Simulating inclusivity, broadening perspectives

Conference or Workshop Item

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Introduction
Although synchronous, networked learning activities have been popular since the 1980s, until the turn of the century, most were text-based. With the growth of synchronous audio- and audiographic tools over the last decade, environments supporting synchronous voice and shared workspaces have gained purchase.

At the Open University, UK, increasingly, face-to-face tutorials are being replaced with synchronous, online tutorials. The use of synchronous tools can be seen as more ‘inclusive’ allowing participation by those previously excluded by distance and the time involved in travelling to the nearest face-to-face tutorial. Many online distance learners, too, value the opportunity to communicate in real-time with their peers, as the interactions can be more spontaneous (McKinney, 2010) and there is the potential for increasing learner dialogue and interaction (McBrien et al. 2009). However, adult part time learners experience many external pressures (Callender & Feldman, 2009), so need the flexibility of study options to be available when they are able to engage, with opportunities to interact whenever it is convenient to them. With this in mind, relying on synchronous communication for an online learning activity could limit inclusivity, as some learners might find the time constraints impossible to meet.

The benefit of asynchronous media is that learners can access whenever they wish (Minocha & Thomas, 2007), hence, we argue, the design of a collaborative online activity should incorporate several options for engaging at times convenient for the student. Learners need the opportunity to use a range of communication tools in order to complete the task in the most flexible way for them but without being overwhelmed by too many options. If given free rein to design their own learning toolbox, students do not necessarily understand the landscape that they are attempting to construct (Valjatega et al., 2010), hence the tutor’s role is essential in helping students to select the right tool to create an immersive learning environment (Bates, 2010) with opportunities for learning any place and at any time, using tools that they are comfortable with.

Within that learning space the facilitator’s role is not central, more on the edge, as a subject expert, or mentor (Eijkman, 2010). The learners themselves have opportunities to develop their ideas in flexible ways, without set outcomes or expectations. Hence a diverse mix of approaches is required (Bates, 2010) and this change in learning approaches implies a necessary change in teacher-learner relationships (Haythornthwaite, 2008). Whereas ‘traditional’ learning techniques have a clearly defined pedagogy with the power emphasis on the teacher, students in both formal and informal learning environments are increasingly encouraged to take ownership of their learning (Sharples et al., 2010), moving towards andragogy, where learning tasks are determined by the teacher but directed by the learner.

In this paper, then, we argue that while synchronous technologies may increase immediacy and, perhaps, ‘presence’ for learners, they can also exclude by their very synchronicity. We present the outcomes of a piece of exploratory action research in which we investigated how a synchronous learning activity might be designed to:

1) promote inclusivity for those unable to participate in real-time

2) encourage learners to take responsibility for their own learning in a secure and non-threatening environment rather than depending on the tutor

The context
H800, ‘Technology enhanced learning, practices and debates’ is an entirely online module in the Open University, UK’s programme for the MA in Online and Distance Learning (MAODE). This module makes use of the audio/videoconferencing tool, Elluminate to offer students synchronous ‘tutorials’, two sessions early in the module and two towards its end. Typical of MAODE students, participants in the compulsory H800 module are drawn from around the world and from a wide range of backgrounds, ranging from educators at various levels through industrial trainers and learning technologists to health professionals and members of the armed forces.
Some work full time, some part time, some are unemployed. All are located at a distance from each other, their tutors and the institution. The international nature of the student body means that while the week in which an online tutorial occurs is scheduled into the timetable, the day and time are not specified, being arranged in relation to students’ availability. Although synchronous tutorials are intended to offer an increased opportunity to communicate with fellow learners, we have observed that the nature of the module (distance, online and international) imposes various constraints on student availability to participate and, even when the same tutorial is offered twice in one week, a significant number may not be able to join. Technical difficulties also exclude students on a regular basis, while for those whose first language is not English, the dual effect of live English language-medium tutorials mediated via an often less-than-perfect audio-channel can increase anxiety and lead to non-participation. In other words, a tool that is intended to promote inclusivity may not have the intended effect.

At the same time, the tutorials follow a somewhat ‘traditional’ approach (Table 1).

<table>
<thead>
<tr>
<th>Actor(s)</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation</td>
<td>Tutor</td>
</tr>
<tr>
<td>Practice</td>
<td>Students</td>
</tr>
<tr>
<td>Performance</td>
<td>Students</td>
</tr>
</tbody>
</table>

Tutorials are scheduled to last for about one hour with time after that for students to write up their notes/reflect on the experience. This may lead to a rather teacher-centred approach, the tutorial revolving around the presentation phase and learners focusing on the teacher’s views rather than reflecting upon and discussing their own interpretations of the materials.

Redesigning for inclusivity: action research

Drawing upon experience of designing activities for learning environments that make use of flexible blends of tools and polysynchronous environments, such as text-based virtual reality, and upon our own participation in MOOCs, we designed a small action research project, redeveloping the original tutorial activity to one offering a range of tools, synchronous and asynchronous, to increase participation and inclusivity.

In an attempt to investigate the two questions above, we adopted an approach that transformed the ‘traditional tutorial’ into a simulation globale.

What is a simulation globale?

Simulation globale makes use of a pedagogical approach used particularly in language learning and teaching. The learner is involved in creating a fictional identity through which s/he interacts with others in the scenario. As Lamy & Hassan, (2003, p.42) explain, the simulation globale ‘… may be played out over any length of time, from a weekend to a month or a whole year’. Using their fictional identities, learners interact in a fictional setting in order to ‘…achieve collaborative projects… or to solve local conflicts…’. Unlike most role-playing activities, then, simulations globales use a ‘unified fictional but realistic framework’ to address a range of learning activities. The approach adopted what Caprile (2004) refers to as ‘une pédagogie de l’imaginaire… Pédagogie de masques’. If Bayne’s findings (2005) concerning the anxieties experienced by students regarding their ‘real’ online personae have foundation, then we hypothesise that providing a fictional environment where students don ‘masks’ may reduce such anxieties and increase learner confidence, allowing students to engage with the materials and arguments through their fictional personae. As part of our second question above, then, we hypothesised that this approach would encourage them to take risks and state their opinions more willingly than they would in a ‘real life’ synchronous tutorial or discussion forum.

Method

In 2012, two groups of adult, distance learners enrolled on H800, twenty in all, were invited to take part in a redesigned version of an Elluminate-based tutorial that occurred towards the end of the module. The topic of the
tutorial was ‘mobile learning’. In total, 14/20 students, located in six countries and three different time zones took part (Table 2).

<table>
<thead>
<tr>
<th>Country</th>
<th>Timezone</th>
<th>Number of participants (N=14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andorra</td>
<td>GMT+2</td>
<td>1</td>
</tr>
<tr>
<td>Canada</td>
<td>GMT-5</td>
<td>1</td>
</tr>
<tr>
<td>Ireland</td>
<td>GMT +0</td>
<td>1</td>
</tr>
<tr>
<td>South Africa</td>
<td>GMT+2</td>
<td>1</td>
</tr>
<tr>
<td>UK</td>
<td>GMT+0</td>
<td>9</td>
</tr>
<tr>
<td>USA</td>
<td>GMT-5</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 2: Distribution of participants by location and timezone

Redesigning for inclusivity

As described in Table 1, the original activity was solely Elluminate-based, taking the form ‘presentation, practice, performance’ with a short time assigned to make notes after the synchronous discussion ended before moving on to the next activity. In total, this was scheduled to take about two hours. Students who were unable to participate at the scheduled time were excluded from being able to share their views with others and did not have access to recordings as most of the ‘practice’ phase, the greatest part of the tutorial, took place in breakout rooms where recording was not available. The pace of the course – at 15-20 hours scheduled study time per week - means that students rarely return to discuss Elluminate-based activities in their discussion forums.

The redesigned activity took into account that some students would be unable to participate in the live discussion but might wish to discuss the topic. Over the space of three weeks, they took part in a simulation globale in which they took on the roles of members of a school governing body where a debate about the possible adoption of mobile learning by the school was underway. A volunteer was requested to fill each of the roles of Chair and Rapporteur/se and the remaining participants were assigned to groups supporting or opposing the proposition of the debate. Participants were then able to select whichever role they wished from a list (for example teacher, school administrator, technician/IT support, parent, student representative, stakeholder from industry, special educational needs co-ordinator).

Tools, learning outcomes and phases

The activity was designed to have four phases; each phase used a single tool or combination of tools (Table 3) to achieve the original learning outcomes and the outcomes outlined in the redesigned activity.

Table 3 Phases and tools for redesigned activity

<table>
<thead>
<tr>
<th>Phase</th>
<th>Tool(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Elluminate</td>
<td>Asynchronous and synchronous discussion tools, e.g. Skype, of students’ choice Wiki space in pbWiki for supporting/opposing groups to develop their arguments.</td>
</tr>
<tr>
<td>During Elluminate</td>
<td>Elluminate used to allow supporting/opposing groups to finalise their arguments for the debate.</td>
</tr>
</tbody>
</table>
| After Elluminate | Collaborative blog used to debate the issues and the questions raised in the original activity, namely:  
  - What evidence have you found that mobile devices are blurring the distinction between formal and informal learning?  
  - Is the ‘ownership’ of learning changing? |
| Closing the debate | Polling tool such as Doodle used to vote on the motion Blog. Closing statement from Chair and vote result. |

The learning outcomes of the original task encouraged students to ‘critically evaluate differing explanations and argument in the field of technology-enhanced learning’ (H800 materials, 2012) by researching a range of formal and informal sources and participation in online networks and communities. The redesigned activity added learning outcomes relating to collaboration within and across tutor groups, working together in different learning environments, and employing both synchronous and asynchronous tools to achieve the activity’s aims.

Although the Open University’s Moodle-based virtual learning environment (VLE) offers blog and wiki tools, these are quite restrictive, so freely available Web 2.0 tools which offered learners greater functionality were selected.
While this did mean that students might need to learn to use a different system, we believed this would be offset by the freedom to be creative. Choice of tool was, therefore, unimportant, but functionality was paramount.

As shown in Figure 1 above, students were able to add video links directly to the blog, as well as writing or pasting in supporting text. Other students were able to comment on the posts whenever convenient.

Data collection instruments and ethics

All students were asked to sign waiver forms to allow their contribution to the simulation to be used for research purposes. Both qualitative and quantitative data were collected. In terms of qualitative data, it should be noted that the majority of planning during the Elluminate session took place in the breakout rooms which cannot be recorded. For this reason, qualitative data comprises only the outputs from the wiki and the collaborative blog.

Data were collected via a survey after completion of the task, comprising of a mix of multiple choice and free-comment questions. All data presented in this paper have been anonymised.

While this was a very small, exploratory action research project, a large amount of data was generated, and, in this paper, the focus is on design for inclusivity and student-centred learning.

Data analysis

Participants were asked specific questions regarding which parts of the activity they took part in. They were also asked if the tools used were appropriate for the tasks, whether the activity was explained clearly, and if the timing of the task was appropriate. Their views on adopting a persona for the activity were also sought.

Participation in the activity

Only six students indicated availability for the synchronous session, even though account was made for the various time zones and several different times offered. This was not unexpected, and seems to support our hypothesis regarding the need to offer flexibility in activities; survey responses suggested that time issues were the main barrier to participation, for reasons such as work and family commitments. The lack of temporal flexibility inherent in synchronous communication was highlighted in one response:

Whilst I enjoy the time spent in Elluminate, the thought of commitment to a specific time puts me off. (Student C)
In contrast, the asynchronous activity in role on Blogger was relatively high over the three weeks the project ran. There were over five hundred views of the blog (Figure 2). Since the blog was closed so that only activity participants could access it and was also hidden from search engines, it seems reasonable to assume that the majority, at least, of these views were by participants, particularly as no hits were recorded from geographical areas outside those represented by the students.

![Pageviews by Countries]

<table>
<thead>
<tr>
<th>Entry</th>
<th>Pageviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>423</td>
</tr>
<tr>
<td>South Africa</td>
<td>40</td>
</tr>
<tr>
<td>Ireland</td>
<td>36</td>
</tr>
<tr>
<td>Canada</td>
<td>23</td>
</tr>
<tr>
<td>United States</td>
<td>21</td>
</tr>
<tr>
<td>Andorra</td>
<td>15</td>
</tr>
</tbody>
</table>

Figure 2 – Map of Blogger statistics, pageviews by country

In all, there were 26 separate posts, many with multiple comments (81 comments in total). Ten embedded videos were posted, by 4 different students and 16 hyperlinks relating to the discussion topics were included, added by 9 different students. Such material was external to module-related materials and readings, suggesting students had carried out their own research to find these items.

**Tools and timing**

Participants generally thought the range of tools was appropriate for the task, although Student A noted, ‘...the discussion forum might have been better so that a continuous dialogue was possible rather than individual posts [in the blog] which made the debate difficult to follow’. Students commented that the wiki was a suitable workspace for planning before the synchronous session and the Elluminate session worked well to launch the debate, although ideally they should have more time to familiarise themselves with the new tools (collaborative blog and wiki). However, the mix of tools did appear to address participation issues, while helping to meet the inclusivity requirements we had identified. For example, Student D commented, ‘I thought there was a range of options for people to engage with and missing the synchronous discussion still meant that you could take part in the debate’.

**Adopting a fictional persona**

The students’ adoption of a persona for the simulation was an integral part of the activity design, so their reflections on this aspect were sought. There is research evidence to suggest that adopting a persona allows the students more freedom to express themselves (Lamy & Hassan, 2003) and this was borne out in the responses from participants in the current study. For example, Student D felt able to be ‘more outspoken’, Student E enjoyed ‘getting stroppy in character’, while Student C suggested ‘I don’t think I said less or more in character, but maybe I was more aggressive and to the point than I would be usually’.

The learning experience also appeared to benefit from participants adopting a position contrary to their natural choice. For example, Student C noted that ‘It was fun, but I was arguing against my natural position so this made it harder’. This suggests that the student may have reviewed the debate from both sides more fully, and possibly in a more balanced way, than if reflecting from a personal standpoint. There is also further evidence to suggest
that the learning experience is more stimulating if approached from a different angle, for example Student B comments that ‘…adopting a character to put forward arguments that I would not necessarily support works for me, so [in] that respect fun and interesting’.

Conclusions and future directions

For this activity, we have created a multi-platform virtual environment that is sufficiently flexible for online, part-time, distance learners to fully engage, even if it has not been possible for them to participate in all aspects of the debate.

Although the sample size is relatively small (20 students), this has given us the opportunity to review the activity in depth, and to gain a clear insight into the students’ perceptions of such an activity. While the notion of a simulation globale was new to most of the group, the responses gathered here support the notion that by adopting an online persona, students are more likely to engage in risk-taking by commenting freely on the more contentious aspects of a debate. They have also moved beyond the boundaries of the module-provided materials, researching and sharing resources to reinforce their in-character ideas, thus developing their abilities as independent learners.

We had intended to carry out focus group interviews once the data from the survey were analysed, but this proved to be impossible in the time available. The data analysis suggests that there are areas worth exploring with the questions considered here, such as how fictional personae interact and how online identities develop. Further iterations of the project will take this into consideration, ensuring that time is available for more in-depth interviews to occur.

References

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