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## Comparing Student Use of Technology in Remote Teaching Activities

The COVID-19 pandemic has resulted in a significant increase in the use of online teaching approaches as part of blended or entirely-remote learning strategies in Higher Education. This increased use of online approaches has resulted in some debate over how students engage with these remote activities and the technologies used to support them.

The Chemistry programmes at the University of Leicester use a variety of learning approaches including Problem Based Learning (PBL), small group tutorials, large group lectures as well as laboratory- and project-based activities. This variety of teaching activities combined with the sudden switch to online teaching provided a unique opportunity to analyse how students use technology to engage with different types of remote learning activities.

First year Chemistry students were invited to participate in a questionnaire-based study that investigated their use of technology in and between live sessions. Two questionnaires were used to compare technology use in PBL (n=46) and live lecture sessions (n=30). Questionnaire responses revealed that a greater proportion of respondents reported turning their cameras on in PBL sessions (54.3%) than live lectures (30%). There was a similar difference in use of microphones: 82.6% of respondents used them in PBL sessions whereas 60% used them in lectures. There was high engagement with text chat functionality in both types of live sessions: 82.6% of respondents used this in PBL sessions and 93.3% in live lectures.

The findings suggest that use of some live session functionality depends very much on the format of the session. The use of instant messaging to support learning between these sessions is also important (95.7% of respondents used this between PBL sessions and 89.7% used this between live lectures) and in both cases was more widely used than the support mechanisms formally provided by instructors (e.g. discussion boards).

## Key words

Remote learning, student engagement, induction

## Region

UK/Ireland

Author: WILLIAMS, Dylan (University of Leicester)Presenter: WILLIAMS, Dylan (University of Leicester)

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