

Impact of iPad Use on Student Learning

Abstract

An iPad Project was implemented by the Creighton College of Arts and Sciences in the fall of 2012. Ongoing data gathering from faculty and students is taking place as the project moves from non-iPad sections to iPad sections. The two investigators were asked to be pro bono evaluators for the project, and this application is for assistance to hire data-entry folks to help with entering data from surveys of several hundred students and 25 faculty. Student helpers will also be asked to help with the coding of qualitative data gathered from faculty and students.

Investigators

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Proposal

Statement of Purpose

The purpose of this research is to assess the impact of iPad use on student learning and technology attitudes. In August 2012, the Creighton College of Arts and Sciences initiated an iPad Project at the suggestion of the Vice President for Academic Affairs and the Associate Vice President for Enrollment Management. The purpose of this proposal is to secure funds to help the researchers with timely data-entry of a vast amount of qualitative data and with the coding of qualitative data.

Project Design

This project contains a series of pre/post assessments of students and faculty who are involved in the iPad project. At the beginning of the fall 2012 semester, we administered our survey to the sections of courses taught by iPad faculty (without the iPad) who will then teach the same course using the iPad next semester. A total of 1000 surveys were distributed and returned, and we are in the process of entering those and the results of course content pre-tests for each of the sections. The content test and our survey will be administered at the end of this semester to establish our baseline for students and courses without an iPad influence. Then, next semester, we will repeat the survey at the beginning and end of the semester and also collect pre/post content data. The instructors have constructed their own pre/post content measures. The pre/post assessment that the researchers constructed was presented to students by instructors in their classroom in paper format to avoid the confounding that might occur if students completed the assessment online and in groups. This approach also significantly increased the assessment response rate.

In terms of data gathering instruments, there are three. First, there is the Creighton College of Arts and Sciences iPad Project 2012-2013 Survey of Educational Impact Fall 2012. This was developed by Dickel and Khanna and contains items from the EDUCAUSE Center for Applied Research's (ECAR) National Study of Undergraduate Students and Information Technology 2011 and 2012 (available upon request). The second instrument is a content pre/post test developed by each instructor, and third is an open-ended survey of iPad faculty to assess their plan for the use of the iPad in their course, their attitudes toward technology using items from the ECAR survey, the outcomes they expect for students in their iPad class, and their concerns about using the iPad in their teaching. In addition to the instruments, we will request access to each iPad instructor's BlueLine2 analytics to see how students are using the BlueLine2 learning management system, and midway through the second semester (spring 2013) iPad students and faculty will be asked to participate in separate, small, focus groups where they will be asked to discuss their experiences with the iPad.

Project Timeline

August 2012 – Course Content Pre-Test and Demographic and Technology Pre-Assessment administered to the sections of courses taught by iPad faculty (without the iPad) who will then teach the same course using the iPad next semester.

August – December 2012 – Data entry

December 2012 – Course Content Post-Test and Demographic and Technology Post-Assessment administered to the sections of courses taught by iPad faculty (without the iPad) who will then teach the same course using the iPad next semester.

December 2012 – January 2013 – Data entry

January 2013 - Course Content Pre-Test and Demographic and Technology Pre-Assessment administered to the sections of courses taught by iPad faculty.

January –May 2013 – Data entry

May 2013 – Course Content Post-Test and Demographic and Technology Post-Assessment administered to the sections of courses taught by iPad faculty.

May – August 2013 – Data entry

August 2013 – Report generation

Expected Products

Reports to: Deans (Lueger, Ishii-Jordan, and Turner) and Instructors

Presentations at: EDUCAUSE and perhaps Merlot

Campus Forum

Sustainability

The Creighton College of Arts and Sciences iPad Project is expected to be ongoing for several semesters as additional faculty are added and as more students own iPads. As the researchers are able to showcase qualitative and quantitative evidence of the impact of iPad usage in courses, it is hoped that support will follow from the Creighton College of Arts and Sciences. By fall 2013, we also hope to have the courage to have all of your pre/post assessments online to avoid the massive data-entry challenge that we currently face.

Budget

AMOUNT	PERSON	JUSTIFICATION
\$1200	To be determined	120 hours of quantitative data-entry time at \$10/hour for student worker(s) and for time spend coding qualitative data
\$400	C.T. Dickel	Compensation for data-entry and analysis of quantitative and qualitative data
\$400	M. Khanna	Compensation for data-entry and analysis of quantitative and qualitative data
\$2000	TOTAL	