Students’ Perceptions of Compulsory Asynchronous Online Discussion

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Abstract

Online discussion boards are increasingly being used by tertiary educators as tools for encouraging student interaction and for developing learning networks. In particular, educators who have adopted a socio-constructivist approach to teaching are keen to facilitate collaborative learning in which students share their experiences and perspectives, and construct knowledge together through shared meanings. In this paper, the findings from an electronic survey of 72 distance education students’ perceptions of an online discussion assessment item (ODAI) are presented. The study revealed that the majority of the respondents enjoyed the ODAI, and agreed that the online discussions had allowed them to achieve a range of cognitive and social learning outcomes, and to develop some important graduate skills.

Introduction

Online discussion boards are now commonly used in many university courses, and in particular for distance learning. Electronic means of communication have overcome the tyranny of distance by providing a mechanism for students across the globe to interact with one another at a time and place that is convenient to them (Berge and Collins, 1995; Whatley and Bell, 2003; Wu and Hiltz, 2004). Further, student interactions on online discussion boards facilitate a socio-constructivist approach to teaching involving social and collaborative learning processes (Stacey, 2002). The main objective of this study was to explore distance education students’ perceptions toward compulsory participation in online discussions and to determine the impact of online discussion on students’ perceived learning outcomes. Other research objectives included identifying barriers to participation and uncovering factors that encourage participation in online discussions.

Asynchronous Online Discussions and the Socio-constructivist Learning Paradigm

The socio-constructivist learning paradigm emphasises learner-centred learning, whereby learners share their experiences and perspectives with one another to arrive at shared meanings and perspectives (Goodyear, 2001; Kolb, 1984; Whatley and Bell, 2003; Wilson and Stacey, 2004). Students are encouraged to collaborate and engage in active dialogue to construct knowledge by discovering principles for themselves (Bruner, 1990; Jonassen, 1999). The socio-constructivist paradigm involves assisting students to extend their knowledge (‘scaffolding’) by encouraging them to go beyond merely answering questions to actively engaging in dialogue with other students and instructors (‘reciprocal teaching’) (Birch, 2004; Hausfather, 1996). In this paradigm, the role of the teacher has shifted away from one-way transmission of information toward facilitation of student learning through greater emphasis on peer interactions for cognitive development (Curtin, 2002). Social interaction influences cognitive development and raises the quality of distance learning programs (Moore, 1989; Vygotsky, 1978; Wilson and Stacey, 2004). While the socio-
constructivist approach is readily achieved in face-to-face learning environments, it is more
difficult to replicate in distance education settings. However, online discussion forums now
facilitate a socio-constructivist approach by allowing students who are studying at a distance
to develop learning communities through sharing and reflecting upon their experiences and
perspectives and providing feedback to one another online (Wilson and Stacey, 2004).

Asynchronous online discussions have been found to yield both cognitive and social learning
outcomes (Birch, 2004; Harasim, 1997; Wu and Hiltz, 2004). Indeed, Larkin-Hein (2001)
argued that online discussions allow active learning, and thus facilitate the development of
higher-order thinking skills and deeper learning (Gibbs, 1992). Further, online discussion
forums “promote high levels of cognitive engagement and critical thinking” (Wu and Hiltz,
2004, p.141; Thomas, 2002). Asynchronous online discussions allow “an intellectual
environment that encourages active, thoughtful, and equal participation from all comers”
(Althaus, 1997, p.158). Moreover, asynchronous online discussions permit students to interact
at their own pace, thus giving them an opportunity to more carefully consider their
contributions prior to engaging in the discussion (Birch, 2004). Thus, online discussions may
be particularly beneficial for students from non-English speaking backgrounds (Curtin, 2002).
One major benefit of online discussions is the opportunity that students have to “practise the
new language of the knowledge community” (Wilson and Stacey, 2004, p.2) in a safe and
supportive learning environment. These benefits may encourage educators to make greater
use of online discussions.

Case Study – Promotion Management Course

Distance education students in an undergraduate course in promotion management were
required to participate on the online discussion board as a compulsory part of their assessment
(10% of the total mark). The primary objectives of the assessment were to replicate the on-
campus students’ tutorial experience by stimulating greater interaction between the distance
education students, and fostering a social and collaborative learning environment in which
students could develop meanings by sharing their experiences and perspectives (Jonassen,
1999). Other objectives included facilitating students to develop better electronic
communication skills and reducing the sense of isolation that distance education students
sometimes experience. Students were required to make four postings of 100-150 words across
ten topics. Students were asked to share their experiences and perspectives on a given topic by
posting either an original comment, responding constructively to another student’s
contribution, or synthesising a number of students’ responses. Students were provided with a
rubric for assessment that explained that their contributions would be evaluated as being
excellent, good, sound, limited or minimal, in terms of the insightfulness of their comments,
their understanding of the underlying theory, and their ability to apply the theory to ‘real-
world’ marketing situations.

Research Method

The research method involved conducting an electronic survey toward the end of the
semester. Students were asked to indicate their level of agreement with a number of
statements concerning the online discussion assessment item (ODAI). These statements were
developed to measure students’ perceptions of the various cognitive and social outcomes of
the ODAI, as well as whether the ODAI had assisted with the development of important
graduate skills. Students were also asked about their attitude toward online discussions in general, and then the ODAI in particular. The statements were developed from a review of the literature and an exploratory study that had been undertaken in a previous offering of the course.

Findings and Discussion

Of the 161 distance education students enrolled in the course, 72 (44.7%) responded to the survey. The majority of the respondents were female (80%) and aged 21-29 years (80%). The respondents to the survey included both on-shore (40%) and off-shore students (60%), and despite being a distance education course, 70% of the respondents reported that they were full-time students (many students in the course are enrolled with overseas partner colleges). However, 37% of the respondents also reported that they were full-time employed. Over half of the respondents (55.4%) indicated that English was not their first language. Most of the respondents (73.8%) had completed less than 13 courses in their program.

To assess students’ perceptions of whether the ODAI had yielded beneficial cognitive and social outcomes, as well as, important graduate attributes, students were asked to respond on the extent to which they agreed that the ODAI had allowed them to achieve these outcomes (table 1).

Table 1: Cognitive and Social Outcomes of the ODAI (%)

<table>
<thead>
<tr>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
<th>Mn</th>
<th>Std</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ODAI allowed me to apply the theory to real-world examples</td>
<td>38.5</td>
<td>47.7</td>
<td>10.8</td>
<td>1.5</td>
<td>1.8</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>The ODAI encouraged me to think more deeply about key concepts</td>
<td>36.4</td>
<td>43.9</td>
<td>13.6</td>
<td>3.0</td>
<td>1.9</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>The ODAI helped me to understand key concepts</td>
<td>25.8</td>
<td>51.5</td>
<td>19.7</td>
<td>3.0</td>
<td>0.0</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>The ODAI allowed me to assess my progress relative to other students</td>
<td>13.8</td>
<td>47.7</td>
<td>30.8</td>
<td>6.2</td>
<td>1.5</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Social/cognitive outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ODAI provided me with an opportunity to gain feedback on my opinions from my instructors</td>
<td>36.9</td>
<td>55.4</td>
<td>4.6</td>
<td>3.1</td>
<td>0.0</td>
<td>1.7</td>
<td>0.6</td>
</tr>
<tr>
<td>The ODAI gave me an opportunity to share my views/perspectives</td>
<td>33.3</td>
<td>51.5</td>
<td>15.2</td>
<td>0.0</td>
<td>0.0</td>
<td>1.8</td>
<td>0.6</td>
</tr>
<tr>
<td>The ODAI provided me with an opportunity to gain feedback on my opinions from other students</td>
<td>24.2</td>
<td>51.5</td>
<td>16.7</td>
<td>7.6</td>
<td>0.0</td>
<td>2.0</td>
<td>0.8</td>
</tr>
<tr>
<td>The ODAI allowed me to share my experiences with others</td>
<td>16.7</td>
<td>63.6</td>
<td>18.2</td>
<td>1.5</td>
<td>0.0</td>
<td>2.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Social outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ODAI provided me with an opportunity to meet other students in the course</td>
<td>6.2</td>
<td>35.4</td>
<td>40.0</td>
<td>15.4</td>
<td>3.1</td>
<td>2.7</td>
<td>0.9</td>
</tr>
<tr>
<td>The ODAI allowed me to develop closer relationships with other students in the course</td>
<td>6.1</td>
<td>22.7</td>
<td>45.5</td>
<td>22.7</td>
<td>3.0</td>
<td>2.9</td>
<td>0.9</td>
</tr>
</tbody>
</table>

(Five-point Likert scale with 1 = SA strongly agree and 5 = SD strongly disagree)

The main cognitive outcomes that respondents agreed were achieved through the ODAI included allowing them to apply theory to real-world examples (86%), thinking more deeply about key concepts (80%), and understanding key concepts (77%). These findings confirm previous research which found that there are significant cognitive benefits to be gained from online discussions (Larkin-Hein, 2001; Thomas, 2002). In line with socio-constructivist
approaches to learning, outcomes which were both cognitive and social in nature included gaining feedback on opinions from instructors (92%) and other students (76%), sharing views/perspectives with others (85%), and sharing experiences with others (80%). This supports the findings of previous research that revealed that students perceive benefits from online discussions including improved learning skills and the quality of their learning (Harasim, 1997; Wu and Hiltz, 2004). While many respondents neither agreed nor disagreed with statements concerning the social outcomes of the ODAI, some respondents did agree that the ODAI had provided them with an opportunity to meet other students (42%), and that the ODAI had allowed them to develop closer relationships with other students (29%).

Respondents agreed that some important graduate attributes had been achieved through participation in the ODAI including providing an opportunity to improve their ability to present their thoughts and opinions in writing (79%), keeping up to date with their study (71%), becoming more confident in using online discussion boards (69%), and enabling the development of more effective electronic communication skills (69%) (table 2).

### Table 2: Ability of the ODAI to Develop Important Graduate Skills (%)

<table>
<thead>
<tr>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
<th>Mn</th>
<th>Std</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ODAI provided me with an opportunity to improve my ability to present my thoughts and opinions in writing</td>
<td>24.6</td>
<td>53.8</td>
<td>20.0</td>
<td>1.5</td>
<td>0.0</td>
<td>1.9</td>
<td>0.7</td>
</tr>
<tr>
<td>The ODAI encouraged me to keep up to date with my study</td>
<td>30.3</td>
<td>40.9</td>
<td>21.2</td>
<td>6.1</td>
<td>1.5</td>
<td>2.0</td>
<td>0.9</td>
</tr>
<tr>
<td>The ODAI helped me to become more confident in using online discussion boards</td>
<td>21.5</td>
<td>47.7</td>
<td>20.0</td>
<td>10.8</td>
<td>0.0</td>
<td>2.2</td>
<td>0.9</td>
</tr>
<tr>
<td>The ODAI helped me to develop more effective electronic communication skills</td>
<td>13.8</td>
<td>55.4</td>
<td>20.0</td>
<td>7.7</td>
<td>3.1</td>
<td>2.3</td>
<td>0.9</td>
</tr>
</tbody>
</table>

(Five-point Likert scale with 1 = SA strongly agree and 5 = SD strongly disagree)

Respondents were asked about their attitudes toward online discussions. Respondents agreed that having been required to participate in the online discussion, they would now be more likely to voluntarily participate in future courses (56%). Further, only 38% of the respondents agreed that it was difficult to find time to access the course discussion board, only 28% agreed that they did not like being required to participate, and only 31% of the respondents agreed that they would not participate if they were not required to do so. Moreover, many of the respondents (41%) agreed that ‘online discussions should be compulsory’, with a further 33% neither agreeing nor disagreeing with this statement (table 3).

### Table 3: Students’ Attitudes Toward Online Discussions (%)

<table>
<thead>
<tr>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
<th>Mn</th>
<th>Std</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having been required to participate in the online discussion in this course, I am now more likely to voluntarily participate in future courses</td>
<td>7.8</td>
<td>48.4</td>
<td>23.4</td>
<td>15.6</td>
<td>4.7</td>
<td>2.6</td>
<td>1.0</td>
</tr>
<tr>
<td>I found it difficult to find time to access the course discussion board</td>
<td>13.8</td>
<td>24.6</td>
<td>27.7</td>
<td>27.7</td>
<td>6.2</td>
<td>2.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Online discussions should be compulsory</td>
<td>7.6</td>
<td>25.8</td>
<td>33.3</td>
<td>27.3</td>
<td>6.1</td>
<td>2.9</td>
<td>1.0</td>
</tr>
<tr>
<td>If I was not required to, I would not participate in online discussions</td>
<td>4.7</td>
<td>21.9</td>
<td>29.7</td>
<td>42.2</td>
<td>1.6</td>
<td>3.1</td>
<td>0.9</td>
</tr>
<tr>
<td>I did not like being required to participate in the online discussions</td>
<td>6.2</td>
<td>15.4</td>
<td>35.4</td>
<td>35.4</td>
<td>7.7</td>
<td>3.2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

(Five-point Likert scale with 1 = SA strongly agree and 5 = SD strongly disagree)
Respondents were asked about their attitude toward the ODAI on a range of items (table 4). On the positive side, less than one quarter of the respondents agreed that they did not like the ODAI (22%). Indeed, most agreed that they enjoyed the ODAI (59%) and considered it to be a good idea (73%), while almost half of the respondents agreed that it was a novel assessment item (45%), and most agreed it should be continued for future offerings of the course (72%). Further, only 27% of the respondents agreed that they had experienced some difficulty accessing the course discussion board, while only 20% indicated that the discussion board took too long to download. On the negative side, 38% of respondents agreed that the ODAI was a time-consuming assessment item, and 39% of the respondents agreed that they had problems meeting the deadlines for posting on the weekly discussion topics.

Table 4: Students’ Attitudes Toward the ODAI (%)

<table>
<thead>
<tr>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
<th>Mn</th>
<th>Std</th>
</tr>
</thead>
<tbody>
<tr>
<td>I did not like the ODAI</td>
<td>6.2</td>
<td>9.2</td>
<td>24.6</td>
<td>43.1</td>
<td>16.9</td>
<td>3.5</td>
<td>1.0</td>
</tr>
<tr>
<td>I experienced some difficulty accessing the course discussion board</td>
<td>3.1</td>
<td>23.4</td>
<td>18.8</td>
<td>39.1</td>
<td>15.6</td>
<td>3.4</td>
<td>1.1</td>
</tr>
<tr>
<td>The discussion board took too long to download</td>
<td>1.5</td>
<td>18.5</td>
<td>16.9</td>
<td>55.4</td>
<td>7.7</td>
<td>3.4</td>
<td>0.9</td>
</tr>
<tr>
<td>The ODAI is a good idea</td>
<td>37.5</td>
<td>35.9</td>
<td>20.3</td>
<td>6.3</td>
<td>0.0</td>
<td>1.9</td>
<td>0.9</td>
</tr>
<tr>
<td>The ODAI should be continued for future offerings of this course</td>
<td>32.3</td>
<td>40.0</td>
<td>20.0</td>
<td>7.7</td>
<td>0.0</td>
<td>2.0</td>
<td>0.9</td>
</tr>
<tr>
<td>I enjoyed the ODAI</td>
<td>13.8</td>
<td>44.6</td>
<td>30.8</td>
<td>9.2</td>
<td>1.5</td>
<td>2.4</td>
<td>0.8</td>
</tr>
<tr>
<td>The ODAI is a novel assessment item</td>
<td>14.1</td>
<td>31.3</td>
<td>45.3</td>
<td>9.4</td>
<td>0.0</td>
<td>2.5</td>
<td>0.8</td>
</tr>
<tr>
<td>The ODAI was a time-consuming assessment item</td>
<td>14.1</td>
<td>23.4</td>
<td>25.0</td>
<td>32.8</td>
<td>4.7</td>
<td>2.9</td>
<td>1.1</td>
</tr>
<tr>
<td>I had problems meeting the deadlines for the discussion topics</td>
<td>10.8</td>
<td>27.7</td>
<td>27.7</td>
<td>26.2</td>
<td>7.7</td>
<td>2.9</td>
<td>1.1</td>
</tr>
</tbody>
</table>

(Five-point Likert scale with 1 = SA strongly agree and 5 = SD strongly disagree)

Limitations, Further Research and Implications

This study was restricted to one undergraduate marketing course and thus should be replicated for other courses using compulsory online discussions. Further, the 47% response rate may mean some non-response bias, with less satisfied students or students who are less comfortable in the electronic environment electing not to respond. Further, as 80% of the respondents were female, it was not possible to conduct comparisons on the basis of gender. Hence, further research should seek to obtain a sample with a more even gender distribution.

Major implications for online educators are that students perceive that there are valuable benefits to be gained from participation in asynchronous online discussions. In particular, respondents perceived significant cognitive benefits and the ability to develop important graduate attribute skills via online discussions. Further, the online discussion appears to support a socio-constructivist approach to learning by yielding a number of outcomes which are both social and cognitive in nature. To a lesser extent, distance education students also consider online discussions to yield some purely social benefits. The findings of this study also indicate that some of the barriers to online discussions that have previously been reported in the literature, such as limited access to the Internet and the time it takes to download the discussion board, may not be as problematic now as they have been in the past. Further, the findings indicate that students are not necessarily opposed to online discussion being set as part of their assessment, and this may be due to the learning outcomes that they perceive can be achieved through online discussions.
References


