Engaging project management postgraduate students in online environments- A Qualitative study

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Engaging Project Management Postgraduate Students in Online Environments – A Qualitative Study

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ABSTRACT
Participation in teaching and learning plays a critical role for students’ better understanding of course principles and contents. A number of studies have been undertaken to investigate ways to better engage students through conventional course delivery modes in the classroom. Purely online course delivery is an emerging approach in contemporary education. This research adopted a qualitative approach to explore student engagement issues in an online project management postgraduate course. Students enrolled in the course were asked to comment on their perceptions of student engagement in online environments. The results showed that there are substantial differences between student engagement in classrooms and that in online environments. Implications are discussed.

KEYWORDS
student engagement, online environment, project management, postgraduate course

INTRODUCTION
The ultimate goal of education is that students gain the necessary understanding of knowledge and skills. Normally a set of objectives are set for each course from the very beginning of the delivery. Assessments are designed to measure students’ learning outcomes. There have been a large number of studies that have investigated ways to improve students’ understanding of course objectives and hence the improvement of their academic performance. It is well recognized that students’ participation in the classroom is one of the most significant factors that contribute towards the academic standing of students. A number of researchers have conducted empirical studies in different contexts on the effectiveness of various tools and techniques to motivate student engagement in the classroom. The aim of this research is to investigate students’ perceptions of engagement in online environments.

The Australian Council for Educational Research defined student engagement as “students’ involvement with activities and conditions likely to generate high-quality learning… provides a practical lens for assessing and responding to the significant
dynamics, constraints and opportunities facing higher education institutions” (ACER 2010, p.3). Järvelä (2008, p. 318) argued that student engagement is associated with “the antecedents and consequences of how students behave, how they feel, and how they think”. This particularly highlighted the critical role student engagement plays in contemporary higher education that is featured with student centred teaching and learning.

Student engagement has attracted an increasing level of attention, both in school education and higher education. Appleton et al. (2006) developed an instrument to measure the cognitive and psychological engagement of students with school. Their large scale survey with 2577 responses returned a six-factor model to assess student engagement, i.e. teacher-student relationships, control/relevance, peer support, aspirations, family support and extrinsic motivation. Their study also found that students’ learning outcomes (such as GPA and suspension) are associated with the level of engagement. Fredricks et al. (2004) pointed out that school engagement is influenced by both the individual trait and the general context. Leithwood and Jantzi (2000) argued that transformational leadership, school conditions and family educational culture contribute towards high levels of student engagement with the school.

At the higher education level, Schaufeli et al. (2002) conducted a cross-national survey in Spain, Portugal and the Netherlands on student engagement issues. Their study with 1661 responses showed that engagement is negatively associated with burnout, whereas the level of student engagement partially explains the students’ academic performance. Ahlfeldt et al. (2005)’s study found that the incorporation of problem-based learning components helps to improve the level of student participation in university classes. Their study also showed that the level of student engagement is negatively associated with the size of the class. Loftin et al. (2010) noted that the instructor plays a critical role to set up an appropriate classroom environment which encourages students to participate in class, e.g. asking questions or making comments. Bentley et al. (2009) pinpointed that the hot seat teaching methodology is an effective approach to motivate students’ engagement such as preparing for class and participating in classroom discussions, particularly in large size classes.

In terms of measurement of student engagement, the Australian Council for Educational Research has developed an instrument (the Australasian Survey of Student Engagement) to be used in Australian universities. There are three versions of instruments, i.e. Student Engagement Questionnaire (SEQ), Postgraduate Student Engagement Questionnaire (PSEQ) and Staff Student Engagement Questionnaire (SSEQ). These instruments are developed based on the instruments developed by the Indiana University Center for Postsecondary Research.
There is a comparatively small number of studies investigating student engagement issues in online environments. This gap needs to be addressed as there is an increasing number of university courses that are taught online. Bradford and Wyatt (2010) surveyed more than 1300 students in two universities in the United States as to the factors that motivate students to engage in asynchronous learning environments. Their study indicated that students with high levels of engagement generally perform better academically in online courses. According to Richardson and Newby (2006), the experience gained during online learning motivates students to take more responsibility for their own learning. They subsequently recommended that a number of factors, such as profile of students, focus of the program, and students’ prior online experience should be taken into consideration during the design of online courses.

Online delivery mode presents a significant challenge to teaching project management postgraduate courses online. The theory of topics such as project management is not difficult to teach through electronic media; however it is much more difficult to teach the practice. Conflict arises because the value of the theory is compromised when not supported by competent practice skills. For example, a course delivered face-to-face may be deliberately structured so that most of the students’ learning comes from active engagement in collaborative activities. Transposing this course into an online structure would immediately present challenges because asynchronous discussion forums would replace real-time discussion.

RESEARCH METHODOLOGY
A qualitative approach was employed in this research to explore student engagement issues in online environments for project management postgraduate courses. The aims of this research were to investigate: (1) perceptions of students on engagement in online environments; and (2) factors to promote student engagement in online environments. A large university in South Australia was selected to satisfy this purpose. This university offers postgraduate project management courses purely online. One first-year course, Principles of Project Management was selected. This is a foundation course which aims to provide students with an overview of the principles, skills and techniques required for management of projects throughout the project life cycle from inception to completion.

This research was undertaken throughout the delivery period July – November 2010. The cohort contained 75 students, all of whom were either Australian or held Permanent Resident status. Two questions were posted to an online discussion forum for students’ comments:

1. What does student engagement mean to you in online studying environment?
2. What factors promote the student engagement in online studying environment?
A total of 23 responses were received; the response rate of 30.7% was considered acceptable in view of the voluntary nature of the inquiry.

RESULTS AND CONCLUSIONS

Perceptions of students on engagement in online environments

As shown in Table 1, a majority of students perceived engagement in online environments as the interaction between students and staff. Some sample comments made by students were:

- “To engage the lecturer and the student in two way dialogue.”
- “I believe engaged learning has a lot to do with being motivated and enthused to undertake learning by your own admission. It also means learning in a collaborative way with others.”
- “Participate in all topic activities and share knowledge / experience with fellow students.”
- “To me engagement in learning means that you are both learning from others doing the course and also contributing your opinions to aid other peoples learning.”
- “Engagement refers to the time, energy and resources that I put into the learning process while interacting with and sharing ideas & experiences with other students.”

<table>
<thead>
<tr>
<th>Students’ Perceptions on Engagement</th>
<th>Number of Responses</th>
<th>Response Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction between students and staff</td>
<td>15</td>
<td>65%</td>
</tr>
<tr>
<td>Interest in learning</td>
<td>6</td>
<td>26%</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>100%</td>
</tr>
</tbody>
</table>

One student particularly highlighted the critical role of interactions between students and staff by stating “Nowadays I hate reading a textbook only, I like variety in the way stimulus hit the back of my brain, cause we all learn differently, and have sixth senses and are social creatures, why not use this to increase our learning capability?” (sic).

22% of students regarded interest in learning as key characteristics of student engagement in online environments, with comments such as:

- “Being involved and interested in learning.”
• “Engagement to me means that it got my attention, and made me part of the learning process. I think that this may have to do with the multi-directional nature of the work in relation to this course and how it aims to engage us in our own learning.”

It is interesting to note that a few students perceived student engagement as “a commitment to further study or extracurricular activities”. This does not appear to be reported in the literature, and therefore is worthwhile considering for further investigation.

Factors to promote student engagement in online environments

As shown in Table 2, a majority of students responded that real time cases and contribution to each other’s learning helps to facilitate student engagement in online environments.

<table>
<thead>
<tr>
<th>Students’ Perceptions on Factors Promoting Engagement</th>
<th>Number of Responses</th>
<th>Response Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real time scenarios</td>
<td>10</td>
<td>43%</td>
</tr>
<tr>
<td>Contribute to each other’s learning</td>
<td>8</td>
<td>35%</td>
</tr>
<tr>
<td>Online facilities for interactions</td>
<td>3</td>
<td>13%</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>100%</td>
</tr>
</tbody>
</table>

Students made some comments on the role of the adoption of real time scenarios in online teaching and learning, as below:

• “Speaking with those working in the industry is interesting and shows how principals (sic) are applied in practice. I am also more engaged if I can apply some of what I am learning in my day to day work.”
• “Relevance to everyday situations.”
• “Having to do ‘real life’ exercises.”
• “One with practical examples rather than just questions, e.g. project program - rather than ask us to create one, it is helpful to first have a collection of examples to review first. Too often courses are simply a textbook read and answer process.”
• “Working with REAL LIFE case studies and receiving acknowledgement in some way that confirms I am on the right track with my understanding.”

In terms of the contribution to each other’s learning, students made comments such as:

• “Being able to see other students' viewpoint and learning new and unthought-of ideas from students and lecturers.”
• “Having to contribute to a final solution and correct others.”

Students recognized that there are various types of assessments, e.g. the essays, the quizzes, and the assignments, that will influence the level of student engagement in online environments. In particular, one student stated that regular smaller assessments are more engaging than larger assessments as it forces more online discussion and also means regular feedback is being received. Another student perceived a study plan as critical for engagement by stating “a well laid out study plan so I do not feel lost in an overload of information”.

The level of students’ participation during class helps to facilitate their learning and contributes towards their achieving courses objectives. Indeed, it has become a challenge for educators to engage students actively in higher education; this is in particular a case in online environments. This research adopted a qualitative approach to investigate the students’ perceptions of engagement in online project management postgraduate courses. Results showed that students perceived engagement in online environments similarly to that in conventional delivery mode (i.e. in the classroom). The most common characteristics of student engagement in online environments are interaction between students and staffs and interest in learning.

Face-to-face interaction is not an option due to the online delivery of the course; therefore technologies need to be in place to assist the instructor to facilitate the interactions. Similarly, students rated the inclusion of real life cases in teaching and contribution to each other’s learning as the most significant factors contributing towards higher level of student engagement in online environments. The comments made by students on the impacts of different types of assessments on student engagement are very interesting and warrant further investigation.

Limitations of this study are owing to the small sample involved. Future research opportunities exist to further investigate this issue with a large scale survey.

REFERENCES


