

Is WebCT a Better Choice for On-Campus Marketing Students? The experience of undergraduate student users in Victoria, Australia

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Abstract: Universities in Australia are increasingly replacing elements of their traditional on-campus lectures and tutorials with more advanced technological approaches. These technologies provide universities 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 four undergraduate marketing subjects that have used WebCT to facilitate students' learning. The sample consisted of 328 undergraduate marketing students. The findings indicated that most respondents enjoyed using WebCT, they found it user friendly and that its use enhanced their impression of themselves and of others. Students were also positive about its usefulness for accessing administrative materials.

Introduction

During the past decade, marketing educators have enhanced or replaced 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). 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-university life and their engagement with the university. In Australia, major tertiary institutions, including Victoria University, have previously delivered courses via static print-based study packages, typically comprising a study guide and a book of readings. University administrators and academics have endeavoured to respond to students' requests for greater flexibility by making learning as accessible as possible and this has led to a greater use of technology-based courses. These consist of an interactive course homepage as well as traditional study packages.

This educational shift has been determined by a number of driving forces including pedagogical, pragmatic, opportunistic, and psychological motivations. 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). The purpose of this paper is to investigate on-campus marketing students' perceptions of WebCT for

enhancing learning and disseminating information. The study also looks at students' perception of WebCT as a communication and socialising medium with WebCT used as a teaching and learning platform.

Literature Review

This section explores research relating to web-based learning and WebCT, which are central themes in this paper. This research provides insight into the use of WebCT in a learning environment and how to provide students with a valuable learning experience. Educationalists are aware of the necessity for prudent use of resources. The application of WebCT 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 WebCT 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. Thus most educational program designers ensure that some individual face-to-face teaching for students is incorporated into the programs. 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). In Australia, most tertiary institutions use web resources to facilitate teaching and learning for many on-campus degrees. WebCT has become a popular tool for this purpose.

WebCT. In brief, WebCT is a teaching aid that works within an Internet browser. It provides 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).

WebCT 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 WebCT 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 (2006) 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 WebCT is particularly relevant for students with work, family and social commitments. However, this study also examines students' opinion of whether WebCT should take on some of the functions of the instructor. Conversely, students' opinions were sought regarding interaction with the instructor via WebCT. 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 WebCT) 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 four undergraduate marketing subjects that have been using the WebCT as a platform to support their learning. One of the subjects, Introduction to Marketing (BHO1171) is part of the core of the Bachelor of Business at the university. The other subjects, Product and Pricing Strategy (BHO2251); Business to Business Marketing (BHO2253) and Marketing on the Internet (BHO2407) are the second-level courses in the marketing major or an elective for other business student.

The subjects were taught as a two-hour lecture, with a one-hour weekly tutorial. To pass these subjects, students had to pass the final examination and complete all other assessment components (three pieces of assessment per subject). The course homepage (in WebCT 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 2, 2006 in the lecture period. The students were enrolled in a Bachelor of Business degree at Victoria University in Melbourne, Australia. Students surveyed were from three different campuses (located at Footscray Park, Werribee and Sunbury). Students were informed that their participation was anonymous and not part of the assessment regime of the class. The survey and protocol were approved by the University's ethics committee.

Students were asked a total of twenty-four self-developed questions most of which required a response on a five point Likert scale with 'strongly agree' and 'strongly disagree' at the extremes. This approach has been used previously in the literature which

examines teaching and learning methods (Harasim 1999). The majority of questions focused on students' perceptions of the value of WebCT in facilitating learning, and as a communication tool. Students' perceptions about the benefits and the enjoyment of using WebCT and the level of difficulty they may have experienced as well. The mean and standard deviation (SD) were established for each item and the results sorted on most favourable mean to least favourable and displayed in table 4. Additionally a one-sample t-test was undertaken to establish that the results were not an artefact of some form of error. Only results in which the value for two-tailed significance is less than .05 have been included.

Results

The response rate of the questionnaire survey was 328 (the majority of the population) composed of students enrolled in four marketing subjects (as listed above). The opening questions asked respondents to state their age, gender, level of experience as a computer user and the subject in which they were enrolled in which they used WebCT. The results (table 1. Age of respondents) showed that more than 79% of the respondents were between 18-24 years of age.

Table 1. Age of respondents

Age	Number of Student	Percentage
18-24	261	79.6
24+	67	20.4
<i>Total</i>	328	100.0

Gender of respondents was evenly distributed, with 55.5% indicated for female and 44.5% 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. 70% of the respondents considered themselves to be either 'a bit experienced' or 'experienced' as shown in table 2.

Table 2. Level of experience as a computer user

Level of Experience	Number of Student	Percentage
Inexperienced	9	2.7
A bit Inexperienced	16	4.9
Neutral	73	22.3
A bit Experienced	118	36.0
Experienced	112	34.1
<i>Total</i>	328	100.0

The respondents were drawn from four marketing subjects as mentioned earlier, with most respondents from the introductory marketing subject (BHO1171) across three campuses as shown in table 3.

Table 3. Respondents' based campus

Campus	Number of Student	Percentage
Footscray Park	266	81.1
Sunbury	29	8.8
Werribee	33	10.1
Total	328	100.0

Respondents were also asked to indicate their level of agreement with the statements as shown in table 4. The intention of these questions was to establish the students' viewpoint on WebCT as learning facilitation tool. The questions sought to establish WebCT's degree of user friendliness, the students' perception of themselves if they used it, and for what other hypothetical purposes they may use it (such as using a search engine). The results indicate that students prefer (with a mean of less than 3) WebCT as a facilitation tool for their learning, that the package is user friendly and the 'impression of themselves' was enhanced by using WebCT. The results also indicated they believed WebCT to be a helpful tool for accessing administrative information about a subject.

Table 4. Agreement/Disagreement

Questions	Mean	Std Dev	Sig. 2-tailed
It would be useful if I could view all my assessment results.	1.6768	.79321	.000
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 & High Distinction.	1.9177	.84008	.000
It would be useful to have a calculation tool so that I can tally my progressive results.	2.0305	.82709	.000
It would be useful to have a search agent in WebCT that would search for me information about topics I have chosen.	2.0579	.82005	.000
It would be useful if I could be provided with information about other subjects that are similar in some way to one of the subjects in which I am enrolled.	2.1402	.82682	.000
It would be useful if I could view other subjects offered by the Faculty of Business and Law, on WebCT in which I am not enrolled.	2.1402	.85590	.000
Learning to operate WebCT was easy for me.	2.1402	.91128	.000
It was easy for me to familiarize myself with WebCT's functions and information sites.	2.2012	.81033	.000
My interaction with WebCT was clear and understandable.	2.2256	.78850	.000
I found WebCT user friendly and easy to use.	2.3201	.94721	.000
It would be useful to exchange opinions with other colleagues or instructors under 'Who's online' about topics related to subjects in which I am enrolled.	2.4817	.76604	.000
It would be fun to have more visually interesting multimedia materials available on WebCT.	2.5122	.89844	.000
I get all the information I need (subject guide, assignment topic, lecture notes etc.) for taking care of study more conveniently from WebCT than from the face-to-face lecture.	2.6037	.96177	.000
Using WebCT for my studies improved my study performance and effectiveness.	2.8110	.88873	.000
Using WebCT shortened the amount of time I spent on my study.	3.1250	.92514	.015
By using WebCT I get better service than from the face-to-face lecture.	3.1250	.93827	.016
By using WebCT I stand out from ordinary people who use traditional methods.	3.1463	.96256	.006
I would like to read versatile daily news about WebCT.	3.1677	.94784	.001

The responses which elicited the most favourable responses from students using WebCT all related to students getting information about their marks. For example, the most favourable response with a mean of 1.6768, (SD .79321) related to students viewing their assessment results on line. 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 1.9177 and SD .84008). The last item in this category again related to a calculator so that students could tally their results as their assessments were completed (mean 2.0305 and SD .82709). Students taking a strong interest in their results is a well known educational phenomenon. Using WebCT 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 following three items with favourable means are those that relate to a facility in WebCT that would enable students to search within WebCT for information about other subjects and topics. Course co-ordinators would be well advised to consider providing information about similar subjects within their courses on WebCT subject sites. This would enable students to garner additional information about forthcoming subjects and effectively review their enrolment decisions.

The next four positive items all relate to WebCT's ease of use and indicate that students found the system user friendly and imply that they had used many of the functionalities of the package. The means and corresponding SD of these four items suggest that there is however, room for improvement in WebCT's ease of use. It would be of value to conduct further research to establish from the user's perspective areas that could be improved.

The next item with a standard deviation of (0.76604) as can be seen in table 4, relates to students' opinion of the usefulness of accessing colleagues and instructors online. The results would indicate that students consider this feature to be desirable. From a pedagogic perspective the provision of this feature may be advantageous for students in that they could obtain assistance closer to when it is needed rather than solely at scheduled class times and instructor 'in office' times. It would also assist students with domestic and work responsibilities or those that face long travel times. Conversely easy access to instructors online may motive students to skip classes altogether as they may then believe they have received all necessary assistance. Using WebCT to access colleagues and instructors may also place a heavier burden on institutions and unless monitored carefully a few students may heavily engage the instructor on-line, thus precluding others from gaining access. With careful monitoring and group discussion forums, on-line access to colleagues and instructors may provide students with an equitable additional learning resource.

Two items to which students responded unfavourably are; the convenience of getting information from WebCT than from face to face lectures, and WebCT providing better service than attendance at lectures. The results indicate that students strongly believe they receive better service and that they prefer the face to face interaction with instructors.

Conclusion and Recommendations

The findings of this research indicate that web-based learning using WebCT is a valuable addition to an educational armoury, but it does not replace traditional methods such as text materials, lectures, small-group discussion, or problem-based learning. Educators still must define WebCT's unique educational contribution. Evaluation of web-based learning using WebCT is in its infancy. Although most learners welcome WebCT (provided that download speed is fast), and give high satisfaction ratings, there is no evidence that students learn more from Web-based programs than by traditional methods. Students may learn more 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 recognize that poorly designed educational programs or materials are not improved by being presented or utilised on WebCT specifically or any web page in general.

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