

EDITORIAL

Innovative technologies and professional paths

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Innovative technologies and professional paths

From Facebook to pharmaceuticals, innovative technology is today shaping our lives in critical ways. To what extent is technology transforming our pedagogical practice as we appropriate it to our own ends in navigating our professional paths, and more importantly, our students' learning, which is, after all, the ultimate goal? It is hard not to be swept away by the strong currents of technological innovation that more and more teaching and learning aids for the classroom present. While technologies themselves do not imply a particular teaching method, or even a "better" method, they can, depending on the sociocultural context, be used for a variety of pedagogical purposes. The "rules of the game" in different contexts often influence the ways in which individuals perceive the utility of a technology and the ways in which they use it. Success stories abound about the capabilities of new technologies for opening up untapped possibilities and creating new opportunities for more democratic and self-directed learning. There are also narratives of the conflictive impact of technologies and of implementation issues, which can form barriers to educational reform. Issues relating to technology acceptance present insights into challenges that may have to be managed realistically and sensitively in each context of use. They bring to the fore the need to constantly re-think our pedagogy and keep an open mind to new modalities for staying relevant in the profession.

In this third issue of *JNUSTA* we bring you the second installment of "From the desk of ..." and three articles that continue the conversation along the line of thought expressed in the previous issue of *JNUSTA*'s online forum, "Technology in the 21st century classroom: To use or not to use". In the "From the desk of..." feature, Vice-Chancellor of the University of Colombo Professor Kshanika Hirimburegama spells out how a nation's investment in higher education and knowledge construction can contribute to nation building and development both at the societal and personal level in the context of a newly healing Sri Lanka. The setting up of a virtual campus at the University of Colombo and the introduction of tissue culture technology at the Institute for Agro-technology and Rural Sciences provide concrete examples of the potential for development and reconciliation such investments in knowledge growth hold in the formerly war-torn country.

The three articles that follow document the mobilisation of innovative technologies in three very diverse contexts of use and with varied success. William Rifkin, Nancy Longnecker, Joan Leach and Lloyd Davis encourage the use of technology, more specifically social media platforms, to develop key skills for 21st century science education – skills such as mastery of oral and written communication, teamwork, critical thinking, and ethical awareness. Examples of projects implemented on World Science Day are used to provide insights into the ways in which science education can meaningfully engage students' potential skills with using social media and how

these meaningful engagements can optimise content learning. Though generally effective in engaging students in interesting ways, the authors also point out how the use of technology presents difficulties in educational contexts. For example, the need to identify and discern within a limited time frame how apt each of these platforms may be for learning is one challenge. Establishing baselines to measure impact while understanding how best to harness a suitable platform is another.

While it would appear that fine arts and business management make unlikely bedfellows, Martin Kupp, Jörg Reckhenrich and Jamie Anderson make imaginative use of artistic success precisely to show how engagement with artworks and history can promote experiential learning in an interactive atmosphere amongst business school management learners. The idea behind using art is to harness the not so obvious parallels between management contexts and artistic contexts for effective learning at the metacognitive level. Techniques, including coaching stages, art dialogue and “mission impossible” tasks, provide a platform for confronting management issues through engagement with artistic considerations, aimed at facilitating introspective learning, communication and team building among students and executives as a means of unleashing their creative potential. Such skills may be enhanced by new technology; they could also be developed by tapping on somewhat less techno-centred resources such as the use of works of art and other artefacts. The underlying approach is to discern the potential these channels can offer and, sometimes, mentally juxtaposing what we do not normally see as “compatible” (e.g. art and business) so that one can further explore new possibilities for teaching and learning.

Finally, Carmel McNaught, Paul Lam, Edman Chan, Shereen Yuen, and Eric Ho report on a small-scale study conducted at the Chinese University of Hong Kong (CUHK) in ²⁰¹⁰ to assess the benefits of using lecture recording systems such as Echo³⁶⁰, with a view to examining the challenges of implementing educational innovation and change. The results of this year-long project involving ³¹⁹⁰ students, ¹⁰ courses and ¹³ lecturers across a variety of disciplines showed that despite requiring minimal technical skills, being easy to use, and the availability of good support, the overall uptake of this technology was rather low. Feedback from a questionnaire survey revealed that the teachers found the system did not enhance their teaching style; instead they perceived it as restraining their modes of presentation and inhibiting improvisation. Similarly, students unfamiliar with technology were not overly enthusiastic about its educational value. Contrary to the success stories of the adoption of Authoring on the Fly (AOF) systems around the world, its acceptance in the case of CUHK was lukewarm. The authors highlight the issue of “face” as being a key factor that must be heeded in a conservative teaching-learning culture like that of CUHK when implementing a highly personalised and semi-public technology like the lecture-capture system among risk-averse teachers and students. The findings are revealing in that although perceived usefulness and perceived ease of use have been found to predict technology acceptance, certain cultural aspects appear to override these factors and call for a more nuanced understanding in assessing professional uptake of technological change.

New information technologies are transforming notions of literacy and education, making online navigation and research, interpretation of hypermedia and synchronous and asynchronous online communication critical skills for tertiary level learners. Clearly, the intensification of this trend in the 21st century is likely to render ineffective curricula based on conventional pedagogical approaches and narrowly defined educational tasks. As the case studies in this issue of *JNUSTA* amply illustrate, professional practice that increasingly incorporates innovative technology and critical inquiry in tandem with collaborative and experiential learning frameworks will be required if our students are to master the complex literacy and communication skills demanded by the emerging informational economy and society.

ONLINE FORUM – POST YOUR COMMENTS @

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Asian education hubs with a global perspective

Universities in Asia are faced with the twin challenges of maintaining an Asian identity, while at the same time cultivating global awareness among graduates, and it is not always clear what these notions of ‘Asian’ versus ‘global’ may mean. The need to shape students’ mindset toward a ‘global’ perspective becomes all the more pertinent at the tertiary level as undergraduates take the next step into the global community upon graduation. This is in addition to the issues and challenges related to how educators can prepare students toward adopting a global mindset. This forum welcomes your deliberations on these and related issues on the topic of “Asian education hubs with a global perspective/s” — we would love to hear from you!

Post your comments at [JNUSTA Online Forum](#). If this is your first visit to the forum you need to register as New Member before you will be allowed to post.