Student experiences of cross-institutional collaborative learning (0263)

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Overview

Encouraging undergraduate students to fully engage with the learning experience is a challenge. Secondary schools are increasingly 'teaching to the test' which can encourage students to adopt strategies that promote surface learning. It is therefore becoming even more important for us, as practitioners in higher education (HE), to encourage students to develop the skills they need to become self-regulated independent learners and adopt methods for promoting deep learning. Interventions that involve students as partners (Cook-Sather et al. 2014), such as the increased use of collaborative or peer-supported learning, can help address these issues (Tosey and Gregory 1998; Bulte et al., 2007).

Collaborative learning requires students to co-create a shared understanding through engaging in communal tasks to share information and experiences, explore concepts and critically evaluate each other's work.   Over the past few years, we have been actively facilitating student-led study groups to create novel resources to support teaching (Rutherford and Scott, 2012; Scott et al., 2014a). Although often only a small percentage of students get actively involved in these activities, the resources created and their benefits are shared (e.g. using GoogleDrive, Wikis and Prezi) with *all* students on the module and future cohorts. Students find these resources useful and they have been shown to have a positive impact on module outcomes (Rutherford and Scott, 2012, Scott et al., 2014b). Significantly, outputs of these collaborative learning activities feedback into academic modules, and therefore have been shown to impact positively on design of teaching and curricula (Scott et al., 2014a), thus making students true partners in the HE experience.

Recently there has been a drive towards development of openly-shared online learning resources (e.g. MOOCs), but these are traditionally designed by academic staff and are based on their perceptions of what students need. A beneficial approach is for students to work as partners in curriculum design and support of teaching. A key benefit of encouraging students to create their own learning resources is that they will be more focused towards the learning needs of that particular student cohort. Student engagement with such learning resources should therefore also be enhanced and this approach can inform teaching, by identifying learning needs that can be addressed by academic staff. The possible limitation of student-authored learning materials, that they may not be entirely accurate, is specifically addressed by the collaborative approach, whereby multiple participants act to critically appraise content, and so self-regulate its accuracy. So far, these collaborative activities have been limited to individual modules within a single higher education institution (Cardiff University).

The main aim of our current research is to determine the most effective methods for establishing and facilitating effective student-led collaborative cross-institutional learning communities.   To date (June 2016), we have established and run two pilot cross-institutional communities to explore their potential for supporting learning outside of modular boundaries and evaluate the impact they have on student experience. The two pilot learning communities were focused on "Medicine" and "Neuroscience" and involved first year undergraduate students from Cardiff University and the University of Bristol. The rationale for selecting these two particular universities was the similarity of student type (both are Russel Group Universities with similar UCAS entry tariffs), similar degree schemes (both have undergraduate degrees in medicine and neuroscience) and proximity (to facilitate physical meetings – short distance and low cost of travel). Collaborative learning is a powerful educational tool that can be performed online and/or in face-to-face meetings (Barkley et al 2014), and we encouraged our students to engage with both of these approaches.   We have promoted the collaborative learning platform (Learnium) and provided training for students and staff in the use of this online tool. We have also been exploring if and how students are using other Web 2.0 technologies for academic purposes. All active participants were asked to keep and

submit a reflective log documenting their experiences and we are currently in the process of analysing this qualitative data using NVivo11 software. We are taking a constructivist grounded theory approach to this project and will be using the emerging themes from the qualitative analysis to inform the development of future cross-institutional collaborative learning initiatives. Key emerging themes from our preliminary analysis include timing, competing demands and student social events, the amount of group work and peer-teaching, and the levels of academic input.

The academic staff involved in the current project have actively encouraged students to work together across institutional boundaries to create novel teaching resources and identify existing resources (e.g. websites with useful and accurate diagrams, animations or videos) which can be used to support their own learning and that of their peers. This project is very much student-led with undergraduates taking an active role in all aspects (e.g. steering the project, organising meetings, collecting and analysing data, creating online resources for sharing with others). The project has therefore encouraged development of students' research and leadership skills, and involving them in the planning and administration of their own learning has made them true partners in this learning experience.

Ethical considerations: Our research received full ethical approval from the Cardiff School of Biosciences SREC (School Research Ethics Committee). All information was collected anonymously, or anonymised prior to analysis, and stored securely. Student participation was voluntary and participants were informed that they could withdraw from the study at any time or request that their contributions not be used in any analysis. Participation in all collaborative learning communities was voluntary and unrestricted so no student groups were unfairly disadvantaged, and the outputs (i.e. learning resources) were shared with all student groups prior to exams.

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