



JOURNAL OF Perspectives in Applied Academic Practice

Using Breakout Rooms in Synchronous Online Tutorials

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ABSTRACT

This paper describes a small-scale, practitioner-led study of the use of breakout rooms for small group work in synchronous online tutorials using the Blackboard Collaborate tool. The project draws on the writer's own experience of using breakout rooms in online tutorials over a period of 10 months, both as a tutor of two health and social care undergraduate modules and as a student of modules in a different faculty. It also draws on the experience of tutor colleagues.

The project identifies three main benefits of using breakout rooms. Firstly, they are a useful tool for facilitating collaborative learning and interaction. Interaction takes on particular significance in online tutorials. In a face-to-face session the tutor can see if a student's attention has wandered and gauge their response to the session. In contrast, a student can log into an online tutorial room and appear to be fully engaged with a lecture style session, whilst actually doing many other things and learning little. Interaction in an online tutorial also provides students learning at a distance with a rare opportunity for peer-to-peer contact, which can be invaluable in building relationships and confidence. Further benefits are identified in terms of empowering students to contribute to the session plan and content and also giving the tutor a break from presenting.

Perceived barriers to breakout room use are identified around technical difficulties, small numbers of students and in terms of student skill and confidence. The only significant actual barrier to breakout room use identified relates to tutor skill and confidence.

Keywords: breakout rooms; Blackboard Collaborate; online tutorials; small group work; interaction

Background

Blackboard Collaborate, a synchronous audiographic conferencing tool, is now widely used for distance learning. Tutorials are held over the internet, in real time. It can be argued that the principles of pedagogy remain the same, whether working online or face-to-face but that the tutor's view of learning will influence what the tutor hopes to achieve in a tutorial session. The Blackboard Collaborate tool incorporates a wide variety of features, including audio, text chat, an interactive whiteboard, the ability to show web pages or share applications and the opportunity to undertake small group work in breakout rooms.

A breakout room is a virtual space which is separate from the main online tutorial room. A tutor can create as many breakout rooms as are needed. Within each breakout room, only those present can hear the discussion and read any text chat messages, creating a more private opportunity for students to talk together and facilitating independent work. Students can relax a little, knowing that their input to a discussion can only be heard by the small group of their peers present in the room and the discussion cannot be recorded. The tutor can send messages into the room and monitor the whiteboard from outside of the room, as well as bringing any completed whiteboards back to the main room for further discussion. The tutor can also enter the room if students need support or clarification about a task.

Small group work has benefits in terms of reducing the distance between tutor and students and enabling everyone in the group to learn from everyone else, rather than seeing the tutor as the expert. It also gives the tutor a greater sense of achievement and job satisfaction once they are able to "let go of their need to teach from the front" (Cole, Haynes, Lown, Ulanowsky, & Salmon, 1999). It seems important to provide opportunities for small group work in online tutorials, just as in face-to-face tutorials. Learning to use breakout rooms effectively is therefore an important part of learning to tutor online and this can form part of a university strategy to increase student engagement and make sessions more interactive.

For students learning at a distance, online tutorials have the potential to bring together students with similar study interests and build networks of relationships to create communities of practice (Lave & Wenger, 1990), with students participating at the periphery of the community initially but gradually taking on more responsibility for the production of resources for learning. More recently, it has been suggested that, rather than thinking in terms of single communities of practice, it is more accurate to think in terms of landscapes (Wenger-Trayner & Wenger-Traynor, 2014). This way of thinking takes into account the complexity of communities of practice, with participants shaping the landscape they enter, just as the landscape shapes the participants' identities. It also takes into account the way in which communities of practice overlap. This is helpful when thinking about the communities of practice in which students are involved. Students may form communities of practice which address different areas of learning and different aspects of

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identity; there is the learning and sense of identity which relates to the module content and then there is the learning and sense of identity around how to study and taking on board the identity of a student. For students studying a practice-focused module, communities of practice may also form around learning to undertake the role of student practitioner. All of these areas of learning have social dimensions and there is a great deal of potential for complexity and overlap. For example, according to Fenton-O'Creevy, Dimitriadis, & Scobie (2014), student nurses experience significant stress when moving between their different identities during learning and they particularly value the support of their peers in coping with this. It therefore seems important to provide plenty of opportunity for peer-to-peer contact and use of breakout rooms can provide this opportunity.

Laurillard (2009) suggests that technologies should be explored and exploited with learners' needs in mind. Her Conversational Framework is a model which incorporates the different elements needed for learning to take place: instructionism; constructionism; social-cultural learning; and collaborative learning. With consideration of these different elements, she highlights the need for technologies which allow a range of opportunities, including peer discussion and debate, articulation of ideas to peers and repeat practice. Breakout rooms seem ideal for this purpose.

Anecdotally, tutors and students have positive and negative experiences of breakout rooms. They can feel nervous about them, especially when trying them for the first time. Tutors of distance learning have been leading the way in terms of developing synchronous conferencing to support students learning languages since 1997 (Heiser, Stickler, & Furnborough, 2013) but its use within other areas of learning is more recent. The author has been using the Blackboard Collaborate tool (and its predecessor, Elluminate) regularly for five years but it is new to some colleagues.

This project sought to explore the advantages and disadvantages of using breakout rooms in online tutorials. It did this from the author's perspective as a tutor of two undergraduate health and social care modules (one first-year undergraduate module and one final-year undergraduate module) and from the author's perspective as a student in a different faculty. In addition, some data was collected from tutor colleagues.

Review of the literature

There are few studies which focus on tutors' experiences of online synchronous tuition. Fasso's study of 11 teachers' experiences of the first year of using the Blackboard Collaborate tool with new undergraduate students concluded that the teachers felt overwhelmed at times (Fasso, 2013 add to reference list). Whilst some could see the tool's potential and their experiences suggested that online tuition could be as good as face-to-face, other teachers' beliefs about the technology limited what they were able to achieve in practice. In a review of the literature, Baehr (2012) found that preparing for online tutorials takes tutors up to 20 per cent more time than preparing for face-to-face classes and that course designers also need to take account of the additional time needed for tutors to train and practice the skills necessary for them to use the technology successfully. McDonald and Campbell (2012) argue that as well as familiarity with the technicalities of the online conferencing tool, tutors need opportunities to learn about effective approaches to facilitating online sessions and how to design effective activities. These opportunities, they suggest, should be embedded within the tutor's own discipline.

The literature available about using breakout rooms for small group work in online tutorials is also limited. In relation to synchronous online tuition in the field of the performing arts, Peacock et al (2012) describe how participants found this environment far more demanding than working face-to-face. They comment that using breakout rooms was an important part of organising the sessions in such a way to make the intensity experienced and the level of concentration required manageable. Foronda and Lippincott (2014) investigated graduate nurse students' experiences of using the Blackboard Collaborate tool and found this to be positive, with students appreciating the enjoyment, flexibility and convenience of online sessions. Interactivity was an important factor and Foronda and Lippincott suggest that increasingly sophisticated Blackboard Collaborate tools, such as breakout rooms, play an important role in achieving this, producing an experience which can be described as comparable to or even exceeding face-to-face tuition. Investigating the effectiveness of the Blackboard Collaborate tool for teaching mathematics, Tonsmann (2014) described the breakout room facility as invaluable, allowing students to develop and apply their understanding of concepts which had been explained in the main room. In contrast, in relation to a qualitative study of her own practice when facilitating a 15 week online course with graduate education students, Yamagata-Lynch (2014) describes breakout rooms as the aspect of online tuition that posed the most difficulty. She goes on to say that modifications to the way she facilitated small group work, such as allocating students to groups with more care, allocating students particular roles and providing a more structured framework for the time in breakout rooms, helped to alleviate these difficulties. It is important to note that the author describes herself as new to online synchronous tuition at the start of the course, developing her skills in the use of the learning environment as she went along.

Methods

This small-scale, practitioner-led study sought to address two research questions from both the tutor and student perspective:

- What are the benefits of using breakout rooms in online tutorials?
- What are the barriers to using breakout rooms in online tutorials?

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A diary method was used as the main source of data collection. Diaries provide academic researchers with a helpful way of addressing gaps in the literature, providing information which is personal and yet also structured and highlighting subtle differences which only become apparent over time (Smith-Sullivan, 2008). They are particularly suited to small-scale studies such as this one, which involved reflection on individual practice. The fact that the diary was kept by the author, identifying other people only in terms of their roles as tutors or students, minimized ethical considerations around the involvement of others. It does also mean, however, that the findings are mainly applicable to the author's own context and practice, as a diary inevitably gives a version of events which is very much from the narrator's perspective. Written conversations were also held with tutor colleagues with a view to broadening the data and making comparisons with the experiences of others in similar tutor roles.

According to Alaszewski (2006), diary entries should be regular, dated, contemporaneous and personal to an individual, recording what the individual judges to be relevant and significant.

Data collection

The author kept a diary of involvement in online tutorial sessions between October 2014 and July 2015. The entries were guided by the following questions:

- How were breakout rooms used during this session?
- If breakout rooms were not used, were there any points at which their use might have been beneficial to either students or tutor?
- What did the breakout room activity involve and how well did it seem to work for the different students in the group?
- Did any of the students comment on the breakout room activity in the session evaluation?
- What was observed about the process?
- Was the explanation given to students about what would happen clear?
- Were the transitions to and from the rooms smooth?
- Was the timing for the activity appropriate?
- Were there any technical issues associated with the use of breakout rooms?

Data was collected from 12 online tutorials sessions facilitated as a tutor, 12 sessions attended as a student and 10 recordings watched as a student. Breakout rooms were used in 11 of the sessions tutored and in 7 of the sessions attended as a student. One tutorial received a routine tutorial visit from a line manager and her observations aided the reflections on the session.

Data was also collected from colleagues tutoring the same modules as the author by posting messages in relevant tutor forums, which were also circulated via email. Colleagues were asked to share their thoughts about breakout rooms in online tutorials and, if they had used them, to say:-

- what sort of activities they had used them for
- what aspects of using breakout rooms had gone well
- what the challenges had been.

Of the 11 colleagues using online tutorials, three replied to this request. Only one of these tutors had tried using breakout rooms.

Analysis

The data gathered in the diary of involvement in online tutorial sessions was analysed by identifying reoccurring themes around the research questions:

- What are the benefits of using breakout rooms in online tutorials?
- What are the barriers to using breakout rooms in online tutorials?

In a number of instances, similar themes were identified in the information gained from written conversations with tutor colleagues. The data around each theme from both sources was combined and the benefits and barriers were categorised according to whether they related to a student or tutor perspective. In the case of the barriers, these were also categorised as actual barriers or perceived barriers.

Results and discussion

Benefits of breakout rooms

Facilitating collaborative learning and interaction

Many of the tutorials the author attended as a student took the form of a lecture or presentation with slides. This tutorial style is acceptable to some students. One tutor colleague told me:

“My groups seem to prefer a modified lecture.”

From the student perspective, there were times when some lecture style input was helpful but the most helpful sessions were those with a balance of different activities, including an opportunity for small group work in breakout rooms. The diary recorded how often the author was doing other things whilst the tutor was in 'lecture mode': reading emails, texting friends, interacting with family, reading some module material or even doing an online shop! Unless a student has a web cam turned on (which is rare and sometimes seems to cause technical difficulties), the tutor cannot see the students and so presents the lecture assuming that students are listening just because their names are present in the participants' window. Occasionally, a tutor might ask students to show that they have understood a point and are ready to move on by 'clicking the green tick'. The diary records how easy it was to 'click the tick' whilst also doing other things and so give the impression of being fully engaged with the tutorial when this was not the case. Full attention was only given when required to undertake a more complex task.

From the tutor perspective, the diary recorded how students frequently interact more in breakout rooms than they do in the main room (this can be monitored by the tutor by observing the microphone symbols going on and off in the participants' window). This was also apparent in the comments by students in their evaluation at the end of sessions:

“I liked being in a smaller group. It was easier to talk.”

“I felt more confident talking in the small group.”

“Good to be in a small group.”

Students seemed to be more relaxed and prepared to interact with each other both during and after time in breakout rooms. On one occasion, two students who had said that they did not have working microphones were spotted chatting away via their microphones in the breakout room. Another time, lots of humorous comments were noted when the students arrived back in the main room, with those who usually avoided interaction in the main room joining in. This phenomenon was also apparent in sessions when in the role of student. This emphasis on enjoyment and the importance attached to interactivity were similar to the findings of Foronda and Lippincott's study (2014).

During the study, the author took the opportunity to try out different types of breakout room activity. For example, when students had a choice of assignment topics to work on, breakout rooms were used to enable students to get together with others planning to tackle the same assignment topic. Separate rooms were set up for different topics and students were invited to move themselves into the breakout room for the topic that they were thinking of choosing. There were whiteboards in the room with questions to aid discussion. If students found that they were the only one in their chosen room, they had the option of joining another group or coming back to the main room to chat to the tutor. It worked well; each time students said they would have liked longer in the breakout rooms. During another tutorial, where students had the option of attending a face-to-face session or a session in an online room, students worked in pairs to tackle practice exam questions. The pairs in the online room worked hard, producing more ideas than the students in the face-to-face tutorial had done in relation to the same activity. They then confidently shared these ideas in the main room. Students highlighted how useful this had been in their evaluation of the tutorial:

“A good experience! Wish we could work in pairs in the exam!”

“I like the experience of being able to chat to just one or two people though I could have contributed more if I was further down the revision line – it was useful to outline ideas though.”

“It's good to be able to chat with somebody else about the topic and get an alternative perspective.”

Peer-to-peer support

Using breakout rooms gives students an opportunity for peer-to-peer support. This is particularly valuable for distance learning students, who have few opportunities to meet their peers face-to-face. Their comments in session feedback included:

“It was good to talk and see how others are getting on with the module.”

“Good to finally speak with others doing the same as you. It can be difficult being an independent learner without the peer to peer contact of a traditional uni.”

“I think it is good to know that most people feel the same and have the same worries about the assignments.”

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The study diary records students' comments about how it helped to have a particular activity to work on together in the breakout room, rather than being asked to discuss how things were going. The students talked about these more general issues anyway, either whilst accomplishing the task or once they had finished it (or sometimes by ignoring the task altogether!) and they said having something to work on together as a small group helped them to start talking. The ideal breakout room activities are easy and fun, rather than anything too challenging. One example might be a drag and drop activity based on the module content, where students need to rearrange movable pieces on the white board to demonstrate their understanding of a concept. An interesting observation about such drag and drop activities is that they are ideally suited to the online environment but not to the face-to-face environment, where the tutor would have to print off lots of copies of the different movable pieces in order to replicate the same activity. This illustrates the importance of a tutor assessing the different possibilities afforded by the online environment, rather than just replicating what happens in a face-to-face session. There were learning points about just how much time was needed to prepare these resources and also about timing when facilitating the activity itself. The right length of time is harder to judge than when working in a face-to-face environment.

From a student perspective, one tutorial was particularly noteworthy and supports the suggestion that tutorial planning should not just focus on content but build student confidence and relationships. It also underlined the benefits of peer support in helping to affirm student identity (Fenton-O'Creevy et al, 2014). It came at a low point in the author's studies and the diary records enjoyment of the session, particularly the time in breakout rooms. The contact with other students, felt 'reassuring and affirming' and the author subsequently became much more positive about the module as a result. During the time in the breakout rooms, other students said how much they enjoyed using breakout rooms in this particular tutor's sessions too.

Empowering students

The session diary also evidenced how spending time in a breakout room could embolden students to speak up about concerns and queries that they might otherwise keep quiet about. One session that the author attended as a student began with one hour and 20 minutes in the main room during which the tutor talked according to his agenda: getting students to see the "bigger picture beyond the module". He regularly stopped and asked students to "give a green tick" if they understood. Everyone clicked the tick and it felt as though there was a pressure to do this. The tutor then randomly allocated students into groups of four in breakout rooms and gave students 10 minutes to discuss how the session had seemed so far. The students talked about their confusion. Two students who had English as a second language seemed particularly lost. Everyone was concerned as to whether the tutor might get around to talking about their agenda: understanding the module material and how best to approach the next assignment. Going back into the main room, it seemed as though groups in other breakout rooms had been discussing the same things. A number of students were then able to speak and share their worries about the direction of the session with the tutor who was then prompted to address some of their concerns.

Having a break

A further advantage of using breakout rooms for small group activities is that, just like in face-to-face sessions, small group work gives the tutor a break from presenting to the whole group, allowing time to gather thoughts or prepare for the next part of the session. One tutor colleague identified this as a possible benefit of breakout room use, even though she had not yet tried them out in her own online tutorials sessions.

The diary notes the value of having a break from the sound of the tutor's voice when in the role of the student, regardless of how interesting and helpful the lecture is. The diary recorded periods of boredom followed by the use of an activity in small groups, which enabled re-engagement with the session.

Time when most students are in small groups can also be used to provide some one-to-one help in the main room for students who have joined the session late or students who feel unable to join in with the group activity. During the study such help was provided on four occasions.

Barriers to using breakout rooms – actual and perceived

Tutor skill and confidence

A significant barrier to breakout room use identified by tutor colleagues was lack of skill and confidence. Two tutors said that they did not feel ready to use breakout rooms, despite having received some online tutorials training. In one case, the tutor had attended some university wide basic online tutorial training, as well as a regional event. She felt that she might benefit from having a tutor buddy to help her try out using breakout rooms.

Working with another tutor in online tutorials is common in some modules and it can provide an opportunity for tutor learning and sharing ideas, as well as benefits for students. One tutor can be available to welcome latecomers and deal with any problems that arise for individual students, whilst the other tutor carries on with the session. The author's experience of working alongside other tutors in online tutorials is limited (three sessions to date) but not positive. It is more difficult to introduce interactive elements to these tutorials because both tutors need to be comfortable with this way of working and it requires a greater commitment in terms of joint planning time.

Another tutor had attended a training programme but missed the session about using breakout rooms. She was concerned that the skills acquired during this training would easily be lost unless they were regularly put into practice soon afterwards.

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The third tutor did have experience of using breakout rooms and had completed an advanced training course. She also commented, however, that she had not remembered the information that she needed when it came to using breakout rooms in practice and raised the point that most tutors might only use online tutorials three or four times during the presentation of a typical module, which is insufficient for developing skills and confidence and for retaining skills once developed. In addition, she pointed out that there is rarely much incentive offered for tutors to develop their skills in this direction. These findings underline the importance of opportunities for tutor training and practice, as suggested by Baehr (2012) and McDonald and Campbell (2012).

Becoming comfortable and skilled in using breakout rooms requires tutors to make a significant investment in terms of time. For the author, a particular investment was learning how to use Plan, another Blackboard tool which enables session features, including breakout rooms, to be set up in advance. When building online tutorials into module design, module teams should consider that tutors need more than basic training if they are to deliver interactive sessions. Their needs might include: advanced training; time built in to their workload to plan and try out activities; a certain amount of creativity; opportunities to share ideas; motivation; and courage.

Student skill and confidence

In the past, the author avoided using breakout rooms for the initial tutorial in a presentation. The rationale for this was that students have many things to get accustomed to when they begin attending online tutorials. Similarly, a tutor colleague said that she had not used breakout rooms to date because there seemed to be a lot of preliminary work to do to help students grasp the basics of using online tutorials.

“...students who do attend either join very late due to IT issues, do not have a mic, are not IT 'savy' enough to use whiteboards.”

On the other hand, Kear, Chetwynd, Williams, and Donelan (2012) suggest that whilst tutors may well be overloaded with the complexity of juggling different tools and roles in an online interface, the same session may feel rather different from a student perspective, with students enjoying the range of tools available. With the final year undergraduate students, a decision was made to try out using breakout rooms during the first online session. The outcome was positive and the tutorial was far more interactive than an initial session might otherwise have been. Whilst most of the students in the group had not used online tutorials before, the activities in the breakout rooms worked well. The sessions were positively evaluated.

“I've found this so helpful. I've not used anything like this before and the interaction with the tutor and other students cannot be matched elsewhere.”

“I think this is amazing! Can't imagine why other modules don't do this.”

“Distance learning is very unique in format and style and this helps to 'ground' things a little, make it 'normal'.”

Numbers of students

This project prompted some thought to the minimum number of students needed for using breakout rooms. One colleague commented that she had not needed to use breakout rooms yet, as only six students were attending tutorials. Another tutor mentioned that small numbers of students were a barrier to using breakout rooms in practice. She felt that she would:

“...want a minimum of 3 students in each break out room - in case one did not have a mic, was a non-talker etc. etc. I think 4 would be better.”

Previously, the same thoughts had prompted the author to allocate similar numbers of students to breakout rooms. Reflecting on experience gained as a student, however, it seems that four students or more might sometimes be too many. In relation to being in a small group of five students, the diary records:

“A few people took control of task and did it. It was very easy to sit back and do nothing. I did not engage with feeding back in the main room.”

As a tutor, giving students tasks to do in breakout rooms in pairs worked well, all students engaging fully with each activity and evaluating the activities positively at the end of the tutorial. It helped to pair up students communicating by the same method i.e. using the microphone or using text chat, so that the pace of communication did not seem disjointed to the students.

Towards the end of the year, the first year students tried out an idea for some individual work in breakout rooms to help them prepare for their end of module project. A session about the requirements of the end of module project was recorded and students were asked to watch this recording individually and prepare a brief essay plan. This was followed by an online tutorial with an introductory activity that involved learning how to use the whiteboard tools. A simple template for recording an essay plan was shared with students and enough breakout rooms were then created for each student to have one, copying the template slide into every room. The template included space for the student to add their own name, so that it was easy to identify each student's template slide later. Students then had a short time in their own breakout room to work on their own template before the completed templates were copied back to the main room and discussed one by one. This gave students an opportunity to provide helpful tips to each other and ask questions about their own plan, even if they had not got very far with their planning. This discussion was helpful in identifying which students might need further support. After the discussion, students learnt how to save their own completed template slide in PDF format for future reference.

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This experience suggests that it is worth considering whether there are any tutorial activities which lend themselves to working in pairs or individually.

Technical issues

One tutor colleague said that potential technical difficulties were one of the main factors that had put her off using breakout rooms to date. The study diary only noted two tutorials during the year where there seemed to be technical issues specifically associated with using breakout rooms. On the first occasion, when the breakout rooms were created, the students could not see them at first but they shortly appeared and the session was able to continue as planned. It is worth noting that this particular session was full of other strange anomalies. On the second occasion, students reported that they could not hear each other very well when in the breakout room but the volume returned to normal on coming back to the main room. Whilst potential technical difficulties might be perceived as a barrier to breakout room use, this experience suggests that this is not a frequent problem.

Practical tips

Following the study, a number of tips around breakout room use were identified and shared with tutor colleagues:

1. Working on a set activity together can encourage student interaction and peer support, even if the activity is not fully completed. It might be appropriate to design a different activity to that provided in an equivalent face-to-face session, taking advantage of the features of the online environment.
2. Set up breakout rooms in advance and give them memorable names.
3. To use breakout rooms smoothly, it is helpful to become familiar with Plan.
4. Set the maximum number of microphone users to match the number of people using the breakout room.
5. Make a list of the information that needs to be given to students before beginning a breakout room activity to avoid missing anything out.
6. Allowing students to move themselves in and out of breakout rooms can save time and give students more choice and control. Make sure that whiteboard permissions are on and give assistance to students using mobile devices.
7. Renaming the whiteboards whilst the students are working on them helps to identify which whiteboard belongs to which group when the boards are copied back to the main room.

Conclusion

This study has identified the benefits of using breakout rooms to enable small group work in terms of facilitating collaborative learning, peer-to-peer support, empowering students and giving the tutor a break from presenting in the session. It has identified some challenges of using this online tool in terms of perceived barriers related to student skill and confidence, student numbers and technical issues. The actual barrier to using breakout rooms in online tutorials that this study highlights is around tutor skill and confidence. This can be developed via training but there is also the issue of tutors needing opportunity and paid time to maintain and develop their skills and resources further.

In addition, when thinking about the provision of an online 'equivalent' to face-to-face provision, it is important not to lose sight of the fact that online tutorials afford different opportunities to the face-to-face environment. Tutorial design can make use of these.

Biography

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