

Professional development for teaching with technology

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Most South African universities provide professional development opportunities for their academic staff. It is one of the accreditation criteria for the Council on Higher Education (CHE) as it is considered a critical element of quality assurance. Increasingly, with the introduction of online learning management systems (LMSs), an array of web-based tools and a variety of technology available in classrooms, that development has to include working with technology to promote learning.

Recommendations

- Make support and professional development for teaching with technology available to academics. A support helpline, online support documentation, and training and coaching should be available.
- Build in a reward system to motivate academics to implement technology in an innovative way to support the achievement of learning outcomes, e.g. it should count towards promotion, an award could be instituted.
- Make training in digital literacy available as a prerequisite during probation, but open to all, and make training in the facilitation of e-learning available as well.

Discussion and analysis

The successful implementation of educational technologies depends on the lecturers using these technologies. It is a daunting task to keep abreast of the ever-increasing number of innovations that may be used in education. In addition to the explosion in educational technologies, most academics do not have much teaching preparation or experience when they are appointed, and base their understanding of effective learning on what they experienced during their student life. As a large number of lecturers do not have previous experience as students in the use of educational technologies to guide their teaching practice, they tend to transfer their traditional beliefs of teaching to these technologies. It is therefore critical to provide support and professional development opportunities to assist lecturers to engage in 'pedagogical problem solving' when they implement new technologies within their disciplines (Kreber and Kanuka 2006).

Frameworks

Two frameworks are used in the following discussion to highlight a holistic approach to the professional

development of staff within an institution to use educational technologies. The first is that of Baran and Correia (2014), and the second is that of Knight et al. (2006), who use Engestrom's activity theory.

Baran and Correia (2014) propose a nested professional development framework for online teaching that considers the interconnectedness of three levels: teaching, community and organisation (Figure 1). At the teaching level, professional development opportunities should support lecturers with pedagogical inquiry into the use of the technology within their specific contexts, acquiring the necessary technological skills to use these technologies, as well as design and development support to design appropriate learning opportunities. Professional development opportunities that address these needs are typically presented by units of instructional designers, library specialists and/or audio-video producers in formats that range from one-on-one assistance to reference manuals, showcases and workshops that are typically presented within an institution (Baran and Correia 2014).

The community component of the framework advocates the expansion of academic development into the communities in which lecturers work. While there is a natural tendency to seek help from support personnel, research (Baran et al. 2013) indicates that lecturers adapt better to the online teaching environment if they belong to both informal groups and formal, organised social networks and communities of practice, as these environments assist lecturers through the experimentation with technologies, exchange of ideas, advice and continuing dialogue on the topic.

The organisational level introduces the key motivational role that institutional support and recognition play to support lecturers' participation, commitment and sustained interest in online learning. A reward system that acknowledges the extra effort and commitment of lecturers to develop online courses has proven to be highly motivating to academics. Baran and Correia

(2014) list the following rewards described in the literature: acknowledgement of leadership, value towards promotion, financial incentives, release of time for course development and public acknowledgement.

Another important factor is organisational culture. A positive organisational culture that 'respects and rewards online teaching, and makes it accessible and flexible' is key to motivating lecturers to increase their use of online technologies.

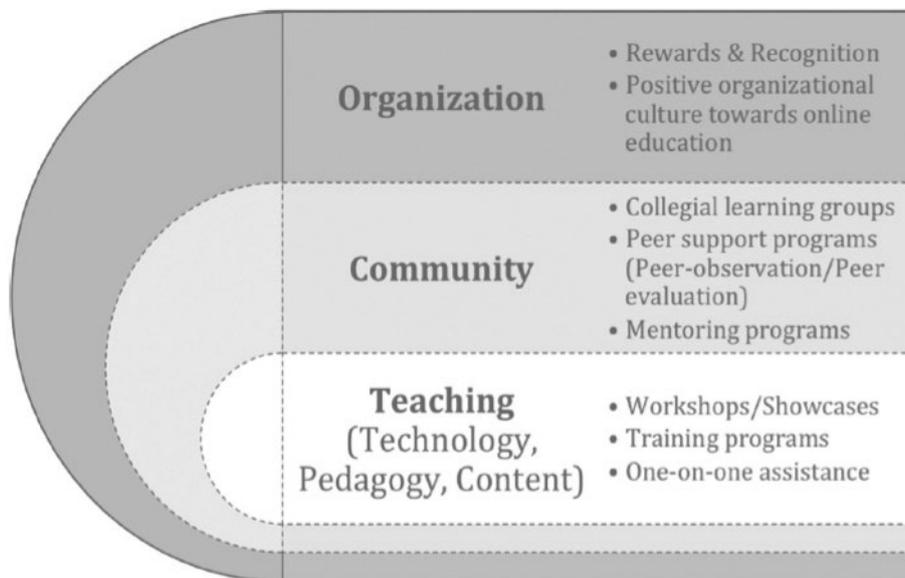


Figure 1: Professional development framework for online teaching (Baran and Correia 2014)

Knight et al. (2006) used Engestrom's activity theory (2001) (Figure 2) to interrogate the impact of context and community on professional development programmes. They implemented this theory as follows: The subject can be seen as the educational development event/resource, which has better educational practice as outcome. Aspects that impact on the degree to which these outcomes are achieved are determined by the tension created between the mediating tools (design of the professional development intervention) and the rules and division of

labour (current working practices of a department/faculty), as well as the community in which the lecturer works. These studies have found that the context and community in which lectures find themselves impact on the effectiveness of professional development opportunities. Conversations within non-formal and social learning environments, such as learning 'on-the-job', discussions with co-workers and own student experiences, influence the effectiveness of academic development initiatives.

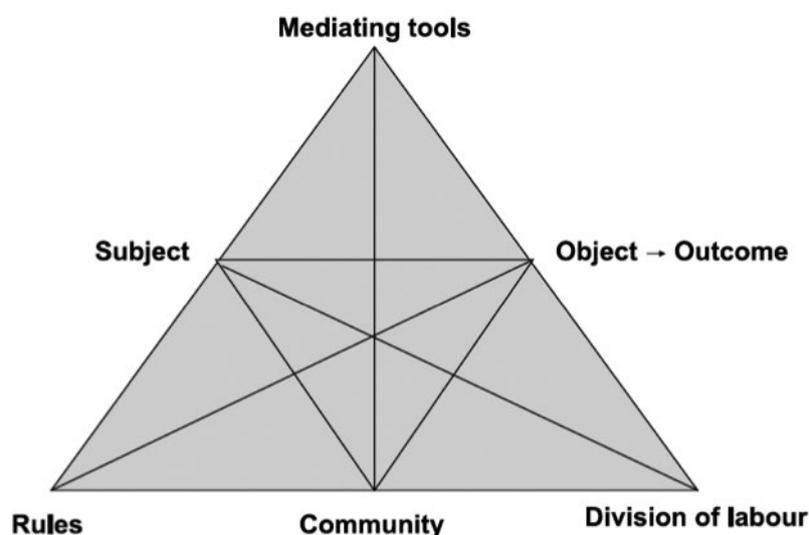


Figure 2: Engestrom's activity theory (In: Knight et al. 2006:135)

Another vehicle that academic staff can use for their own professional development in the implementation of education technologies is Scholarship of Teaching and Learning (SoTL). This engagement with pedagogical problem solving may result in their own growth in understanding of the effective use of education technologies, while contributing to the knowledge base of educational technologies (Kreber and Kanuka 2006).

South African perspective

Professional development and support for the use of educational technology within South African higher education vary according to the vision, policies and context of the institutions, the philosophy of the academic support departments, as well as the number of available e-learning/educational technology support staff.

Limited reward systems are in place to motivate academic staff to make better use of the technologies. Those that are in place vary between time off to develop online courses, showcase events where champions present their work, and awards to academics who implement technology in an innovative way. The only national award that is available is the annual National Excellence in Teaching and Learning Awards of the Higher Education Learning and Teaching Association of South Africa (HELTASA) and the CHE.

Common institutional formats of professional development opportunities include hands-on, contact short courses on how to use the technology, online documentation to support, and training sessions presented to specific academic departments. One aspect of these sessions that requires special mention is the fact that many academics or academic administrative staff members do not have the necessary computer literacy and information literacy skills that are required to implement educational technologies successfully. Only the University of Cape Town and the University of Pretoria provide online courses on the facilitation of e-learning. The massification of higher education in South Africa, as well as the pressure to produce high-quality research, impact on the permanent academic staff's availability to attend these initiatives. Academics who are contracted on a part-time basis seldom have the opportunity to attend these events as their remuneration packages do not include time for professional development.

A few formal under- and postgraduate qualifications exist that address the use of computer-mediated education in South Africa, provided by the faculties of Education at the universities of Pretoria, Johannesburg, Cape Town and the Witwatersrand. Most of the instructional designers/ education technologists within the universities have postgraduate qualifications in the use of educational technologies, while very few academic staff members enrol for these qualifications.

An informal community of practice for instructional designers, known as UP-TU-JU, was established in 2006 in Gauteng and has grown into a national group that meets twice a year. The meetings focus on the best practices for the application and implementation of new educational technologies in higher education.

Recently, MOOCs on how to integrate educational technologies or how to design blended learning courses

have broadened the horizons for academic and academic support staff to learn how to implement these technologies.

Acronyms and abbreviations

CHE	Council on Higher Education
HELTASA	Higher Education Learning and Teaching Association of South Africa
LMS	Learning management system
SoTL	Scholarship of Teaching and Learning

References

- Baran, E., & Correia, A.P. (2014). A professional development framework for online teaching. *TechTrends*, 58(5), 96-102.
- Baran, E., Correia, A.P., & Thompson, A. (2013). Tracing successful online teaching in higher education: voices of exemplary online teachers. *Teachers College Record*, 115(3).
- Engestrom, Y. (2001). Expansive learning at work: Towards an activity theoretical reconceptualization. *Journal of Education and Work*, 14(1), 133-156.
- Knight, P., Tait, J., & Yorke, M. (2006). The professional learning of teachers in higher education. *Studies in Higher Education*, 31(3), 319-339.
- Kreber, C., & Kanuka, H. (2006). The scholarship of teaching and learning and the online classroom. *Canadian Journal of University Continuing Education*, 32(2), 109-131.