

Summary of Workshop Session: SoTL and Technology-enhanced Teaching and Learning (TETL)

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Session Summary:

As we increasingly use technology to support and enhance teaching and learning (T&L) in various ways, it is becoming more vital to learn from and build upon each other's effective practice across different educational contexts and settings. With this idea in mind, this session was set up to explore the synergy and possibilities of the scholarship of teaching and learning (SoTL) and technology-enhanced teaching and learning (TETL) primarily from two aspects:

- 1) How we can bring SoTL into effectively conducting action research on TETL, and
- 2) How technology can be used to support and enhance various SoTL efforts.

The participants came from various universities in the Asia region. They included academic teachers from different faculties as well as university representatives involved in various aspects of academic development work

During the session, a number of participants volunteered to share their practices and experiences on TETL. For instance, A/Prof Tan Swee Liang, from the Singapore Management University (SMU), shared about the Technology-Enhanced Learning (TEL) programmes offered by her institution's Centre for Teaching Excellence (CTE). She also presented on various initiatives which have been launched at SMU to drive SOTL at the TEL level, with examples of TEL projects. From the Faculty of Dentistry at the National University of Singapore (NUS), A/Prof Kelvin Foong presented a framework and strategy for TEL adopted by the Faculty, which consisted of a five-step approach that prompts faculty members to critically examine the need for a technology solution prior to adopting it for T&L. He also provided an example of his own involvement in SoTL-TETL, where he talked about his experience on the development and use of a simulator to train dental students on a local anaesthetic injection technique. This project was developed with funding received from the Learning Innovation Fund–Technology (LIF-T) provided by NUS. Meanwhile, Dr Gavin Porter, from the Faculty of Science in the University of Hong Kong, highlighted the importance of thinking about the pedagogy first before adopting any TEL strategies. His perspectives on the challenges and opportunities in adopting gamification for T&L further prompted participants to critically review the affordances of simulation and gaming platforms in improving the student learning experience (i.e. making complex concepts/principles visible to students). Ms Jeanette Choy, together with Mr Alan Soong, from the NUS Centre for Development of Teaching and Learning shared a conceptual framework for a course designed to provide opportunities for academics to build their capacity in SoTL. The aim of this course was to enable participants to design and develop their modules in a scholarly manner, with the goal of enhancing learning and teaching.

It was also very heartening to receive emails from participants who were ready to share their SoTL-TETL experiences but did not manage to do so due to the limited time allotted for the session or they were unable to attend the session.

From the above sharing and discussions, three learning points in doing SoTL on TETL were observed:

- ***Thinking about learning first:*** A range of technologies could be used to support a wide range of educational purposes. This can range from engaging students in a variety of ways in their learning,

supporting appropriate assessment and feedback for students, to preparing students for life beyond university (i.e. by developing their network and discernment skills). Ultimately, it is clear from the sharing that there is a need to apply a scholarly approach in the use of technology of T&L in higher education to bring about enhanced learning. As stated in the 2009 document *Effective Practice in a Digital Age* from the UK's JISC (2009), effective practice is defined as 'employing a range of pedagogic skills to bring about the best possible learning for the widest variety of learners'. With this, perhaps the question that educators need to ask when adopting TEL is "How can I enable my students to achieve the desired learning outcome?", rather than "What can I use this technology or tool for?"

- **Using evidence and reflection:** Participants queried on the extent that the evidence collected is a valid representation of the success of our TETL efforts. In addition, does having negative findings indicate failure or cause detrimental effects on students' learning? Responses from participants suggest that there is no 'one-size-fits-all' approach to the effective use of technology for T&L. The discussion centred on a critical reflection of the validity and reliability of instruments used to collect the evidence, and the importance of having a rich dialogue that is grounded within institutional contexts and discipline-specific practices.
- **Questioning the value of TETL:** Participants agree that doing TETL requires substantial investment of time, effort, and money. However, is doing TETL worth the investment of our efforts (i.e. time, cost, etc...)? How do we substantiate its "worth"? The term commonly adopted to measure the benefits of an investment is Return on Investment (ROI). ROI is typically adopted in the business context. However, as pointed by A/Prof Sandy Cook, ROI might not be a suitable term to be used in an educational context. Rather, she proposed an alternative term, "Return on Commitment", where students become more committed in their learning. Laurillard (2006) provided another viewpoint on considering its worth where she states,

"The most important benefits, ultimately, are the learning outcomes, the improvements in understanding and skills implicit in the learning objectives" (Laurillard, 2006, p.30).

With the rich sharing and discussion, Prof Iiyoshi refocused the discussion towards how technology can be used to support and enhance various SoTL efforts. How can we (as an SIG) continue to learn from and build on each other's work?

Sharing his perspectives and experience on supporting and enhancing SoTL efforts based on his experience with the Carnegie Academy for Scholarship of Teaching and Learning (CASTL), Massachusetts Institute of Technology (MIT) Office of Educational Innovation and Technology, as well as with Kyoto University, Prof Iiyoshi strongly believes in the value of creating an online space where educators can share, discuss, and adapt shared teaching practices (Iiyoshi & Richardson, 2008). The notion of creating a common space for open knowledge exchange is closely linked to what the event invited speaker, A/Prof Peter Felten, advocates as well where "SoTL creates and develops a "teaching commons" (Huber & Hutchings, 2005). In fact, this could be a solution for the learning points mentioned earlier on whether the use of TEL for T&L are benefiting students and not wasting their time, or the time that their teachers have invested. Laurillard (2006, p. 29) pointed out that the '*more significant cost driver in the switch to TEL is that teachers, support staff and students spend their time differently*'. She posited that the sharing of 'good practice' and 'lessons learned' among members of the higher education community can promote effective uses of technology among educators and decision makers, and reduce duplication of effort and expense.

Finally, we discussed some of the critical future directions, activities, and milestones for the SIG. Based on the responses, there was clear interest from participants in having an online platform that facilitates

knowledge sharing and discussion. A first step towards this is to upload the slides and sharing provided for this session on a suitable online platform. The facilitators of SoTL-TETL SIG will explore a more interactive platform to better serve the needs of its members.

References

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