EDITORIAL

Scholarship of Teaching and Learning as an Agent of Change

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Scholarship of Teaching and Learning as an Agent of Change

Significant change is driving higher education learning and teaching, in part because we are better informed by research about human learning, but also because the circumstance under which learning takes place in higher education have changed dramatically. In this environment, the Scholarship of Teaching and Learning (SoTL) can be a means of reflecting on current practice—as can be seen in the reflections on practice in this issue—and at the same time, a dynamic means of dealing with current learning and teaching issues. In the latter sense, SoTL can be seen as an agent of change. The two main articles in this issue of *AJSoTL* clearly illustrate what we might call SoTL in action, where the authors are thinking through, trying to understand and to meet, the challenges brought about by new imperatives for student learning. The reflective pieces continue this investigation by bringing theory to real practice.

The current challenges to higher education teaching are many and varied, but can arise from a need to engage students in learning subjects that previously did not exist, such as digital literacy, or programming. The research paper of Kurniawan, Cheung and Ng confronts the difficulties of preparing students for a course that is compulsory for all students at the Singapore University of Technology and Design (SUTD), "Digital World", an introductory course in programming and computational thinking using Python programming language. Programming and computational thinking have become more central to our idea of what it means to be educated in the contemporary world, but the authors face many of the challenges faced by those teaching compulsory courses in other areas. First, students come to the course from a "wide spectrum of backgrounds, levels of knowledge and learning interests" and secondly, the level of motivation varies widely across the students. These challenges drive their study and have relevance to many other university courses.

The paper looks at a pre-course intervention designed to scaffold student knowledge by comparing the effectiveness of "traditional" classroom teaching and learning through games in preparing students for the course. The aim is to measure changes in student confidence, perceptions of the intervention's effectiveness and its effect on their subsequent performance in the "Digital World" course.

Notions of scaffolding student learning and the development of critical thinking occur throughout the articles in this issue. For Kurniawan *et al*., scaffolding means addressing the gaps in student knowledge to prepare them for a course, whereas for Rajaram, what he calls "improvised" scaffolding in a management course has a broader meaning. Scaffolding incorporates a variety of activities to engage students in dialogue and reflection, in a flipped classroom construct. Here, scaffolding is about student engagement that allows dialogue and reflection on pre-class learning. The focus is on a flipped classroom framework with educational technology, but a useful distinction is made between "flipped" and "blended".

This article is an example of where SoTL becomes not only a means of disseminating practice, but a way of analysing and advancing new practice in relation to perceived current challneges. And as with the article by Kurniawan *et al*., it is strongly grounded in scholarship and theory. Rajaram's intention is to address perceived qualities of millennial students, such as short-term concentration and lack of engagement, and to develop critical thinking and a student focus on the actual process of learning rather than just seeking answers.

The first of the three "Reflections on Practice" included here, by Sykes and Azfar explicitly addresses the development of critical reasoning over time. What is the relationship between "learning to think and developing thinking skills required for learning" when comparing an undergraduate and a postrgraduate Engineering class? Situating critical thinking in a constructivist framework, the paper looks at the qualities of questions students ask of graded class presentations. The authors hypothesise that because of their longer exposure to higher-order questions, senior students will ask both more questions, and higher-order questions. Here, the question of scaffolding is introduced in a different way. What the authors are looking at is whether questioning develops naturally through longer intellectual exposure, without explicit scaffolding in learning to ask higher-order questions.

Rashid's reflection on practice, "Cultivating 21st Century Skills in PhD Students", confronts the need to give more weight to "interdisciplinarity, critical thinking, and collaboration". Again, we see a reflection on how to meet what is seen as a current need to move PhD students beyond their disciplinary specialisations. In the current complex world, there is a need for students to be able to "situate their work in every wider contexts". Critical thinking and interdisciplinarity develop the capacity for analysis, evaluation and inference and expose students to multiple points of view. Rashid outlines the use of two tools, the Integrated Model of the Interdisciplinary Research Process (IRP) and the "Toolbox Project" designed to prepare students better for teamwork and to be more reflective and critical practitioners.

In the third of the reflective pieces, Wai-Cook and Lee discuss reflective practice itself and apply one of Farrell's (2018; 2007) four types of reflective practice—reflection-*as*–action—to their consideration of the alignment between their beliefs about English language teaching and their actual practice. The occasion for their reflection is a 30-minute teaching session focusing on learning an aspect of English language. Do they, themselves, create the kind of student-centred classroom environment they believe they should? The opening discussion provides a useful introduction to the meaning of reflective practice and its implications for uncovering gaps between belief and practice. This article nicely links to Kurniawan *et al*. in tying the notion of scaffolding to a constructivist view of learning. The main question they address in relation to their own practice is whether there is a balance between didactic teaching, and student practice and interactivity.

This issue is rich in ideas about how to address current circumstances in teaching and learning. To adapt a notion from the foregoing paragraph, we can say that this issue demonstrates SoTL-*as*-action. Pressing issues and needs, such as the need for students to have sufficient foundational concepts and knowledge to move forward, critical thinking, interdisciplinarity, skills for lifelong learning, and so on, are here addressed, analysed and evaluated. In turn, these interventions, analyses and evaluations become the means of moving ahead into further explorations, refinements and innovations. In this way, SoTL can be seen to have a real immediacy as an agent of change.

REFERENCES

Farrell, T.S.C. (2018). *Reflective Language Teaching: Practical Applications for TESOL Teachers*. London, UK: Bloomsbury.

Farrell, T.S.C. (2007). *Reflective Language Teaching: From Research to Practice.* London, UK: Bloomsbury. ■

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