Active participation in synchronous online learning

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Innovative impact

Online synchronous education has recently been vital in replacing face-to-face teaching during the pandemic. Although there is increasing use of synchronous technologies in higher education, there are still challenges which need to be addressed. The most significant of these is lack of active participation by students. Even where educators are experienced in running synchronous online learning sessions, previous research has shown that these sessions tend to be didactic in nature, and interactive elements are often not used. Students' unwillingness to use audio or video channels is one factor, which denies educators the non-verbal feedback intrinsic to face-to-face teaching. In general, there may be a lack of student engagement, with students attending but in a passive capacity, with a reluctance to contribute.

There is a need to address two related challenges: designing synchronous online sessions which have active learning built in; and overcoming students' inhibitions regarding active participation. This article discusses these topics, based on prior research and practice. It then briefly presents selected data from a student survey at the UK Open University. The survey collected quantitative and qualitative data to gain an understanding of students' experiences and views about online synchronous sessions: for example, what value do students place on active participation, and why? The aim of this investigation is to make online synchronous learning more interactive, engaging and effective.

Keywords: synchronous, online, participation

Introduction

In online learning contexts, active participation is believed to be fundamental to student success and educational quality (Caliskan, 2020). Students consider active participation to be important, and particularly value learner-to-instructor interactions (Martin & Bolliger, 2018). In this article we focus specifically on active participation in synchronous online learning sessions. Banna et al. (2015) found that students value opportunities to join synchronous sessions, and the chance to interact with peers and their instructor.

However, active participation is viewed as less important by some online learners, who may not engage significantly during synchronous tutorials. This may depend on the fit between the students' conceptions of learning and the approach to teaching (Richardson, 2013); an active approach may only be best for students who believe this approach to be beneficial. Although teaching staff may be frustrated that students are not being more active, student satisfaction with synchronous online tutorials can still be high. Students may

feel that they are receiving a quality teaching and learning experience despite not interacting significantly with others during it (Butler et al., 2018).

There are many ways active participation in online tutorials can be encouraged, such as quizzes, well-timed questions, and text-based communication, as well as through the audio and video channels often associated with synchronous online tutorials. However, if students do not engage, tutors may feel unable to adapt their approach due to a lack of feedback from students (Rogers et al., 2021).

There are practical reasons for students not engaging with active approaches in synchronous online tutorials; they may not want to use audio and video communication if they are worried about the presence of family members in the background. The major reasons for preferring to keep a webcam turned off during an online session include anxiety, shyness, wishing to ensure the privacy of the home, and a fear of being exposed (Gherheş et al. (2021); Rajab & Soheib, 2021). If teachers can establish an empathetic environment, students will feel safer engaging actively. Teachers exhibit

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empathy through their care, concern and understanding of a student's personal situation, while ensuring that the primary focus is student learning (Meyers, 2019).

Adobe Connect – a tool for synchronous online learning

Adobe Connect is one tool for supporting synchronous online education. Rogers et al. (2021) investigated participation in maths online tutorials using Adobe Connect, through polling, asking academic questions, and on-screen activities. There was high student engagement in all types of activity, although chat box activities were less favoured. Active participation was negatively impacted by low levels of confidence.

Torun (2013) examined the effectiveness of Adobe Connect Pro on a web programming course. Responses were largely positive: students believed that the live tutorials were beneficial for their learning, and they valued being part of a virtual learning community. In this study the layout of the virtual classroom was explicitly considered. This includes the view of the tutor, the main presentation content and the text chat area. One weakness may have been the lack of any views of students.

In a study by Englehart (2015), Adobe Connect enabled online students to join other students who were in physical classrooms. Students appreciated the convenience of the online sessions, but felt that the quality of interactions suffered, partly because none of the online students turned their webcams on.

The findings from studies using Adobe Connect as a tool to facilitate synchronous education are not specific to Adobe Connect, but generally relate to using any synchronous technology. With the 2020 pandemic, and the widespread use of other tools such as Zoom, Microsoft Teams and Google Classroom, it is expected that studies comparing different tools and their features will emerge.

Recent findings on active participation in synchronous online tutorials

Research at the UK Open University is investigating students' and tutors' perspectives on active participation in online tutorials, which take place in Adobe Connect. Because of the Covid 19 pandemic, all tutorials needed to take place online, rather than the mix of face-to-face and online tutorials offered previously.

A cross-university survey is providing insights into students' views on participative activities in online tutorials. These activities may include the use of Adobe Connect tools such as whiteboard, polls and text chat. One of the survey questions asked students who had taken part in such activities whether they found them valuable. Of the 511 responses, 69% said that they did, while 10% did not; the remaining 20% were unsure.

Following this question, respondents were asked to explain why they thought the activities were, or were not, valuable. The wordcloud in Figure 1 illustrates the content of the 282 responses to this supplementary question.



Figure 1 Wordcloud of student responses on the value of activities

For example, one respondent said:

"I find that study on my own can be quite isolating - to hear others interpretations of materials is thought provoking."

Another commented:

"Opportunities to answer questions allows you to see if you are understanding. If not, you can ask for clarification."

However, other students commented on the more negative aspects of activities that they experienced; for example:

"If you have something to contribute, they have value. If not, then they're stressful, and you end up feeling a bit stupid."

Even from this early data, it is clear that there are a variety of perspectives from students on the benefits and difficulties of active participation in synchronous online learning. We will be exploring our data in more depth to investigate this further, in order to maximise the benefits for students, and address the problems.

Conclusion

The benefits of active participation in synchronous online sessions have been highlighted in several studies. The opportunity for students to interact with other students and their teachers can enable them to feel part of a learning community, to hear other people's views, and to clarify their understanding of a topic. However, the perceived value is also strongly related to students' beliefs about learning approaches, and active participation can be a cause of stress. Work continues to understand how to encourage and support students and teachers in these environments.

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