

Blended professional learning – modelling the paradigm shift

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Many academics are grappling with transforming their teaching practices to embed 21st century pedagogy creating new challenges for academic developers. To address this, a professional learning program was redesigned integrating emerging technologies and practices to provide an immersive experience in the flipped classroom strategy and to foster technology enhanced pedagogy using an experiential learning framework. Participants (n = 195) in the first iteration of the program reported a very positive learning experience regarding engagement, motivation to integrate learning technologies in teaching and confidence to embrace new pedagogies. Overall, conceptions of and engagement with the flipped strategy were also highly positive but the blended nature of the course poses challenges in terms of participants' personal learning journeys, raising critical implications for those involved in planning and facilitating professional learning courses.

Keywords: blended learning, teacher professional learning

Introduction

Emerging technologies and their potential impact on and use in teaching and learning in higher education are challenging traditional notions of professional learning and how professional development programs are designed and implemented. This paper describes the ways in which a professional learning initiative in the form of a Foundations of Learning and Teaching program has been restructured to advance pedagogical change at a West Australian university, by modelling a flipped classroom and learning engagement strategies in a technology rich learning space using an experiential learning framework. Preliminary investigative insights into participants' experience are explored.

Background

Online and blended learning have been embedded as course delivery modes at Curtin University for more than 15 years, with substantial differences in implementation across courses and units delivered both onshore and transnationally. Given this legacy, most teaching academics are proficient users of the Learning Management System. The strategic priority to transform learning is framed by the university's response to the intensification of global competition in higher education, and is reflected in the imperatives to enhance the student experience, enrich student engagement and learning, and assure quality teaching. An enabling strategy across multiple interrelated projects (e.g., New Generation Learning Spaces, Distributed Learning and Assessment, Review and Transformation) is the availability of continuing professional learning opportunities.

However, under conditions where many academics are change weary and time poor, those involved in developing, designing and delivering professional learning programs, are confronted with new challenges such as seeking ways to embed the philosophical and pedagogical shifts, across varied cohorts of academics working in different settings (e.g., regional campuses, transnationally, online). Thus the rationale for the program renewal described in this paper was threefold: to augment participants' pedagogical knowledge and skills, to cultivate a positive emotional climate to advance the paradigm shift, and to integrate opportunities for contextual application and knowledge transfer to occur.

Theoretical underpinnings

Evidence based research literature provided a theoretical map to reconfigure the professional learning strategy to revitalize and align a Foundations of Learning and Teaching program with the university's transforming learning agenda. Previous research provided a guide to addressing key challenges around PD practice perceived to be prevalent in the local context. These challenges include for example, the notion that a rapidly changing workplace context affects professionals' practice (Fullan, 2007; Oakes & Rodgers, 2007); that PD programs are often fragmented, superficial and improperly address what is already known about how teachers learn (Borko, 2004); and that episodic decontextualized PD significantly reduces the impact to advance changes in practice (Darling-Hammond & Bransford, 2005; Darling-Hammond et al., 2007; Hawley & Valli, 1999).

Consequently, in redesigning the program the author employed critical reflection as a lever to advance changes in teaching practice (Brookfield, 2005; Katz, Sutherland, & Earl, 2005). To preclude fragmentation and superficiality, the program has been restructured into three cohesive modules and adult learning principles (Knowles, 1980; Papas, 2013; Tafel, 2008) underpin the process and problem oriented pedagogies that are employed. The flipped classroom strategy is deployed to repurpose class time to promote peer interaction and learning engagement. This refers to a model of learning that:

... rearranges how time is spent both in and out of class to shift the ownership of learning from the educators to the students. In the flipped classroom model, valuable class time is devoted to more active, project-based learning where students work together to solve ... real-world applications — to gain a deeper understanding of the subject. Rather than the teacher using class time to dispense information, that work is done by each student after class, and could take the form of watching video lectures, listening to podcasts, perusing enhanced e-book content, and collaborating with peers in online communities. Students can access this wide variety of resources any time they need them. (NMC Horizon Report, 2014, p. 36)

To facilitate this shift, engagement with content knowledge is assigned as pre-session activities (Educause, 2012; MindShift, 2011). Decontextualisation is mitigated by fostering an authentic experiential learning cycle (Kolb, 1984), with opportunities for personalisation (Perkins, 2010) and enhanced relevance to individuals' teaching contexts.

The experiential learning framework (see Fig. 1) affords several benefits: enabling transferability of learning; promoting ownership of the knowledge and skills; extending the learning event beyond the time and space of the face-to-face session; and evaluating participants' achievements of the learning outcomes to gauge improvements in teaching practice and possible impacts on student learning (Bourner, O'Hara, & Barlow, 2000; Desimone, 2009). Effective use of educational technology and active learning strategies are modelled throughout the program (see Fig. 2).

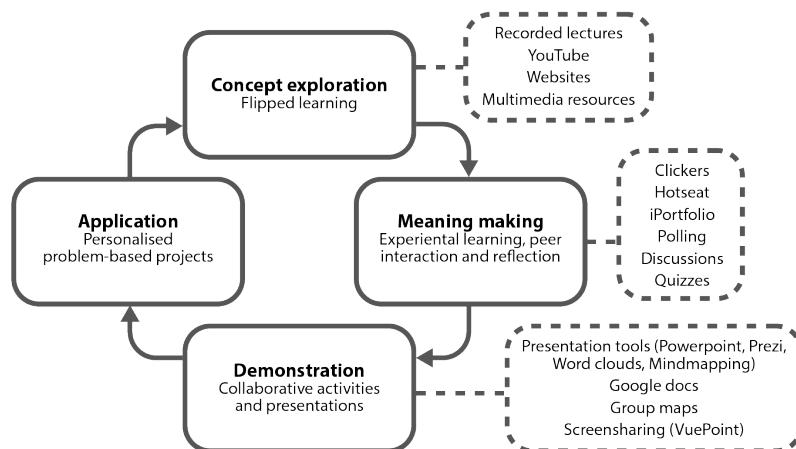


Figure 1: Experiential learning cycle supported by technology integration

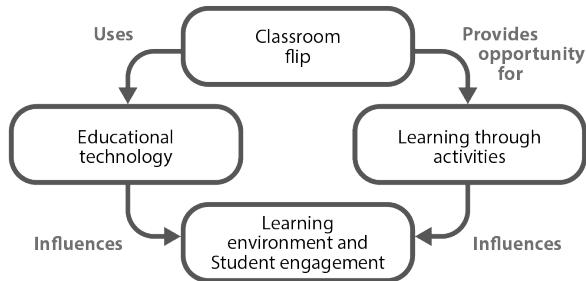


Figure 2: Transforming learning paradigm

The program

The restructured program comprises three extended modules run as three full-day face-to-face workshops delivered iteratively over a 13-week semester. The online space is hosted on the Learning Management System (*Blackboard*), and is deployed primarily as a resource repository, with limited opportunities for online discussion amongst peers. Hence, the online space is best described as an augmentation of the face-to-face professional learning context, providing an opportunity for interleaving and extending participants' knowledge base through self-directed resource-based learning. However, this has the propensity to limit facilitator control over the pace at which individuals work through the course materials and engage in their personalised action-learning project to transform and document aspects of their professional practice in a teaching portfolio (Beaty, 2003). Nonetheless, this blended strategy is considered a positive design affordance as participants value the flexibility in a climate of managing intense workloads, with possible implications for participants' preferred professional learning strategies.

The experiential learning framework (Kolb, 1984) is used to seamlessly transition participants through three phases of engagement extending over 12-18 months (see Fig. 3) (Garrison & Kanuka, 2004). The flipped classroom strategy is employed to facilitate concept exploration as homework activities during the *pre-session phase*. Participants engage with video material and Open Educational Resources to explore the content and answer focus questions. During the *concrete experience phase*, participants engage in collaborative learning activities in class and construct meaning through peer interactions whilst optimally utilising the affordances of a technology enhanced learning space. The *post-session phase* is when participants get to apply the knowledge and skills gained to transform practices in their own teaching and learning context. This occurs through self-determined projects designed to transform learning and promote teaching excellence. The outcomes of these individual teaching and learning projects encompass the range of topics covered within the program (e.g., 21st century teaching and learning practices to enhance student engagement; authentic assessment; feedback; curriculum renewal and development to align with strategic directions in work integrated learning, English language development, Indigenous and intercultural capabilities; and Evaluation of teaching by students and peers) and are documented in participants' teaching portfolios.

The technology rich, flexible learning spaces in which the program is held are enabled for use of mobile technologies, wireless and e-learning systems, and provide the infrastructure to move from traditional teacher-focused instruction to student-centred, collaborative, and active ways of learning. Collaborative software installed on 6-8 pod computers with their own monitors and control panels allow for the use of technology to transform the 'student' experience in these classrooms. Moreover, the notion of the 'classroom' is extended beyond the physical space and incorporates the virtual space, with the potential to transform how teaching and learning happens in these spaces.

A range of technologies and tools are employed to model the following: (1) content capture that can be accessed with affordance of time and place flexibility; (2) presenting learning materials in a variety of formats to suit different learning preferences; (3) creating opportunities for discourse and interaction in and out of class; (4) conveying timely information; (5) providing immediate peer feedback opportunities; and (6) capturing data about participants to analyse their progress, provide facilitator feedback and action support as needed.

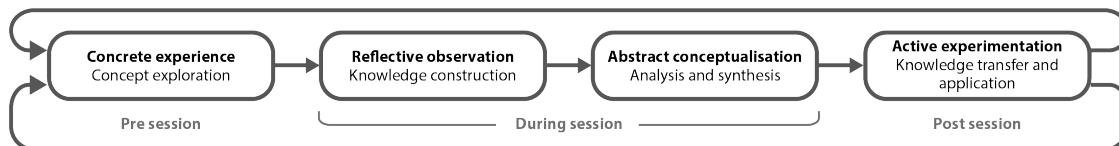


Figure 3: Transition through the experiential learning framework

Study description

During the first iteration conducted over one semester at the main campus, 195 academics participated the program. A post-session online evaluation survey comprising open-ended and fixed alternate questions provided the primary data source for the present study. This is further supported by reflective insights gained by the author as course convenor.

Given that the survey is linked to a larger research project that investigates three broad areas, namely participants' professional learning experience; contemporary professional learning strategies and teacher preferences; and teachers' professional learning pathways, only selected items pertaining to the former areas are explored within the scope of the present paper to reflect shifts in an approach to professional learning. Thus, the author analyses the participant experience with regard to six aspects – (1) learning engagement; (2) motivation to integrate learning technologies; (3) confidence to embrace new pedagogies; (4) the flipped classroom strategy; (5) the blended approach; and (6) preferred professional learning strategy. The data presented in the following section is based on a response rate of 38% ($n = 74$) to the online survey.

Findings

Participant perceptions revealed favourable results about the professional learning experience. Using a five-point Likert scale (Strongly Agree - SA, Agree - A, Neutral - N, Disagree - D, Strongly Disagree - SD) most respondents reported a positive learning experience regarding: (a) learning engagement (45% = SA, 49% = A, & 2% = D); (b) motivation to integrate learning technologies in their teaching (53% = SA, 41% = A; 6% = N); and (c) confidence to embrace the new pedagogies (49% = SA, 46% = A, 5% = N).

The introduction of the flipped classroom strategy also yielded highly positive results, with 85% of respondents reporting that they had engaged with the pre-session tasks and had found them engaging; whereas a further 10% indicated they had engaged with the pre-session tasks but had found some of the tasks not particularly engaging. Approximately 5% had not engaged with the pre-session tasks at all. These concept exploration tasks involved for example, exploring websites and infographs, and viewing short video clips (see Fig. 1). Informal class discussions revealed that participants' experience of the flipped strategy facilitated improved conceptions providing greater awareness about various permutations, including the task design, cognitive complexity, time commitment required, type and selection of resources, and interest level. All of these components appeared to contribute favourably to participants' engaging with the pre-session tasks. Further reflective insights suggest that ease of access to the pre-session resources and acceptance of a cultural shift positively reinforced the high rate of engagement with the flipped classroom strategy.

Optimisation of the blended nature of the course revealed slightly less positive attitudes amongst respondents. Whilst 65% stated they intended to engage with the resources post session, 32% indicated they intended to engage with the resources if they had the time, and 2% did not intend to engage with the resources at all. Also pertinent to the blended nature of the course, is individuals' preferred mode for engaging in professional learning. A large majority of respondents (81%) indicated a preference to participate in face-to-face professional learning programs, as opposed to other options (Online community = 9%; Facilitated online workshop = 5%; and Webinar = 5%). This finding is interesting considering 51% of respondents described themselves as 'eager to play with technology', a further 36% described their technology use as a 'seamless part of their everyday life and work,' and 13% described themselves as 'a survivor' from a technology user perspective.

Discussion

Early indications are that the experiential model has facilitated professional learning to support the transforming learning agenda. Immersing staff in a blended technology rich environment yielded gains in facilitating improved understanding of the shifts occurring in teaching and learning practice, and strengthened participants motivation and confidence to embrace new pedagogies. This could suggest that the learning interactions provided a source for both: augmenting knowledge and influencing attitudes and practice.

The flipped learning strategy appears to have been well received in this professional learning context. It is likely that gains in tacit knowledge of what flipped classroom pedagogy involves and how it might look in different contexts, has demystified the concept somewhat and has provided a platform for course participants to re-imagine how they might adapt their teaching to integrate this strategy as part of the transforming learning agenda. Participants not only recognised the many permutations of the flipped classroom but also appreciated the need for good learning design (e.g., curriculum alignment, learning activity, and selection of resources), as well as strategies that foster a cultural shift and effective classroom management. For instance, participants found the variety of multi media resources engaging, the associated workload and the ease of access to the web-based resources facilitated their engagement. The classroom experience also provided opportunities to consider strategies they might employ to deal with situations such as, students not having completed the preparatory learning activities, increased noise levels in collaborative learning environments, and keeping students on task. This experiential dimension assisted in positively reframing these issues rather than viewing them as perceived barriers.

From a professional learning design perspective, three issues deserve further study. First, the challenge of assuring effective post session engagement with the course content and knowledge transfer is critical to achievement of teaching improvements at scale and is closely tied in with the imperative to demonstrate the impacts of professional learning. Currently, there is no requirement for participants to engage with the course materials post session and the strategy of learning authentically by doing is reliant on sustained motivation to strive for teaching excellence. Second, the ongoing challenge of managing diminishing resources with the need to offer more customised professional learning programs for specific cohorts (e.g., sessional staff) working in different settings (e.g., regional campuses, transnationally, online), is widely recognised and the need to harness flexibility and scalability is well understood, but solutions remain elusive. This study has shown that blended and hybrid approaches are promising, and they can successfully leverage the technology skills staff have already developed independent of the professional learning program. Third, it is necessary to look beyond participants' initial excitement of discovering a range of technologies to engage students in new forms of learning, and put in place strategies to channel the growth in confidence through continuous professional learning to keep abreast of the pace at which technologies evolve and to cultivate deeper intellectual understanding of key concepts and technology enhanced pedagogies.

Conclusions

Evidence-based preliminary findings from this ongoing study suggest that a blended experiential professional learning approach in this particular context fosters an organic action-learning framework that is likely to promote teaching excellence and contribute to improvements in student engagement. As this model gains momentum and refinements are made it is likely to generate a shift in teachers' professional practice that is more strongly aligned with the transforming learning agenda. Thus, an immersive experience within which new practices are modelled and opportunities for sharing tacit teacher knowledge needs to be strengthened to drive continuous professional learning and teaching development. Whilst the blended approach assures flexibility, ease of access and integration of multi-media and new technologies, the action-learning cycle could be strengthened with appropriate policy solutions and the implementation of adaptive and personalised learning designs.

References

- Beatty, L. (2003). *Action learning: Continuing professional development series* (No. 1). Learning and Teaching Support Network.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.
- Bourner, T., O'Hara, S., & Barlow, J. (2000). Only connect: Facilitating reflective learning with statements of relevance. *Innovations in Education and Training International*, 37(1), 68-75.

- Brookfield, S. (2005). *The power of critical theory for adult learning and teaching*. Maidenhead, UK: Open University Press.
- Darling-Hammond, L., & Bransford, J. (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey Bass.
- Darling-Hammond, L., Chung-Wei, R., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the US and abroad*. National Staff Development Council.
- Desimone, L. (2009). Improving impact studies of teachers' professional development: Toward better conceptualisations and measures. *Educational Researcher*, 38(3), 181-199.
- EDUCAUSE Learning Initiative. (2012). *7 Things you should know about flipped classrooms*. Retrieved from <http://net.educause.edu/ir/library/pdf/eli7081.pdf>
- Fullan, M. (2007). *The new meaning of educational change*. (4th ed.). New York: Teachers College Press.
- Garrison, R.D., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.
- Hawley, W., & Valli, L. (1999). The essentials for effective professional development: A new consensus. In L. Darling-Hammond & G. Sykes (Eds.). *Teaching as the learning profession: Handbook of policy and practice* (pp. 127-150). San Francisco: Jossey-Bass.
- Katz, S., Sutherland, S., & Earl, L. (2005). Toward an evaluation habit of mind: Mapping the journey. *TeachersCollege Record*, 107(10), 2326-2350.
- Kolb, D. (1984). *Experiential learning: Experiences as the source of learning and development*. NJ: Prentice Hall.
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (Rev. ed.). Chicago: Follett.
- MindShift, (2011). *The flipped classroom defined*. Retrieved from <http://blogs.kqed.org/mindshift/2011/09/the-flipped-classroom-defined/>
- New Media Consortium. (2014). *2014 Higher education edition*. NMC and EDUCAUSE Learning Initiative. Retrieved from <http://www.nmc.org/pdf/2014-nmc-horizon-report-he-EN.pdf>
- Oakes, J. & Rodgers, J. (2007). Radical change through radical means: Learning power. *Journal of Educational Change*, 8, 193-206.
- Perkins, J. (2010). Personalising teacher professional development: Strategies enabling effective learning for educators of 21st century students. *Quick, Summer* (113).
- Tafel, L. (2008). Using adult learning theory to frame and support professional development. In A. Borthwick & M. Pierson. *Transforming classroom practice: Professional development strategies in education technology*. ISTE: Washington.

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