

EFFECTIVELY USING MOBILE LEARNING DEVICES IN THE PRINCIPLES OF MARKETING CLASS: LESSONS LEARNED FROM STUDENTS USING IPADS

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The specific objectives of this study are to identify where and how iPads can aid student learning in the principles of marketing course. The number of students enrolled in this “experimental” course is 39. Students not owning a second-generation iPad were loaned one by our university for the duration of the semester. The iPads were pre-loaded with four apps (Keynote, Pages, Priority Matrix, and iThoughtsHD) and students were expected to purchase no more than \$20.00 on additional apps. All students were required to purchase the Grewal and Levy (2012) Marketing 3e e-text from Inkling.com. The course is supported by our university’s Blackboard CMS. Students were asked to download and use the Mobile Blackboard app. However, it does not offer the functionality of the full Blackboard CMS.

Achievement and assessment of the course’s learning outcomes is facilitated by employing six major activities: (1) outside of class preparation of weekly memos, (2) iExercises, (4) a semester long new product opportunity assessment/marketing strategy marketing planning type assignment wherein student teams develop a quasi marketing plan for a product, (5) individual research on how iPads are used by business/marketing practitioners, and (6) classroom participation. Memos (one-page maximum) were designed to reward student familiarization with textbook and other assigned content (readings, videos, podcasts, etc.) prior to attending class in order to enhance their ability to participate in an active learning environment. iExercises are in-classroom and out-of classroom activities that use specific iPad functions and apps to produce and distribute a variety of products that might be created by those working in the field of marketing. The purpose of these exercises is to explore where, learn how, and adapt where possible a newer technology to an “old” problem or need.

How iPads Were/ Will Be Used in Learning Activities

Most in-class content delivered by the instructor was through his iPad by using Apple's Air Play with the mirroring function made possible by the Apple IOS5 operating system. This system also made it possible for any student in the class to show the entire class the exact content being displayed on their own iPad including any sound component.

Students were not required to prepare their weekly memos by using the word processing app (Pages) pre-loaded on their iPads but some did. One reason for limiting the memos to a single page (or no more than 400 words) was to allow such use. However, as students could not use the iPad to submit finished memos (as attachments) to Blackboard, they had to send any iPad-produced attachments to themselves for submission via a different device (e.g., their laptop). A possible work

around solution is to copy a memo produced in Pages and paste into the Blackboard assignment submission window. However, this process can easily result in a finished product with altered formatting issues. In such cases the instructor can face a difficult time in assessing writing quality.

During the earlier weeks of the semester, students received iExercise instructions in the classroom and were given time to begin but not finish the assignments that were then due by the end of that particular day. This approach was chosen to insure that each student had some tutorial exposure on how a particular app functioned and saw an example of its use by the instructor. Students assisted each other in learning how to use the app but were told that the finished product to be submitted was to be unique in terms of content or how the app was applied to a particular marketing activity or task. One of the earliest assignments included using the PriorityMatrix app to perform and display a SWOT analysis based on class discussion surrounding a short case used earlier in the course. iExercises were submitted directly from the student's iPad via a variety of options that depended on a particular app's capabilities. Some app "products" can be sent via e-mail in a variety of formats and viewed by the recipient on their iPad (or other device) regardless of whether or not their device has the same app installed. However, this is not always the case and helps to remind students about making communications assumptions and mistakes. With few exceptions, students were expected to submit their iExercises by e-mail. In some cases, this meant that the student only provided a URL link to their finished assignment as the app vendor stored it on their server.

The marketing plan assignment has two unique deliverables, each of which has a written and oral component. Each deliverable is briefly described next along with actual and planned uses of iPad functions and apps. Deliverable #1 consisted of conducting and presenting a Situational Analysis (including SWOT), developing marketing objectives, and forming market segmentation and a product positioning strategy. iPad uses here included accessing Library owned databases and relevant literature, drafting/sharing/editing documents, in and out of classroom collaboration with team members (four on a team), audio recording of interviews/discussions, and observing/collecting/reporting observation research findings. iPad functions and associated apps used included but were not limited to: iMessages, Skype, Google+ Hangout, Google Docs, Web browsers, Wikipedia, e-textbook reader, Apple's Pages, Priority Matrix, iThoughtsHD (mind mapping), AudioMemos, ScreenChomp, (screen casting), and Flipboard. In-class oral presentation steps included developing key visual and audio support materials to be used by teams for their delivery to the entire class). Tools and associated apps used for constructing support materials included but were not limited to: screen casting and drawing apps and Apple Keynote. Support materials were presented from iPads via an Apple TV connected to full screen projector. Students in the audience used a student response app to provide peer evaluations of their peers' presentations.

Deliverable #2 involves construction of the marketing mix strategies and tactics and can include a (instructor directed) modification of Deliverable #1's paper. This deliverable was under construction at the time of the 2012 MEA conference and therefore it is not known exactly what iPad functions and apps will eventually be used for its production and presentation.

Assessing iPad Impact on Student Learning

The impact on student learning to be presented at the MEA conference draws on findings derived from two surveys conducted with students in the course described above. One survey was undertaken by all students prior to the second day of class of the spring 2012 semester. Its main purpose was to establish a benchmark of student feelings (anticipations, attitudes, and expectations) on what might happen in the coming weeks. The second survey was conducted in week 10 of the course. Its main purpose was to provide an indication on how, if at all, student feelings had changed from week one and also capture information on how they were using the iPad and apps. A third, end of the semester survey will also be conducted to measure further changes in student feelings and use of the iPad.

Assessment Measures Reported at MEA Conference

Measures to be reported are based on the following four research questions and will be based on results produced by the above-mentioned two surveys. Research Question #1: Why are some students more likely than others to adopt mobile learning devices such as an iPad? Measures to be reported here include general barriers to technology adoption as identified by the Venkatesh, et al (2003) in the Unified Theory of Acceptance and Use of Technology. The seven general adoption determinants fall into one the seven categories: performance expectancy, effort expectancy, social influence, facilitating conditions, self-efficacy, attitude toward using the technology, and anxiety. Research Question #2: How effective are mobile devices in supporting Chickering and Gamson's (1987) seven principles of good practice in undergraduate education? These good practices include: encouraging student-faculty contact, encouraging active learning, respecting diverse talents and ways, communicating high expectations, providing prompt feedback, encouraging cooperation among students, emphasizing time on task, and encouraging active learning. Research Question #3: How effective are mobile devices in helping students achieve the six global learning objectives identified by Meuter et al (2009)? These learning objectives include: earning better grades in class, staying interested in the topic of study during the semester, retaining knowledge long term, enhancing one's educational experience outside the classroom, enhancing one's educational experience inside the classroom, and learning more in one's classes. Research Question #4: How effective are specific iPad functions and apps in helping students successfully complete marketing assignments? Findings

to be reported include: how much students liked using a particular iPad function or app, how frequently they used it, how frequently they used a specific function or app for a specific in or outside the classroom learning activity, how easy it was to use for that activity, and how much they liked using it for that activity.