Who prefers what? The effectiveness of Blackboard for on-campus marketing students in Singapore

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Abstract

Tertiary institutions in Singapore are increasingly replacing elements of their traditional on-campus lectures and tutorials with more advanced technological approaches. These technologies provide tertiary institutions with an ideal opportunity for on-campus students to access learning resources and provide them with more control over their learning. The current study focuses on on-campus students enrolled in an undergraduate marketing subject that have used Blackboard to facilitate students’ learning. The sample consisted of 390 undergraduate business students. The findings indicated that most respondents would like Blackboard to be more fully utilised offering results calculators, and additional learning resources to facilitate their learning.

Introduction

In recent years, rapid advances in information technology strongly increased the interest of marketing educators to replace elements of traditional on-campus lectures and tutorials with technical substitutes. For example, they have replaced print-based study packages with learning technologies such as interactive CDs and electronic communication via e-mail, online discussion forums, and chat rooms (Eastman & Owens Swift 2001; McPhail & Birch 2004). Just like their counterparts around the world, tertiary institutions in Singapore are increasingly replacing elements of their traditional on-campus lectures and tutorials with more advanced technological approaches. These technologies provide tertiary institutions with an ideal opportunity for on-campus students to access learning resources and provide them with greater flexibility to access subject materials. These techniques allow students the freedom to choose when and where they wish to study and allow them the flexibility to manage both their non-college life and their engagement with the institution.

This educational shift has been determined by a number of driving forces including pedagogical, pragmatic, opportunistic, and psychological motivations (Peled 2000; Brooks, Nolan & Gallagher 2001; Brown 2007). The trend has, however, attracted the interest of researchers concerned about the impact of these changes on students in terms of both their acceptance of the changes and their educational performance (Hunt, Eagle & Kitchen 2004; McDonald & McPhail 2004). It is important to utilise course management systems (CMS) that are comparable with students’ ability and willingness to adopt a new technology. Madden-Hallett and Ashley (2008) argued that Gen Y were not responsive to the adoption of leading edge technologies. Therefore investigation into the use of Blackboard, a robust and well known CMS is relevant for this generational cohort. The purpose of this paper is to investigate on-campus business/marketing students’ perceptions of Blackboard for enhancing learning and disseminating information. Face to face teaching, because it is synchronous, is time sensitive. One of the perceived strengths of Blackboard is that it is asynchronous; eliminating the time sensitivity of materials delivery. In this role Blackboard may greatly assist the learning process as a support teaching tool. It must be
recognised that there are many factors that can influence both positively and negatively students learning and that management of subject is but one of those factors (Krause, Bochner & Duchesne 2003). The study also looks at students’ perception of Blackboard as a communication and socialising medium with Blackboard used as a teaching and learning platform.

**Literature Review**

This section explores research relating to web-based learning and Blackboard, which are central themes in this paper. This research provides insight into the use of Blackboard in a learning environment and how to provide students with a valuable learning experience. Educators are aware of the necessity for prudent use of resources. The application of Blackboard in a learning environment is an effective way to reduce operational costs whilst improving the student learning experience. Educational institutions would benefit from further research into the effectiveness of Blackboard and similar technologies.

*Web-based/on-line facilitation of learning.* Web-based learning or on-line learning environments have been developed and used around the world during the past decade (Aggarwal 2000). Most web-based learning courses are a mixture of static and interactive materials, and whilst they use technology they recognise the importance of face-to-face interaction. Some advantages of web-based learning methods are its accessibility, the ease with which content can be updated and hyperlink functions that permit cross-referencing to other resources (Aggarwal 2000; McKimm, Jollie & Cantillon 2003).

The integration of web-based resources and conventional face-to-face teaching in a tertiary institution is normally done via an intranet. This is usually “password protected” and accessible only to registered users. Thus it is possible to protect the intellectual property of online material and to support confidential exchange of communication between students (McKimm, Jollie & Cantillon 2003). Recent developments in web-based learning have benefited tremendously from the developments in easy-to-use courseware management systems (CMS) such as WebMentor, WebCT, and Blackboard, all of which offer almost the same basic features of instructional platform (Abdalla 2007). In Singapore, most tertiary institutions use CMS to facilitate teaching and learning for many on-campus degrees. Blackboard has become a popular tool for this purpose.

*Blackboard.* In brief, Blackboard is a teaching aid that works within an Internet browser. Blackboard offers space for discussion boards, tests and quizzes, grade books, instructor profiles, and a chat room (Stewart & Scappaticci 2005). It also provide the instructor and students with capabilities such as the ability to post documents in HTML format, to create document files (word, excel, power point or acrobat) that can be shared with students and is easy to download, to create a grade tracking module, and to schedule classes, meetings and assessment via a calendar (Merron 1999).

Blackboard however, has been criticised because materials in a subject are easily retrieved electronically and this may cause students to believe they do not need to attend classes. This study investigates this issue and the alternative suggestion that Blackboard is effective for
creating a sense of ownership and camaraderie within the student cohort. In this way students’ negative perceptions of class attendance may be reduced. Research conducted by McCrindle (2007) suggests that Generation Y, usually classified as those born between 1977 to 1997 (Heebner 2001), strongly desire a sense of belonging to a community and use technologies to find this.

In summary, web-based learning support for on-campus students is simply a new version of a traditional paper-based learning environment. In the on-campus web-based learning environment there are no set times for revision and students can freely access all subject materials and resources at any time and from different venues. The convenience of Blackboard is particularly relevant for students with work, family and social commitments. However, this study also examines students’ opinion of whether Blackboard should take on some of the functions of the instructor. In this mode interaction may be at students’ convenience. By utilising the web environment such as online discussion forum, the subject homepage and email as a tool for interaction (all these functions are made available by Blackboard) students have more control of their learning. This offers a learning environment in which a students’ university learning can mesh smoothly with their non-university life.

**Case Study**

This study focuses on on-campus students enrolled in an undergraduate marketing subject – *Principles of Marketing*. Students involved in the research came from one of the largest Polytechnics in Singapore which reside in the western region of Singapore. The department in which the subject was developed and delivered already employed the Blackboard CMS as the primary mechanism for the delivery of course materials.

Since July 1999, the Polytechnic has introduced the ‘own-a-notebook’ scheme for students. To date all new students enrolling in the Polytechnic courses will need to have their own laptop computers. It gives them the flexibility to work on assignments, surf the Internet for information, using Blackboard for accessing the subject web-sites, participate in online discussions, and communicate with their tutors and classmates through email anytime and anywhere they wish (Ngee Ann Polytechnic 2008).

The subject was taught as a two-hour lecture, with a two-hour weekly tutorial. The course homepage (in Blackboard platform) provided announcements from course instructors, a subject guide, lecture notes, assignments details, and additional documents related to the subject.

**Method**

Data was collected using a one-page questionnaire administered in the final week of semester one, 2007 in the lecture period. The students were enrolled in a Diploma of Business course at the Polytechnic. The students were in their first year of college and were studying a range of business courses such as Marketing, Human Resources, Finance, Accounting, Business Computing and Tourism.
The survey asked students to respond to basic profile questions and were given a range of statements using a five-point Likert-scale. The statements focused on the use of the technology, user friendliness, access to support, methods and time of use, learning and perceptions. The questionnaire survey required between five and ten minutes to complete. Students were informed that their participation was anonymous and not part of the assessment regime of the class. There were 390 completed surveys collected comprising 223 female students and 163 male students (4 respondents did not complete this item).

Results

390 students responded to the survey (the majority of the population). It was composed of students enrolled in a marketing subject. The opening questions asked respondents to state their age, gender and level of experience as a computer user. The results showed that almost all respondents were between 16-24 years of age.

Gender of respondents was slightly unevenly distributed, with 57.2% indicated for female and 41.8% male. The next variable was level of experience as a computer user. Whilst this was a self-evaluated question it was felt that given the general level of computer use in the community respondents would be sufficiently conversant with computer use to give an accurate self-analysis. 55.6% of the respondents considered themselves to be either ‘a bit experienced’ or ‘experienced’.

Respondents were also asked to indicate their level of agreement with the statements as shown in table 1. The intention of these questions was to establish the students’ viewpoint on Blackboard as a learning facilitation tool. The results indicate that students prefer (with a mean of less than 3) Blackboard as a facilitation tool for their learning, that the package is user friendly and the ‘impression of themselves’ was enhanced by using Blackboard. The results also indicated they believed Blackboard to be a helpful tool for accessing administrative information about a subject.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>It would be useful if I could view all my assessment results.</td>
<td>1.9818</td>
<td>.74105</td>
</tr>
<tr>
<td>It would be useful to have a calculation tools so that I can use it to estimate what marks I would need to score a mark within the designed ranges of Pass, Credit, Distinction &amp; High Distinction.</td>
<td>1.9896</td>
<td>.81108</td>
</tr>
<tr>
<td>It would be useful to have a calculation tool so that I can tally my progressive results.</td>
<td>2.1432</td>
<td>.81935</td>
</tr>
<tr>
<td>Learning to operate Blackboard was easy for me.</td>
<td>2.0494</td>
<td>.71455</td>
</tr>
<tr>
<td>It was easy for me to familiarize myself with Blackboard's functions and information sites.</td>
<td>2.0625</td>
<td>.65137</td>
</tr>
<tr>
<td>I found Blackboard user friendly and easy to use.</td>
<td>2.0961</td>
<td>.66818</td>
</tr>
<tr>
<td>I get all the information I need (subject guide, assignment topic, lecture notes etc.) for taking care of study more conveniently from Blackboard than from the face-to-face lecture.</td>
<td>2.2237</td>
<td>.82416</td>
</tr>
<tr>
<td>By using Blackboard I get better service than from the face-to-face lecture.</td>
<td>2.5349</td>
<td>.82744</td>
</tr>
<tr>
<td>It would be fun to have more visually interesting multimedia materials available on Blackboard.</td>
<td>2.2857</td>
<td>.78821</td>
</tr>
<tr>
<td>It would be useful if I could view other subjects offered by the Faculty of Business and Law, on Blackboard in which I am not enrolled.</td>
<td>2.3143</td>
<td>.77891</td>
</tr>
<tr>
<td>By using Blackboard I had more time for my family/friends/hobbies</td>
<td>2.5938</td>
<td>.84008</td>
</tr>
</tbody>
</table>
The statements which elicited the two most favourable responses from students using Blackboard all related to students getting information about their marks. For example, the most favourable response with a mean of 1.98, (SD .741) related to students viewing their assessment results online. The next favourable response indicated that a calculator designed to estimate what they would need to score to gain a pass, credit, distinction or high distinction would be a useful tool (mean 1.98 and SD .811). The last item in this category again related to a calculator so that students could tally their results as their assessments were completed (mean 2.14 and SD .819). Students taking a strong interest in their results is a well known educational phenomenon. Using Blackboard to assist them calculate hypothetical and actual results may prove to be useful because students may then be able to estimate their level of commitment to gain their desired results.

The statements also with favourable means are those that relate to a facility in Blackboard that would enable students to search within Blackboard for information about other subjects and topics (means of >2.0).

Two items to which students responded favourably are; the convenience of getting information from Blackboard than from face to face lectures, and Blackboard providing better service than attendance at lectures. The results indicate that students strongly believe Blackboard provides good service and that they prefer it to face to face interaction with instructors (means of >2.22). The final three positive statements relate to the students perception of Blackboard. Specifically its potential to carry visually interesting multimedia materials (mean 2.28), its potential to provide students with additional information about other suitable subjects (mean 2.31) and that it allowed them more time (because of its ease of use) with family and friends (mean 2.59). The means and corresponding SD of these three items suggest that as Blackboard is being used its full potential is underutilised. It would be of value to conduct further research to establish from the user’s perspective areas that could be improved.

**Conclusion and Recommendations**

This study analysed how a CMS such as Blackboard is used for an on-campus marketing subject. The results of this research suggest that students’ perceptions of Blackboard are generally positive, and they find it to be an effective tool to enhance the learning environment. Educators still must define Blackboard’s unique educational contribution. Evaluation of web-based learning using Blackboard is in its infancy. Most students welcome Blackboard (provided that download speed is fast), and give high satisfaction ratings. Students may learn efficiently, but there is minimal information about the relative costs of web-based learning programs. Finally, curriculum development and instructional design are no less important for Web-based educational interventions than for other media. Educators must recognise that poorly designed educational programs or materials are not improved by being presented or utilised on Blackboard specifically or any web page in general.
References


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