Engaging students in learning through online discussion: A phenomenographic study

2011 ASCILITE CONFERENCE PAPER PRESENTATION

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Presentation outline

› The broad study
  - The aim
  - The importance of such research
  - An overview of the background literature
  - An outline the research methodology
  - The final results

› Learning through online discussion as a way to engage learners
  - Online discussion, engagement and assessment

› Conclusion and future lines of research

› Questions and discussion
Asynchronous discussion

### Project 1: SUBMISSION area for 9am group

**Description (click to collapse)**

Use this forum to post your critique and provide comments to your peers' critiques.

- **Topic Type:** Threaded
- **Graded:** No
- **Peer Review:** No
- **Posting Restrictions:** Allow post and reply
- **User Identification:** User Name

**Create Message**

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<thead>
<tr>
<th>Subject</th>
<th>Messages</th>
<th>Author</th>
<th>Date</th>
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<tr>
<td>IWB &quot;Flags of Africa&quot; (New)</td>
<td>COHEN</td>
<td>24 August 2010 16:42</td>
<td></td>
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<td>Simon's critique of the IWB</td>
<td>SIMON</td>
<td>19 August 2010 06:42</td>
<td></td>
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<td>AARON</td>
<td>19 August 2010 06:41</td>
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<td>Re: Critique of the</td>
<td>FANGYAN</td>
<td>18 August 2010 11:03</td>
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The aim of the broad study

› Master of Learning Science and Technology (research stream), The University of Sydney

› This study aims to reveal the qualitatively different ways university teachers’ experience learning through online discussion.
  - aims to extend recent research into university teachers’ conceptions of and approaches to e-learning
  - aims to complement research into students’ conceptions of and approaches to online discussion
The aim of the broad study

› **Students’ experiences**

- Learning (e.g. Biggs, 1987; Dart et al., 2000; N. Entwistle, Hanley, & Hounsell, 1979; N. J. Entwistle, 1991; Marton & Säljö, 1997; Prosser & Trigwell, 1999; Trigwell & Ashwin, 2006; Trigwell & Prosser, 1991)

- e-learning, (online) discussion and blended discussion (e.g. Beckmann, 2011; Ellis & Goodyear, 2010; Ellis, Goodyear, O'Hara, & Prosser, 2007)

› **Teachers’ experiences**

- Teaching (e.g. Kember & Kwan, 2000; Trigwell & Prosser, 1996; Trigwell, Prosser, & Taylor, 1994)

- e-learning and ‘learning technologies’ (e.g. Ellis, et al., 2009; González, 2009, 2010)
The aim of the broad study: 3P model of learning

(Biggs, 1993, p. 75; Brookfield & Preskill, 2005, pp. 21 - 41)
The importance of such research

Discussion

- Often a large component of university courses but rarely articulated in curriculum documents
- Often central to cooperative and collaborative learning designs
  - Taken-for-granted that students practice effective ‘democratic’ discussion for learning

An important pedagogical challenge for online learning

- To ensure that students develop the higher level skills of dialogue and critical exchange with their peers when they are in different locations or time zones (Beckmann, 2011)
Discussion (as a way of teaching)
- 15 benefits of discussion for learning (Brookfield and Preskill, 2005)
- Discussion is a way to mediate social interaction

A valuable way to reveal diverse and complex views about a topic as learners are guided to **explore questions, challenge beliefs** and learn about other **perspectives** (Brookfield and Preskill, 2005).

It can **enliven classrooms** by creating a **balance of students’ and teachers’ voices** while maintaining moral, political, and pedagogic integrity (Brookfield & Preskill, 2005)

Teaching as ‘**a sort of conversation**’ where learners and teachers are equally listening and talking (Ramsden, 2003)

More challenging (but possible) in an online environment
Teachers’ approaches to teaching (Kember, 1997)

1. Imparting information – Teaching is purely the transfer of information
2. Transmitting structured knowledge – Teaching is the transfer of structured, logical and easily understood information
3. Student-teacher interaction – Teaching is a focus on interaction between the student and the teacher
4. Facilitating understanding – Teaching is helping individual students learn
5. Conceptual change/intellectual development – Teaching is changing student conceptions
Students’ consider discussion as a way of –
1. checking your ideas are right
2. collecting ideas
3. challenging and improving your ideas
4. challenging ideas and beliefs in order to arrive at a more complete understanding

Students engaging in online discussions to –
1. read postings to avoid repetition
2. use postings to add to ideas
3. evaluate postings to challenge ideas
4. evaluate postings to reflect on key ideas

(Ellis, Goodyear, Prosser, & O’Hara, 2006)
# Teachers’ conceptions of e-learning and learning technology

<table>
<thead>
<tr>
<th>Less complete, less inclusive, focused on tools</th>
<th>(Ellis, et al., 2009)</th>
<th>(González, 2010)</th>
</tr>
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<tbody>
<tr>
<td>1. Learning technologies as <strong>tools</strong> for access</td>
<td>1. eLearning as a medium <strong>to provide</strong> information to students</td>
<td></td>
</tr>
<tr>
<td>2. Learning technologies as <strong>tools</strong> for information delivery</td>
<td>2. eLearning as a medium for <strong>occasional communication</strong> among unit participants</td>
<td></td>
</tr>
<tr>
<td>More complete, more inclusive, supportive of student learning</td>
<td>3. Learning technologies as ways of providing <strong>active learning</strong> opportunities</td>
<td>3. eLearning as a medium for <strong>engaging</strong> students in online discussions</td>
</tr>
<tr>
<td></td>
<td>4. Learning technologies as ways of <strong>building knowledge</strong></td>
<td>4. eLearning as a medium to <strong>support knowledge building tasks</strong></td>
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</table>
A phenomenographic approach to research

- A phenomenographic approach is applied to systematically explore and reveal the ways teachers conceptualise the phenomenon ‘learning through online discussion’.

- Emerged out of seminal research investigating students’ conceptions of and approaches to learning (Marton & Säljö, 1976)

- Qualitative research collecting data in semi structured interviews

- Understand phenomena from a ‘second-order perspective’ (Marton, 1981)
  - a phenomenon (in education) is understood by studying how people (closely engaged) experience it (the approach and the conception)

- Using what we know now to prepare students for the unknown future (Bowden & Marton, 1998)

- Reveal qualitatively different conceptions of phenomena in Education
Research methodology

- Sample size \((N) = 15\) (Bowden, 1996; Bowden & Walsh, 2000)
  - Sampling strategy to ensure adequate variation
  - Teaching area (discipline); class size; level of study (postgraduate/undergraduate); teaching mode (online/blended); and years of experience with teaching with technology
  - Professors, associate professors, senior lecturers and lecturers
## Research sample

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Discipline</th>
<th>Size</th>
<th>Level</th>
<th>Mode</th>
<th>Experience</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Social science</td>
<td>&lt; 50</td>
<td>PG</td>
<td>Blended</td>
<td>5 - 10 years</td>
</tr>
<tr>
<td>2</td>
<td>Higher education (AD)</td>
<td>&lt; 50</td>
<td>PG</td>
<td>Blended</td>
<td>5 - 10 years</td>
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<tr>
<td>3</td>
<td>Primary/secondary education</td>
<td>&gt; 200</td>
<td>UG</td>
<td>Blended</td>
<td>&lt; 5 years</td>
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<tr>
<td>4</td>
<td>Secondary education (ICT)</td>
<td>&lt; 100</td>
<td>UG</td>
<td>Blended</td>
<td>10 – 15 years</td>
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<tr>
<td>5</td>
<td>Higher education (e-learning)</td>
<td>&lt; 50</td>
<td>PG</td>
<td>Blended</td>
<td>10 – 15 years</td>
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<tr>
<td>6</td>
<td>Higher education (AD)</td>
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<tr>
<td>7</td>
<td>Arts (language)</td>
<td>&lt; 100</td>
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<td>Blended</td>
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<td>8</td>
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<td>9</td>
<td>Business and economics</td>
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<td>11</td>
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<td>12</td>
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<td>13</td>
<td>Higher education (AD)</td>
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<td>14</td>
<td>Higher education (Research)</td>
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<td>10 – 15 years</td>
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<td>15</td>
<td>Politics and sociology</td>
<td>&lt; 50</td>
<td>UG</td>
<td>Online</td>
<td>&lt; 5 years</td>
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</table>
Predominantly **asynchronous discussion** in learning management system (Blackboard/WebCT)
- Students’ privacy (policies)
- Time zones and Internet connectivity
- Specialised skills

Two participants discussed synchronous discussion (Adobe Connect)
- Fully online
- A blend of face-to-face and online students in class
Research methodology

- Three key questions with several probing questions
  1. What does learning through online discussion mean to you?
  2. How do you go about the design of learning through online discussion?
  3. How do you go about the facilitation of learning through online discussion

- Approximately 3000 lines of interview transcripts

- Three (3) iterations of analysis using NVivo 8.0
  1. line-by-line to identify utterances (beyond the words and content to explore the meanings) that related to the area of investigation similar to Grounded theory (Corbin & Strauss, 1990)
  2. Bringing together the conceptions into groups by identifying similarities and differences in meanings
  3. focus to the relationships between the categories
Main findings

› Learning through online discussion as a way to –
  1. provide time and access
  2. engage learners
  3. foster a community of learners
  4. enable higher-order cognition and learning

› ‘engage’ 21 instances
› ‘engagement’ 9 instances
› ‘engaged’ 14 instances
› ‘engaging’ 10 instances
To engage learners

> [...] where people feel safe and prepared to take a risk and where they support one another and comment and respond to what other people are saying in their own time. [...] I think there is anonymity in an online discussion forum, although students know each other’s name. It is a safe environment where students are prepared to speak out (Teacher 12).
What is it that students today engage in, that they can bring from their social life into their educational life? So, I thought, this is where a lot of students are spending their time with their social networking type things. If I can build on those skills and use discussion forums in that way, then hopefully I am going to promote engagement. You know tapping into what students, like to do (Teacher 13).
So a post that demonstrates deep engagement is one where they have read others’ postings and really reflected on it and then provided some further discussion to build on that community’s knowledge. But it is not enough for them to provide say, an opinion, or an emotional response, it has be to more scholarly than that (Teacher 4).
To engage learners

To let them take ownership of their discussion, the content that they are producing, even their assessment tasks, you know, it is all one and the same thing. Um, if people feel ownership, then they are far more likely to engage, they and more likely to remember it, and are far more likely to learn the meta-cognitive skills or generic skills or whatever, that your course is teaching. If you allow them that freedom they feel that they are actually contributing and respected (Teacher 2).
As part of their assessment? I think a lot of teachers do it as, you know, as, part assessment. And that’s how they encourage students to collaborate. I don't particularly like that, and I have spoken a colleague who’s doing that in a postgraduate unit at the minute on higher education where that’s required and she’s finding that it’s really, it’s artificial, it promotes a whole lot of artificial sort of discussion, however, um. (Teacher 10)

It’s not assessed directly, but they analyse their own text chat and um, they’re assessed on the basis of their analysis, so they’re encouraged to contribute otherwise they won’t have anything analyse. (Teacher 10)
so, you know, like, you need to use the assessment to drive why they might participate, I think that’s a first thing. So, you know, like you might say well, 25% of the course is going to be your engagement in this (Teacher 8)

there are all different ways of doing it, like [] in her course, has got, she makes some students be responsible for facilitating the discussion each week, and so that means they have to sit down – I’m actually doing it with one the students this afternoon – we sit down a look at the readings for week 11, what are some are some key questions that we might ask, and we’ll setup some of discussion topic (Teacher 8)
Conclusion and future directions for research

› Teachers’ descriptions emphasised the importance learners’ thoughtful engagement for learning
  - Leads to deep learning (Prosser & Trigwell, 1999)

› Teachers’ described a pedagogical challenge
  - How does one balance assessment requirements with designs for authentic learner engagement in online learning spaces?

› Relational studies investigating the phenomenon of engagement
  - There is significantly more value in analysing the relationship between teachers’ conceptions and approaches, and students’ conceptions and approaches. There are few relational studies in the literature that do this. Trigwell, Prosser and Waterhouse (1999) is a noteworthy exception.
Thank you

- Question/discussion time

- Further details
  - Mr Martin L Parisio
  - Email: [martin.parisio@sydney.edu.au](mailto:martin.parisio@sydney.edu.au)
References


