

Challenges and serendipities: group working under conditions of social distancing and dual modes of delivery

Sam Hopkins

University of Surrey, UK

Shelini Surendran

University of Surrey, UK

Keywords: Covid-19; Biosciences; foundation; HyFlex; teamwork; group work.

The challenge

As part of a Bioscience foundation year, where our students were expected to be on campus for certain activities unless they had specific extenuating circumstances, it was vital that students who were online at the same time had an equitable and undiminished experience to those in class.

In our foundation year, group work capabilities are a key learning outcome. We all know how vital group work can be to the learning experience (Riebe, Girardi and Whitsed, 2016) and there is evidence that it can be enhanced using technology and social media (Crook, 2013). But how effective is group work when some students are online and others are in the classroom?

Walker et al. (2020) discuss the importance of interpersonal team processes, including communication, managing different personalities, and developing trust and commitment to the team, as key to good group work. Whilst this is possible online, as demonstrated by Falls et al. (2014), it may be easier in person. The challenge of giving the same group work experience for students in class as for those joining us online was not always successful in our experience. This short piece will focus on three approaches to the above challenge and discuss the reasons we took these approaches, what worked in our context, what did not, and why we believe this to be the case. We will end on a short set of recommendations that we will be taking forward in our teaching practice.

The response

We were determined to keep aspects of group work despite social distancing and some students attending online and so we got creative. We tried to tackle this in three different ways within our course:

1. We had students in the room and online doing the same tasks at the same time.
2. We ran separate sessions for those online to attempt to give them a similar experience to those in the classroom.
3. We moved the whole session online.

In cases where we had students in the classroom at the same time as online, we found the type of activity informed its success. For example, writing tasks where students were introduced to an idea and then asked to write a paragraph using the idea worked well as all students could do the same task and there was little group interaction required. Students in class could ask questions in the room and students online would unmute their microphones and ask questions over the speakers. If the task required group work, students online were put into breakout rooms, and this was where the session would often not be as successful. Students did not enjoy breakout rooms and, as teaching staff, we often got the impression they had sat in silence whilst their peers in class had been discussing the topic enthusiastically. Students online were reluctant to turn their webcams on, which possibly put them at a disadvantage as it could limit their feelings of co-presence and ability to see non-verbal cues when working in their group (Kozar, 2016). Other teachers (Saldanha, et al., 2021) suggest an online etiquette session early in the course and this may have helped with students realising breakout rooms were part of their course and establishing the expectation of participation.

Where tasks were wholly based around group work or there was a need for special equipment or materials, it was not feasible to run the session as above and we had to find another way. In such cases, we split the class and ran separate in-person and online sessions in an attempt to improve student experience. An example of this was a predator prey activity where 250 deer cards and 50 wolf cards get thrown into a 'forest' to simulate a predator/prey model. In class, we created packs of these cards for groups to use to do

their counts and draw the graphs. In class this worked well, students could do the activity in their group in a safe, socially distanced manner, and they could see in real-time and be actively involved in chucking the cards and working together to count the number of surviving deer. Viewing the class, it seemed a fun experience; the students chucked the cards, made errors, and problem solved whilst discussing how the model worked. We then held a separate online session where students directed a member of staff in what to do with the forest and cards. Here the online session was not the noisy, fun experience the students in the room had, as it felt like the presence of a staff member dampened down the student interactions. The difficulties of running two separate modes of delivery could mean that students could be given separate educational experiences, and, in this instance, it felt like this was the case. Students in person could have the opportunity to conduct the activity through discovery learning, inspiring risk-taking and learning through trial and error (Bicknell-Holmes and Hoffman, 2000). Students in class had the advantage of working together in small groups to experience the game style activity in reality, whereas the online class did not have the same dynamic learning experience. This is not just our experience and is echoed by other teachers (Kemp and Grieve, 2014).

The final solution to this challenge was to hold the entire class online for activities that did not require any special resources. An example of this was a series of journal clubs. In these sessions each group was given a different journal article to read and critique. We considered it important that all members of the group could attend the journal club and thought it would be a poor experience if half the group were online and half in person. Moving the entire session online allowed equity but also meant that all students could 'sit together', facing each other (something that would have been difficult in a Covid-19 safe classroom) to discuss the journal article. We believe this approach only worked because the groups were very small (six-eight) and so students felt comfortable turning on their cameras and getting involved with the discussion; as noted above, there were other instances, in larger groups, where student were much more reluctant to get involved.

Recommendations

We realise that we are not making any big recommendations but merely reflecting on the situation, our challenge, and how we made the best of it. This experience has made us unpick many of our 'known truths' around the way we teach and forced us to innovate to

give the students the best experience we could. Going forward, we plan to take aspects of what we have done this year and develop it further for the future. In some instances, Covid-19 has made our approach stronger, and our plan moving forward is to capture these new ideas and use them. Sometimes the new approach has not worked and in these cases, we will use ours' and others' experience to develop new strategies in our teaching. Our one recommendation, then, would be to not wait for a global pandemic to interrogate and innovate with teaching but to adopt this approach on a more systematic basis and challenge those 'known truths'.

References

- Bicknell-Holmes, T. and Hoffman, P. S. (2000) 'Elicit, engage, experience, explore: discovery learning in library instruction', *Reference Services Review*, 28(4), pp.313-322. <https://doi.org/10.1108/00907320010359632>.
- Crook, C. (2013) 'Varieties of togetherness in learning', in Andriessen, J., Baker, M. and Järvelä, S. (eds.) *Affective learning together social and emotional dimensions of collaborative learning*. Hoboken: Taylor and Francis, pp.41-49.
- Falls, I., Bahhouth, V., Chuang, C. M., and Bahhouth, J. (2014) 'Factors influencing students' perceptions of online teamwork', *SAGE Open*, 4(1), pp.1-9. <https://doi.org/10.1177/2158244014525415>.
- Kemp, N. and Grieve, R. (2014) 'Face-to-face or face-to-screen? Undergraduates' opinions and test performance in classroom vs. online learning', *Frontiers in psychology*, 5, pp.1278–1278. <https://doi.org/10.3389/fpsyg.2014.01278>.
- Kozar, O. (2016) 'Perceptions of webcam use by experienced online teachers and learners: a seeming disconnect between research and practice', *Computer Assisted Language Learning*, 29(4), pp.779-789. <https://doi.org/10.1080/09588221.2015.1061021>.

- Riebe, L., Girardi, A., and Whitsed, C. (2016) 'A systematic literature review of teamwork pedagogy', *Higher Education: Small Group Research*, 47(6), pp.619-664.
<https://doi.org/10.1177/1046496416665221>.
- Saldanha, K., Currin-McCulloch, J., Muskat, B., Simon, S. R., Bergart, A. M., Mesbur, E. S., Guy, D., Chilwalo, N. B., Seck, M. M., Tully, G., Lind, K., Lee, C. D., Hall, N. and Kelly, D. (2021) 'Turning boxes into supportive circles: enhancing online group work teaching during the COVID-19 pandemic', *Social work with groups*, 44(3), pp.1-18.
<https://doi.org/10.1080/01609513.2021.1910110>.
- Walker, E. R., Lang, D. L., Caruso, B. A. and Salas-Hernández, L. (2020) 'Role of team dynamics in the learning process: a mixed-methods evaluation of a modified team-based learning approach in a behavioral research methods course', *Advances in Health Sciences Education: Theory and Practice*, 25(2), pp. 383-399.
<https://doi.org/10.1007/s10459-019-09931-3>.

Author details

Sam Hopkins is a Teaching Fellow in learning development on the Biosciences foundation year at the University of Surrey and a fellow of the HEA. Sam has a background in biology and learning development.

Shelini Surendran is a Teaching Fellow on the Biosciences foundation year at the University of Surrey and a fellow of the HEA. She is interested in playful learning and flipped learning. She has experience working in primary schools, colleges, and university. She has a PhD in Nutrigenetics and a PGCE.