Enhancing students' university experiences by engaging them with their course and equipping them for life-long learning

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Within universities there is concern about an apparent decrease in student engagement with their courses, reflected in reduced student attendance at lectures and a perceived lack of active student learning during lectures. To address these issues, and to cope with expanding student numbers, I developed interactive guided-inquiry lectures that encourage student learning *via* note-taking and in-lecture activities. These lectures are based upon Process Oriented Guided Inquiry Learning (POGIL), a student-centred teaching process that uses the student learning cycle of exploration, concept formation, and application (see Brown, 2010). During my guided-inquiry lectures, students are presented with key concepts, which are built upon with problem-solving activities, including interpretation of graphs, data analysis, crosswords and drawings. The guided-inquiry lectures can thus develop skills such as critical thinking, problem solving and communication. Whilst changing from passive didactic lectures to interactive guided-inquiry lectures requires greater effort by students (and lecturers), I have found that these lectures enhance student participation, interest and learning, as demonstrated in pre- and post-lecture testing and anonymous student feedback. The guided-inquiry lectures are also rated highly by students in their teaching evaluations.

Many students focus on discipline knowledge but they need to understand that their university degree contributes to their individual development and life-long learning, and that they should improve their skills as they develop as learners. In order to develop students' employability skills and to address their anxiety about careers uncertainty and employment I embedded a professional development program into the biomedical curriculum. The goals of the program are: "(1) To address students' assumptions about their careers, including their potentially narrow focus on linear pathways that are frequently limited to medicine or research; (2) To raise students' awareness and ownership of their employability skills development; and (3) To assist students in building their capacity to effectively communicate their capabilities and transferable skills" (see Choate *et al.*, 2016). The program is scaffolded across the three years of the biomedical science degree-program and is assessed *via* an electronic portfolio. This portfolio is used to build a record of experiences, skills, knowledge and capabilities that demonstrates their employability; this allows students to reflect on their personal development and learning and facilitates the organisation and maintenance of artefacts associated with these processes. Anonymous student evaluation of the program was positive and has led to the introduction of more careers speakers. However, there has been a critical need for student and staff training with the unfamiliar portfolio platform.

Brown JP (2010). Adv Physiol Educ 34: 150-5.

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