



Mentoring through scholarship-based academic development projects

Diane Robbie and Debbi Weaver
Swinburne Professional Learning
Swinburne University of Technology

While there is definitely a place for centrally delivered Professional Development (PD), staff often don't transfer what they have learned in the PD sessions and return to their workspace usually continuing as before. This paper describes an evidence- and scholarship-based model of PD, where academic developers work closely with teaching staff on projects designed to address teaching needs specifically through the implementation of educational technologies. Each project involves engagement with the relevant scholarly literature, implementation of an appropriate teaching strategy or innovation, evaluation of the effectiveness of that implementation, and ultimately publication of the outcomes of the project. Fostering a one-to-one collaborative, mentoring relationship means the academic developer also benefits by extending their scholarly knowledge, and contributes to the discipline of academic development.

Keywords: Academic development, academic mentoring, teaching scholarship

Introduction and background

A previous publication on our experiences in developing and delivering an academic Professional Development (PD) program for online teaching (Weaver et al, 2008a), identified a range of different PD components for institutions to consider providing. Many of those components are relevant to a centrally-delivered program, and are based on the premise of a one-size-fits-all approach. At the time of writing that paper (2005), online teaching was still in its infancy (at least for the majority of academic teachers), and the sheer numbers of staff requiring PD in a short time frame often meant that this sort of generic program was the only model that institutions could support.

As discussed by Brabazon (2001), the early implementation of technology for learning and teaching can have some dire effects on teaching academics and the learning they deliver through the online environment. For various reasons, many teachers resorted to content delivery only and used the new learning management system as content repositories rather than for collaborative activities afforded by the communication and interactive tools (Weaver et al 2008b). Grounds for this included their changing roles and workplace practices and workload, time needed for learning new tools, skills and designing programs for online delivery. Any PD offered provided starting points for teachers and, unless you were an early adopter and willing to spend additional time, often the quality of online delivery was minimal. Ultimately teachers needed support and advice beyond the scheduled PD programs.

We also need to recognise how teachers and teaching are being challenged and undermined. ... Learning is not technologically dependent. It remains reliant on commitment, interest and passion. (Brabazon 2001)

Online teaching has now become mainstream for most university academic staff, and the quality of that teaching and its impact on student learning is now more at the forefront of PD activities.

Technology or tools training has been supplanted by a more strategic focus on teaching scholarship with a greater emphasis on teaching academics to embrace the research nexus through educational research and publication. In this way, teachers are now able to *close the loop* on learning and teaching through more rigorous approaches to planning, implementing, evaluating and reviewing their practice in paradigms

espoused in Kolb's Experiential Model (Kolb 1984), Schon's Reflective Practitioner Framework (Schon, 1987), and Mezirow's (1997) process of transformative learning.

Concurrent with the increasingly accepted practice of online teaching has come a growing pressure on academic staff to increase their research and publication output (Hughes, 2005). In particular, a few academic areas of some institutions have previously been considered teaching-only, so the faculty members had little or no history or culture of conducting research. At the same time, there are increasing expectations of teaching staff to evidence reflection on their practice as it relates to improving student learning outcomes. These pressures have created a challenging environment for academics. For many, evidence-based practice has demanded a refocus on their career directions, creating the need for academics to perform successfully beyond their traditional teaching areas. In this context, a need has been identified for individual mentors to act as change agents to meet shifting climates and in turn help open doors and alleviate fears.

This paper describes a model of one-on-one scholarship-based professional development, conducted in two faculties at Swinburne University of Technology. Neither faculty has experienced a high research profile output previously, and are under increasing pressure to improve this. Through the efforts of academic developers working closely with teaching staff, both faculties are starting to have increased opportunities to build this profile.

Scholarship of teaching

In keeping with our commitment to facilitate a transformative process of change with the staff we are mentoring, we are also mindful of the importance of our own critical self reflection and scholarly approach to academic development and as Wilcox (2009) promotes, this 'allows us to contribute to the 'discipline' of educational development and to improve our own practice' (p. 131). This is reinforced by Shulman (2000), Taylor (2009) and others who 'argue that commitment in academic life involves a synergy between our individual work as scholars and our engagement in larger academic communities – institutional or disciplinary – that share our values' (Taylor, 2009, p 2).

It has long been recognised that scholarship of teaching is more than a scholarly approach to teaching (Boyer, 1990), expanding the focus beyond the learning experiences of students for continued teaching and learning improvement. A scholarly approach to teaching requires the teacher to engage in research into the pedagogy appropriate to their specific discipline to inform teaching approaches that will enhance student learning. Teaching scholarship delves deeper into the pedagogy of student learning in the discipline through critically reflective practice following Schon (1987) and Brookfield (1995), evidence-based investigation and review of the scholarly literature, the results of which are then systematically documented and communicated to a wider audience through scholarly papers, conferences and journals.

A scholarship of teaching is not synonymous with excellent teaching. It requires a kind of "going meta" in which faculty frame and systematically investigate questions related to student learning -..... and to do so with an eye not only to improving their own classroom but to advancing practice beyond it. (Hutchings & Shulman 1999, p.13)

Transforming teaching practice?

As with many PD activities, staff often don't transfer what they have learned in the PD sessions and return to their workspace usually continuing as before. A one-to-one model that builds on the theoretical and practical underpinnings of centralised and even faculty-based workshops can act as a springboard by adding value to teaching practice through reinforcement of concepts, shared conversations and individualised support and advice. This can often lead to collaborative partnerships with multiple outcomes. Devlin (2003) suggests 'it is appropriate for academic developers to work towards both global strategic initiatives and individual academic development. After all, it could be argued that the basis of successful institutional change in the area of teaching is the development of the individual teacher who must make the choice to implement policy, embrace change, and focus on improving teaching and learning' (p77).

The approach taken by the authors in this paper is similar to a consultancy model as espoused by Shrives and Bond (2003) who talk about the 'three phases in the consultancy cycle

1. getting in (establishing a relationship with a potential client and securing agreement to undertake work)

2. getting on (gathering necessary data and information, working with the clients on evaluation and implementation)
3. getting out (concluding the consultancy assignment and withdrawing from the situation' (p 74).

Shrives & Bond (2003) 'believe that the true advantages of the consultancy model lie within the process of working with staff in identifying real (as opposed to initially perceived) problems and in steering staff to implement substantial, grounded and sustained (as opposed to superficial) change' (p74-75).

Hargreaves takes this further, by suggesting that academic developers' collaboration should extend to the full emotional experience of the process, and to 'share in the burdens of change as well as facilitating and motivating staff to embrace change as a source of enrichment for teaching' (Hargreaves, 1998, in Smythe, 2003, p. 57).

Many academic developers now find themselves with an increased opportunity to work with individual academic teachers, and to focus and support the teaching academics *close this loop* on their teaching and research. At Swinburne University of Technology, six Academic Development Advisors (ADA) are employed by a central unit (Swinburne Professional Learning), but physically located within each of the six Faculties. Each ADA contributes to the design and delivery of a centrally-organised PD program, but is also responsible for more targeted PD within the Faculty. While this can sometimes be delivered in the form of small workshops (either to the whole faculty or to smaller teams or discipline groups within the faculty), it is more often provided in the form of targeted support for individuals or small teams.

These current roles provide the ADAs with the opportunity for longer-term one-on-one mentoring. The allocation of these roles to individual faculties is particularly important for the Faculties of Higher Education and Design, as both of these faculties are located at satellite campuses, some distance from the major (Hawthorn) campus of Swinburne, which means that encouraging staff to attend centralised or off-campus Professional Development sessions is always a challenge.

Project implementation

The authors of this paper are academic developers who have taken advantage of their location within the Faculties, to work closely with individual academic staff on a focused teaching project. These projects are designed to not only meet the teaching needs of the academic staff member (and therefore, the needs of their students), but can at the same time be structured as a small evaluative research project. In this context, teaching staff can be effectively mentored into the scholarship of teaching, into evaluating their teaching innovations, and into publishing the results of their investigations.

The aim of the projects undertaken with teaching colleagues is, in most cases, based on a need or desire to improve or share pedagogical practice, to resolve an existing problem or for career development, working in a partnership where discussion, critique, discourse and collaboration about the practice or the problem can lead to improved student learning outcomes and effective evidence-based teaching.

While each project is necessarily unique in focus, each has a similar structure, and involves four key phases:

1. Engage with the scholarly literature, to ensure the project is informed by current best practice in the field, and to prepare a brief literature review for ultimate publication
2. Implement an appropriate teaching strategy or innovation to address the identified need
3. Evaluate the impact of this innovation
4. Publish the outcomes of the evaluation, thus becoming a contributor to the scholarly literature in the field.

At any time, projects undertaken with different academic teachers are quite diverse. Current examples include:

- evaluating the impact of participation in an international study tour;
- investigating student experiences with peer assessment;
- developing consistent feedback strategies for off-campus markers;
- implementing a learning community through a communication and information resource portal;
- designing scaffolded learning activities used web-based discussion; and
- employing Web 2.0 technologies for giving and receiving feedback

Two examples of such projects, that highlight innovation through implementation of educational technologies, are detailed below.

Examples of mentoring projects

Using Web 2.0 technology for image sharing, critique and feedback

Teaching academics are encouraged to embrace innovative teaching practice through exploration of educational technologies. During the early 2000's, the Faculty of Design teaching staff were introduced to and encouraged to adopt the Blackboard Learning Management System for teaching and learning. The university-wide adoption of Blackboard offered tools for communication by email and discussion and a text-based repository for resources and links to information but little in the way of visual displays and pin-ups of work essential to the design studio class. In the design discipline, where the visual representation is fundamental, using Blackboard alone was insufficient. In order to support the university-wide implementation, the faculty ADA investigated various digital options to support staff make their Blackboard sites more media rich. A variety of customized faculty-based 'technology taster' workshops demonstrating innovative ways of incorporating media into their teaching, accessible or supplementary to Blackboard, were held at various times throughout the ensuing years. It was during a PD session in early 2007 that Flickr, a Web 2.0 technology, was introduced as one mechanism for image sharing and critique. This Web 2.0 tool appealed immediately to one teacher who sought further information and discussions regarding suitability for incorporation into a design photography unit.

Working together, the teacher and ADA explored the Flickr features and discussed ways it could be used for teaching photography. The visual affordances of Flickr were instantly clear but, through trial and discussions, additional features were soon realised. The use of Flickr offered features most appropriate for a large cohort of diverse student body whose work / life / study balance is paramount. Flickr presented immediate, anywhere anytime access. As a social networking tool, the functionality was also familiar to many first-year students already and provided environmentally sustainable features alleviating undue use of printing chemicals and printing costs.

An early pilot of Flickr involved specific learning tasks that linked image upload, commentary and critique on peer work. These scaffolded learning tasks aligned with the student learning objectives and assessments. An initial review of the learning outcomes and student feedback was extremely positive. An implementation plan, for a larger scale application of Flickr, and an evaluation strategy to analyse the effectiveness of student learning outcomes followed in subsequent semesters. After each semester the teaching and learning approach was modified based on student feedback and enhanced by new features that became available in Flickr e.g. 8 languages and variety of visual display options.

The team developed an evaluation survey to seek feedback from students. Questions asked for comments on the accessibility, flexibility and use of Flickr, about using Flickr for learning and teaching and if their photographic skills had improved. Early feedback from students had highlighted the constructive aspects of peer-to-peer interaction, the regular and timely feedback and the opportunity to benchmark work, not only against students in own studio class, but also across the whole cohort of students enrolled (up to 180). The team had created a new dynamic in teaching photography in a design unit with effective outcome-based learning. Peer-to-peer and teacher feedback was most consistently mentioned in the unit evaluations resulting in both teacher and ADA applying more comprehensive research on the type of feedback given and received, how and when it was given and how students use it. An extensive review of the literature about feedback *on* and *for* learning (Brinko 1993; Gibbs & Simpson, 2005; Hounsell, et al. 2008) cast the net wider on examples and opportunities for peer-to-peer interaction and its impact on student assessment and learning outcomes.

This successful teaching and learning approach has since been transferred to another Design discipline in the faculty. The rewarding nature of this partnership has resulted in a peer reviewed journal article, (Robbie & Zeeng, 2008a), a peer reviewed conference proceeding (Robbie & Zeeng, 2008b), a collaboration internationally with a student group at Rowan University, USA, and an ALTC Citation Award. The team currently have a further two articles submitted for publication. This collaborative partnership has encouraged both the teaching academic and the ADA to interrogate innovative teaching and learning practices using new generation technologies and also to start and extend their publication profile in the educational environment. The teaching academic describes the impact on her personally:

[The ADA] has been a valuable support for me over the past few years as an educational mentor. Her vast knowledge of new technologies and research into feedback has provided

me with new ideas and strategies to employ in my teaching. It has helped me develop a stronger innovative curriculum structure employing better feedback techniques ...[and] has assisted me to improve my teaching practice. Her enthusiasm for teaching and learning and her encouragement has led to my interest in scholarly writing. In collaboration with [the ADA] I have now written several journal articles and given educational conference presentations in Chicago, Sydney and Melbourne. We have received recognition in the faculty, nationally with an ALTC Citation, and are in the process of creating a global partnership with universities in Queensland and USA.

Using Wikis to foster collaboration amongst off-campus students

Academic staff in the Faculty of Higher Education, Lilydale are engaged in teaching a large number of units offered through Open Universities Australia (OUA). These units are offered fully-online to off-campus students, and adhere to the open university philosophy of open access to all (i.e. there are no prerequisites for entry into OUA, so students may not have completed secondary education). OUA students have the opportunity to graduate with a degree from one of the contributing universities, so to meet accreditation requirements, each unit offered through OUA must be identical to an equivalent unit offered to students enrolled through the relevant university. This poses challenges where the university policy dictates that all students of that university will receive specific opportunities. For example, Swinburne University claims that in order to assist students in developing these graduate attributes, we assess their mastery of discipline-based knowledge and also provide feedback on their progress in attaining key generic skills such as:

- teamwork skills;
- analysis skills;
- problem solving skills;
- communications skills;
- ability to tackle unfamiliar problems; and
- ability to work independently.

Providing opportunities for teamwork for off-campus students is often ignored, or considered too difficult to manage, especially since one of the major advantages of off-campus study is the opportunity for students to work at their own pace, yet we are now expected to not only provide this opportunity, but to also provide feedback to students on their teamwork skills.

To address this need, a group project was introduced to an OUA study skills unit (SSK13: Learning and Communication Behaviour). The academic teacher consulted the Faculty's ADA for advice on implementing the group project. Together, research on the literature was conducted, leading to a decision to use Wikis as the collaboration platform, as these provide the opportunity for collaboration and are 'designed to facilitate exchange of information within and between teams' (Goodnoe 2005, cited in Minocha & Thomas, 2007). A strategy of implementation and evaluation was developed collaboratively, and both were involved in sourcing (and developing) appropriate student support resources.

The Wiki group project was piloted in Study Period 1, 2008, and modified according to student and staff feedback for subsequent study periods. Despite initial misgivings about the learning curve associated with the introduction of a new technology, students loved the Wiki environment, especially the chance to work with their colleagues. While many students acknowledged that they were initially (cautious) about a group project, the level of communication and collaboration observed within the groups demonstrated that group work for off-campus students is not only possible, but only marginally more difficult to manage than equivalent projects for on-campus students – in fact, we found the level of collaboration much greater in the off-campus cohort. For these students who never meet their peers in a face-to-face environment, this chance to work together and to also socialize (albeit in online chat rooms or conference facilities) proved to be the highlight of their studies for many of the class.

The Wiki was not only highly successful in helping these students complete their group project, but the evaluation of the pilot and subsequent report has also led to the institution now adopting the BlackBoard plug-in for the Wiki tool.

Outcomes of the implementation and evaluation have been published at peer-reviewed conference proceedings (McIntosh & Weaver, 2008; Weaver & McIntosh, 2009). A further two journal articles are in preparation. The academic teacher of this unit had not published academic papers prior to this project.

Discussion

While we acknowledge the importance of centralised PD to communicate broad strategic directions of learning and teaching, it is the more focused individualised supportive interactions that can have the most significant impact and outcomes (Prebble et al, 2005). As academic developers, we have been instrumental in our faculties in exploring models of PD to support our staff, mindful of the need as Nieto (2003) says, to ‘rethink professional development-not as a way to fill teachers' heads with new and innovative ideas that may come and go, but rather as an approach that builds on teachers' professionalism and encourages their intellectual activity’ (p. 18). The role of professional development in the higher education setting needs to concentrate on teachers learning from their own inquiry actions and collaborative reflection on their practice. Supporting an individualised model has inherent implications for the academic developer. These include time and project management, distributing support, and managing perceptions and expectations of teachers.

Time and project management skills, when working with staff on individual projects, need to be carefully managed. For teaching academics, this has become an increasing challenge, with the need for innovation in teaching and learning through the rapid emergence of web-based technologies. There are disparate views on time required for the design and delivery of face-to-face and online teaching; similarly this is the case for the academic developer and difficult to quantify. As the flexibility of online teaching has brought with it 24-hour availability and access of teachers by students, in some cases the same applies to the relationship between academic developers and the staff we work with. Much has been documented on various strategies to make teaching more effective and efficient, and to support teachers in the challenge of teaching and learning in the online environment, so they ‘can enjoy the convenience of online teaching and learning without getting lost, feeling overwhelmed, or sacrificing the instructional quality and overall learning outcomes’ (Shi, Bonk & Magjuka, 2006, p8). However, less is written about strategies for academic developers. They too need to develop strategies so the time and resources they allocate to individual projects is distributed for the greater good of the faculty and not just the individual teacher. While position descriptions might indicate dedicating a specific time fraction in the faculty (e.g. two days per week) the reality can be remarkably different.

Similarly, we not only have to manage our time commitment while working with staff on teaching projects, we also have to manage the duration of the project. When a partnership is formed and becomes successful, it can be very difficult to let go. In mentoring roles, it is crucial to factor in a *release and let go* policy (Shrives and Bond, 2003), to allow moving on and working with others, respecting the achievements of partnerships and giving colleagues the impetus to continue working on their own or with others. As academic developers are required to work with as many teaching staff as possible, it is critical to manage expectations very carefully and encourage staff to be able to work on their own after support during the initial phases of teaching scholarship. It is also important to be mindful of perceptions of others, so that assistance is not seen as working just with low performers, or just with friends. The mentoring role of the ADA is collegial, can take time to develop working relationships and must be seen to be constructive, encouraging and non-judgmental.

The one-on-one consultative approach we have adopted closely aligns with the relationship described in all three models (Professional Services, Counselling and Collegial) defined by Weimer and Lenze (2007). Studies by Piccinin (1999) on the consultative role of academic development found that

...consultation appears to be most effective when it assists teachers to interpret and reflect on feedback on their own performance. It is on the basis of this feedback and reflection that significant changes in understanding, knowledge and behaviour are made (p.35 in Prebble 2005).

We believe that supportive collaborative partnerships, offering individualised encouragement and advice, where shared co-construction of knowledge and expertise can value add new innovations and enhancements to teaching and learning. This can lead to greater impact on student learning and teaching quality than some of the customised large scale PD activities on offer. Capacity building through faculty-based individual projects, involving authentic activities situated in real contexts is central to enabling development, improvement and enhancement of teaching. Such a mentoring model reinforces engagement in reflective practice, where experiential action learning in an authentic situation or context encourages improved learning and teaching quality by empowering academic teaching staff (Lave & Wenger, 1991; Kimble & Hildreth, 2008). The model described in this paper is similar in some ways to the mentoring circles model described in Darwin & Palmer (2009), where a reciprocal collegial relationship can have greater impact than the more traditional hierarchical mentor/mentee relationship.

An added bonus of the model described here is the opportunity for the teaching academic to publish for the first time. This meets the immediate needs of both the individual (with their papers recognised for promotion and teaching awards within the institution) and the faculties involved in this model, where historically research output has been minimal. It must also be acknowledged that the projects engaged in here are small, often only one semester in length, and in more research-active faculties unlikely to carry the same weight as discipline-based research. It is likely too, that some of the projects would come under the heading of *Pseudoscience* (Reeves, 1995), with small sample sizes, little statistical analysis and often a lack of familiarity with relevant literature. Realistically though, it can be argued that this *is* acceptable for a first research project, and feedback from conference and journal reviewers is a critical part of the process of improving the individual's research skills and teaching scholarship.

Valuing the effectiveness and impact of individualised mentoring projects

The academic development model described here is certainly labour-intensive, and many institutions may consider the allocation of a dedicated academic developer to each faculty an unaffordable luxury. Similarly, for particularly large faculties, a single academic developer may not be able to have the same impact as has been described here. Our role is now to assure senior management that, while their perception might be that this model is resource-intensive and meeting the needs of fewer staff than centralized PD programs, carefully project managed, this model has the potential to have a greater and wider impact, and be sustained over time.

This impact is not just into specific units and with individual teachers but has much wider impact through improving and raising:

- collegiality within the faculties;
- teaching quality;
- student learning outcomes;
- evidence-based practice;
- research profile through publication;
- learning and teaching profile through successful local and national awards, and presentations at local, national and international peer reviewed conferences; and
- profile of academic development as a essential element of teaching scholarship addressing the teaching research nexus.

Moving the platform of academic development into a localised setting is aligned with the recommendations of Boud (1999), who states, 'Academic development should be conceptualized not only as a university-wide process, but also as a local practice and as a process of peer learning in the workplace' (p. 3). And by utilising an evidence and research-based approach to evaluating the outcomes of teaching innovations, it is possible to ensure that academic development practice meets multiple objectives of improving teaching as well as contributing to the scholarship into teaching. As Devlin (2008) states:

If we *do not* think deeply about teaching and student learning in our own specific contexts, conduct rigorous studies to examine the impacts of our approaches and innovations, share our findings with critical colleagues who can help us interpret and understand them, and learn from others undertaking the same sorts of investigations, how will we know that our students are learning?(p.5).

References

- Boud, D. (1999). Situating academic development in professional work: Using peer learning. *International Journal for Academic Development*, 4(1), 3-11.
- Boyer, E. L. (1990). *Scholarship Reconsidered*. San Francisco, CA: Carnegie Foundation and Jossey-Bass.
- Brabazon, T. (2001). Internet Teaching and the Administration of Knowledge. *First Monday*, 6(6). <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/867/776>.
- Brinko, K.T. (1993). The Practice of Giving Feedback to Improve Teaching: What is Effective? *Journal of Higher Education*, 64(5), 574-593.
- Brookfield, S. (1995). *Becoming a critically reflective teacher*. San Francisco: Jossey-Bass.
- Brown, J. S., Collins, A. & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42.

- Darwin, A. & Palmer, E. (2009). Mentoring circles in higher education. *Higher Education Research & Development* 28(2), 125–136.
- Devlin M. (2003). A Solution-focused Model for Improving Individual University Teaching. *International Journal for Academic Development* 8, 77-89.
- Devlin, M. (2008). The Scholarship of Teaching: What does it mean for Deakin University? Discussion paper, Office of the Deputy Vice-Chancellor (Academic), Deakin University, Victoria, Australia.
- Gibbs, G. & Simpson, C.(2005). *Conditions Under Which Assessment Supports Students' Learning*. Learning and Teaching in Higher Education. 2005, UK: Oxford University, Open University.
- Hounsell, D., McCune, V., Hounsell J. & Litjens, J. (2008). The Quality of Guidance and Feedback to Students. *Higher Education Research and Development*, 27 (1),55-67.
- Hughes, M. (2005). *The mythology of research and teaching relationships in universities*. In R. Barnett (Ed.), *Reshaping the university: New relationships between research, scholarship and teaching* (pp. 14–26). Buckingham: Society for Research into Higher Education/Open University Press.
- Hutchings, P. & Shulman, L. S. (1999). The scholarship of teaching. *Change* 31(5), 11-15.
- Kimble C., Hildreth, P. & Bourden I. (2008). *Communities of Practice: Creating Learning Environments for Educators*. Information Age Publishing. <http://www.chris-kimble.com/CLEE/index.html>
- Kolb D. (1984). *Experiential learning: experience as the source of learning and development*. Englewood Cliffs, New Jersey: Prentice Hall.
- Lave J. & Wenger, E. (1991). *Situated Learning. Legitimate peripheral participation*. Cambridge: University of Cambridge Press
- McIntosh, P. C & Weaver, D. (2008). *Fostering collaboration amongst off-campus students*. In Hello! Where are you in the landscape of educational technology? Proceedings ASCILITE Melbourne 2008. <http://www.ascilite.org.au/conferences/melbourne08/procs/mcintosh.pdf>
- Mezirow J. (1997). *Transformative learning: Theory to practice*. *New Directions for Adult and Continuing Education* 74, 5-12.
- Minocha, S., & Thomas, P. G. (2007). Collaborative Learning in a Wiki Environment: Experiences from a software engineering course. *New Review of Hypermedia & Multimedia*, 13(2), 187-209.
- Nieto, S. (2003). What keeps teachers going? *Journal of Educational Leadership* 2003 60 (8),15-18.
- Prebble T., Hargraves, ZH. Leach L., Naidoo, K., Suddaby, G., & Zepke, N. (2005). *Impact of Student Support Services and Academic Development programs on student outcomes in undergraduate tertiary study: A synthesis of the research*. Massey University College of Education, Ministry of Education, New Zealand.
- Reeves, T. C. (1995). Questioning the Questions of Instructional Technology Research. [Online] <http://www.hbg.psu.edu/bsed/intro/docs/dean/>
- Robbie, D., & Zeeng, L. (2008a). Engaging student social networks to motivate learning: capturing, analysing and critiquing the visual image. *The International Journal of Learning*, 15(3), 153-160.
- Robbie, D. & Zeeng, L. (2008b). IT's evolving, they're changing, we're listening: Everybody's learning. In *Hello! Where are you in the landscape of educational technology? Proceedings ascilite Melbourne 2008*. <http://www.ascilite.org.au/conferences/melbourne08/procs/robbie.pdf>
- Schön, D. (1987). *Educating the Reflective Practitioner*. Jossey-Bass San Francisco
- Schulman, L. (2000). From Minsk To Pinsk: Why A Scholarship Of Teaching And Learning? *Journal of Scholarship of Teaching and Learning (JoSoTL)*, 1(1), 48-53.
- Shi, M., Bonk, C. & Magjuka, R. (2006). Time Management Strategies for Online Teaching. *International Journal of Instructional Technology and Distance Learning*, 3(2), 3-8. http://itdl.org/journal/feb_06/article01.htm
- Shrives, L. & Bond, C. (2003). Consultancy in Educational Development. In Kahn P. & Baum D. (Eds), *A guide to staff and educational development*. Kogan Page
- Smyth, R. (2003). Concepts of change: enhancing the practice of academic staff development in higher education, *International Journal for Academic Development*, 8, 51-60.
- Taylor L. (2009). Educational Development practice and scholarship: an evolving discourse community, *International Journal for Academic Development*. 14(1), 1-3.
- Weaver D. & McIntosh, P.C (2009). Providing Feedback on Collaboration and Teamwork Amongst Off-Campus Students. In C. Fulford & G. Siemens (Eds.) *EdMedia 2009 - World Conference on Educational Multimedia, Hypermedia and Telecommunications*, Hawaii, USA June 2009 pp 2070-2079.
- Weaver, D., Robbie, D. & Borland, R. (2008a). The Practitioner's Model: Designing a Professional Development Program for Online Teaching. *International Journal on E-Learning*, 7(4), 759-774.
- Weaver, D., Spratt, C. & Nair, C. S. (2008b). Academic and student use of a learning management system: Implications for quality. *Australasian Journal of Educational Technology*, 24(1), 30-41. <http://www.ascilite.org.au/ajet/ajet24/weaver.html>

- Weimer, M. & Lenze, L. (2007). Instructional interventions: A review of the literature on efforts to improve instruction. In K. Perry & J. Smart (Eds.), *Effective teaching in higher education: Research and practice* (pp. 205-240). New York: Agathon Press.
- Wilcox S. (2009). Transformative educational development scholarship: beginning with ourselves *International Journal for Academic Development*, 14(2), 123-132.

Authors: Diane Robbie, Swinburne Professional Learning, Swinburne University of Technology.
Email: drobbie@swin.edu.au
Debbi Weaver, Swinburne Professional Learning, Swinburne University of Technology.

Please cite as: Robbie D. & Weaver, D. (2009). Mentoring through scholarship-based academic development projects. In *Same places, different spaces. Proceedings ascilite Auckland 2009*.
<http://www.ascilite.org.au/conferences/auckland09/procs/robbie.pdf>

Copyright © 2009 Diane Robbie and Debbi Weaver.

The authors assign to ascilite and educational non-profit institutions, a non-exclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ascilite to publish this document on the ascilite Web site and in other formats for the Proceedings ascilite Auckland 2009. Any other use is prohibited without the express permission of the authors.