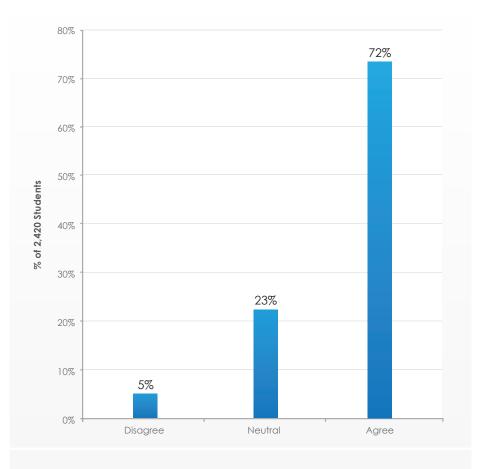
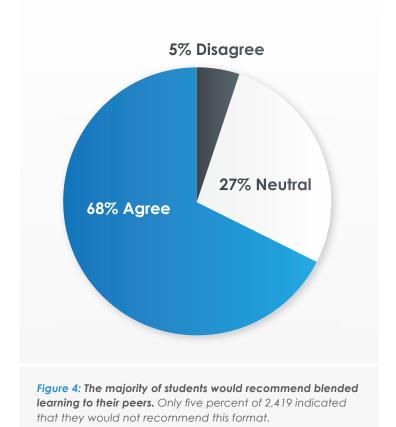


Figure 3: Students cite flexibility as a key benefit of a blended learning model. Seventy-two percent said they like the flexibility offered through blended learning instruction; only five percent disagreed when asked the question: I like the flexibility of the blended learning course.



Student satisfaction with blended learning instruction makes them likely to champion those courses to fellow students

Students satisfied with their blended learning experience are more likely to recommend courses taught using this method to their peers. Only five percent reported that they would not recommend blended learning courses to fellow students.





Students participate in face-to-face study groups yet participation in online study groups lags behind

Online study groups allow students to engage and offer peer feedback on course topics through a digital platform. The primary benefit of an online study group is that students do not require a central meeting place and can participate from anywhere. Sixty-eight percent of students said that they participated in face-to-face study groups compared to only 36 percent participating in study groups online.

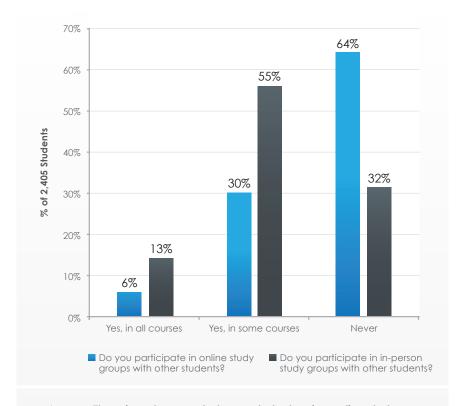
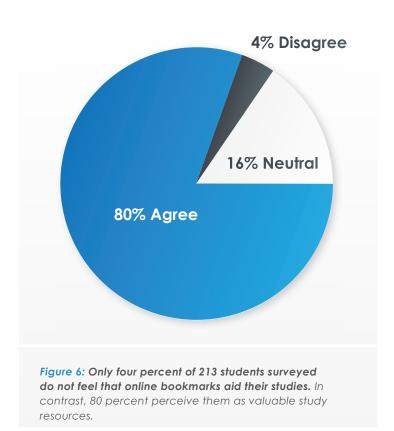


Figure 5: There is a clear gap between students using online study groups and those participating in face-to-face study groups. Sixty-four percent of 2,405 students responded that they never use online study groups.

Online bookmarks are useful study tools

Bookmarks are points of interest or learning moments in a recording marked for future reference. Bookmarks benefit students by allowing them to return to the previously indicated section of the recording for further clarification or review. When given access to bookmarks, 80 percent of students agree that they aid them in their studies.

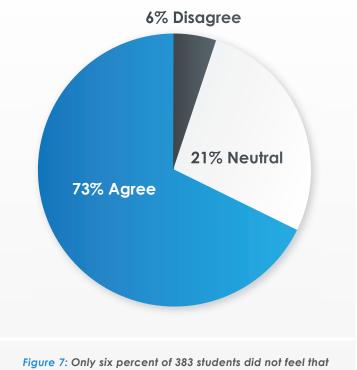




Students overwhelmingly agree that discussion threads aid their studies

Online discussion threads extend classroom learning by providing an asynchronous method of communication for the exchange of meaningful ideas that promote critical thinking and develop thoughtful reflective learning.³ The primary benefit of discussion threads is the freedom they offer students in initiating ongoing academic dialogue outside of scheduled class time.

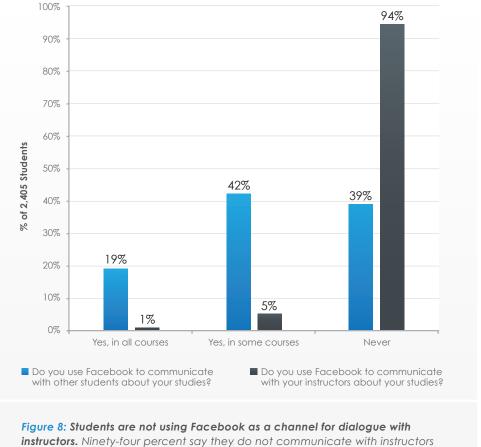
Seventy-three percent of students surveyed agreed that online discussion threads are valuable study tools.



discussion threads were helpful in their studies. Seventythree percent said that they are useful tools, while 21 percent responded as neutral.

Students communicate with peers on Facebook regarding their studies but rarely use it to interact with their instructors

Sixty-one percent of students said that they communicate on Facebook regarding their studies but rarely use it to interact with their instructors.



through Facebook.

Conclusion

The data clearly demonstrates that students actively prefer blended learning, however they seem to be seeking a more centralized digital solution for instruction, communication and resources. They presently utilize a variety of fragmented resources (both online and face-to-face) to support their studies in addition to blended learning technology.

There are currently blended technologies with features such as bookmarking and discussion tools that serve to bridge the gap, however, the survey responses denote that many institutions may not be using them or communicating their availability to their students.

Another factor that must be considered is students' pervasive use of social media. Sixty-one percent of students said they use Facebook to communicate with other students regarding their studies. Yet, they are reticent in using that medium to engage in similar dialogue with instructors, with 94 percent responding they never communicate with instructors via Facebook. Meanwhile, two-thirds of instructors reported using at least one social media site in their class, but 53 percent said Facebook and 46 percent said Twitter add "negative" value, according to a recent study. The disparity between students' and instructors' use of Facebook and other social media platforms for teaching and learning indicates that these platforms do not offer a consummate solution for facilitating communication in a successful blended learning model.

The data indicates the need for a blended learning solution that fosters interactive learning and builds a comprehensive online academic community. Instructor resources and communication portals should also be aggregated; further transforming the way instructors teach and engage with students. Despite a penchant for online tools and social media, students recognize the value of face-to-face instruction and desire blended learning technology that virtually mimics the classroom.

Echo360 introduced lecture capture as an early technology solution to support blended learning in 2009. In response to changing pedagogical and student needs, the EchoSystem has added more collaborative features and communication channels to better simulate the live classroom experience aimed at increasing instructor efficiency and student engagement.

For additional resources and information about blended learning solutions, please visit **www.echo360.com**. For more information about The Feedback Loop student survey program, visit **www.echo360.com/studentsurveys**.

