



Author: Weaver, Debbi; Robbie, Diane; Kokonis, Sue;
Miceli, Lucia
Title: Collaborative scholarship as a means of improving
both university teaching practice and research
capability
Year: 2013
Journal: International Journal for Academic Development
Volume: 18
Issue: 3
Pages: 237-250
URL: <http://dx.doi.org/10.1080/1360144X.2012.718993>

Copyright: Copyright © 2012 Taylor & Francis. The accepted
manuscript is reproduced in accordance with the
copyright policy of the publisher.

This is the author's version of the work, posted here with the permission of the publisher for your
personal use. No further distribution is permitted. You may also be able to access the published
version from your library.

The definitive version is available at: <http://dx.doi.org/10.1080/1360144X.2012.718993>

International Journal for Academic Development

Vol. X, No. X, Month 20XX, 000–000

ARTICLE

Collaborative scholarship as a means of improving both university teaching practice and research capability

Debbi Weaver¹, Diane Robbie², Sue Kokonis² & Lucia Miceli³

¹Faculty of Higher Education Lilydale, ²Swinburne Online, ³Faculty of Design, Swinburne University of Technology, Melbourne, Australia

Corresponding author:

Debbi Weaver

Swinburne University of Technology

Locked bag 218

Lilydale Vic 3140

dweaver@swin.edu.au

Collaborative scholarship as a means of improving university teaching practice

The general consensus in the literature is that generic professional development workshops in the Scholarship of Teaching & Learning rarely have a lasting impact on changing teaching practice. In an attempt to develop an alternative model, a four-stage Collaborative Scholarship Model was designed by academic development practitioners. This model used small individually-supported projects to mentor individual academic staff into the scholarship of teaching while implementing an innovation into their own teaching. Individual project outcomes included sustained change to teaching practice, demonstrated openness to new ideas, and contribution to the scholarship in the field. Success was measured by tangible outcomes – such as sustained improvement for students, successful implementation of innovative approaches, and peer-recognition (in the form of awards, publications or invited presentations). These project outcomes were used as measures of the effectiveness of the model itself. The Collaborative Scholarship Model appears to have a greater and more sustained impact on the teaching practice of individuals involved, leading to increased research outputs by the participants; however, the labour-intensive nature of the model means that only few faculty members can be mentored at any one time by a single academic developer. There are significant benefits to this individualised approach, and the long-term benefits for Faculties and their students may outweigh the limitations in scalability.

Keywords: Academic development; Mentoring; Scholarship of Teaching

Introduction

Most institutions of higher education aim to provide academic professional development (PD) to support and encourage staff to reflect on and improve their teaching, leading to improved student learning outcomes. But what forms of PD have the greatest and most sustained impact on university teaching quality? Do one-off programs (e.g. workshops and seminars) have a similar impact to longer-term programs (e.g. credentialed Graduate Certificates in Learning and Teaching)? Does the role of the academic developer influence teacher improvement (as suggested by Brew, 2010)? And do mass-delivered programs have the same impact as one-on-one PD? These questions have been debated in the literature for decades (for example, Gibbs & Coffey 2004; Knapper, 2003; Stes et al., 2009; Willcoxson, 1998).

Most research has focused on the impact of longer-term programs, for example, foundations programs for new academic teachers, or credentialed Graduate Certificate programs. Weimer & Lenze (1997, cited in Gibbs & Coffey 2004) looked at the impact of foundation programs (120 – 500 hours duration), but found little evidence of the overall impact of PD on improving teaching or student learning. More recently, studies by Gibbs & Coffey (2004) and Stes and colleagues (2009) have found that longer-term PD (eg. 140 hours over 1 year) correlated (albeit weakly) with academic staff adopting a more student-focused approach.

Less research has been conducted on the impact of shorter PD programs, such as one-off workshops and seminars. Wright & O’Neal (1995) found that workshops were not highly ranked by participants across different countries, being ranked 3rd most likely to improve teaching in UK, and as low as 14th in Australasia. Willcoxson (1998) found no benefit from participation in short occasional workshops (two – three hours duration), and proposed that only longer-term PD would have an impact on improving teaching practice. In contrast, Rust (1998) found that PD workshops from Oxford Brookes University did have an impact on participants (albeit with many caveats). But it should be noted (as Rust does) that Oxford Brookes has an excellent reputation for PD, (including strong structure and organisation, and highly skilled and experienced facilitators), so possibly these results are not representative of the situation across higher education generally.

Knapper (2003) laments the lack of success of academic development in improving the quality of teaching and learning in higher education over the past 30 years:

“In terms of effects on higher education practice, ...we would earn at best an A for effort, but probably a C for impact.” (p. 7)

However, he attributes this to many factors, including the pressure on increased research output, rather than to sub-standard PD. In the same journal issue, Reid and Petocz (2003) argue that:

“Models of academic development that target specific aspects of academic work in isolation only continue to support the academic divide between teaching and research.” (p. 114)

This perceived divide between teaching and research is borne out in the literature. Most literature on academic PD focuses on improving teaching practice, or increasing engagement with SOTL literature. However, few PD programs attempt to combine teaching practice with improving research output.

There is general agreement that scholarship is central to both research and teaching (Hughes, 2005), so programs that ‘encourage and support participant research on learning and teaching’ (Reid & Petocz, 2003, p. 105) may promote ‘credible pedagogical scholarship on teaching done by practitioners in the field’ (Weimer, 2006, cited in Hawkins, 2009, p. 96).

Hawkins (2009) mentions that ‘pedagogical studies do indicate that engaging in the scholarship of teaching improves performance in the classroom’ (p. 97). However, for this to be effectively enacted, scholarship should be integrated within the discipline, as upheld by Trigwell (2011).

It has long been recognised that the scholarship of teaching is more than a scholarly approach to teaching (Boyer, 1990). A scholarly approach requires the teacher to engage in research into the appropriate discipline-specific pedagogy to inform teaching practices 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. It requires the results of these investigations to be systematically documented and communicated to a wider audience through scholarly papers and presentations.

Local context

The authors of this paper were located at two small ‘satellite’ faculties of a multi-campus Australian university. Faculty-based PD programs have traditionally revolved around workshops and seminars, with little clear evidence of changes to teaching practice or sustained impact on student learning, supporting the

concerns expressed in the literature (e.g. Gibbs & Coffey 2004; Knapper, 2003).

Given the concerns about the disconnect between teaching practice and improved research output in most existing PD models, the authors chose to ask how a contextualised, scholarship-based PD program could be implemented. Situating the PD within the academic teacher's own context means that PD can be targeted at specific issues or objectives, and focus on student learning outcomes. More targeted or customised PD requires a mentor-mentee relationship between the academic teacher and the academic developer, not achievable in group-based PD.

Mentoring has long been recognised as highly successful in educational settings (Ehrich et al., 2004), although this is usually focused on research, holistic career progression or work-life balance, rather than teaching and learning (Trask et al., 2009). In his review paper on how institutional SOTL programs can be developed, Stigmar (2010) proposes that a well-organised mentorship is likely to help interweave theory with practice, in order to support scholarship of teaching. Hubball, Clarke and Poole (2010) found positive results from their cross-institutional program of SOTL mentoring, including benefits for both mentors and mentees. However, evaluation methods are unclear, and they do not appear to have investigated whether their program resulted in sustained improvement in teaching practice.

The authors considered a one-on-one mentoring model, based on a collaborative relationship, with outcomes of mutual benefit to both partners, as a means of providing targeted PD. The study reported in this paper used a conceptual framework based on a four-stage model that linked stages of: engagement, innovation or intervention, evaluation and publication (described in further detail below). At each stage, the mentor (an experienced academic developer) worked collaboratively with an individual academic teacher or small team to address an identified teaching need, conduct research into the specific area, and produce co-written research reports or publications. The design of the model was informed by research on learning and teaching, which linked theory with practice and focused on sharing and disseminating. Boyer's theory of the

scholarship of teaching (1990) provided a framework for the design of the model, which was also guided by the reported successes of mentoring and collaboration (or community of practice) programs in the research field. The model focuses on the integration of targeted research into an aspect of the participant’s teaching practice, and addresses the dual pressures on academic staff to improve teaching practice (and thereby improve student learning), and research output.

Introducing the Collaborative Scholarship model

Based on Boyer’s (1990) theory of the scholarship of teaching, a 4-stage model: **Engage; Innovate or Intervene; Evaluate; Publish** (Figure 1) was developed to facilitate academic staff into the scholarship of teaching.

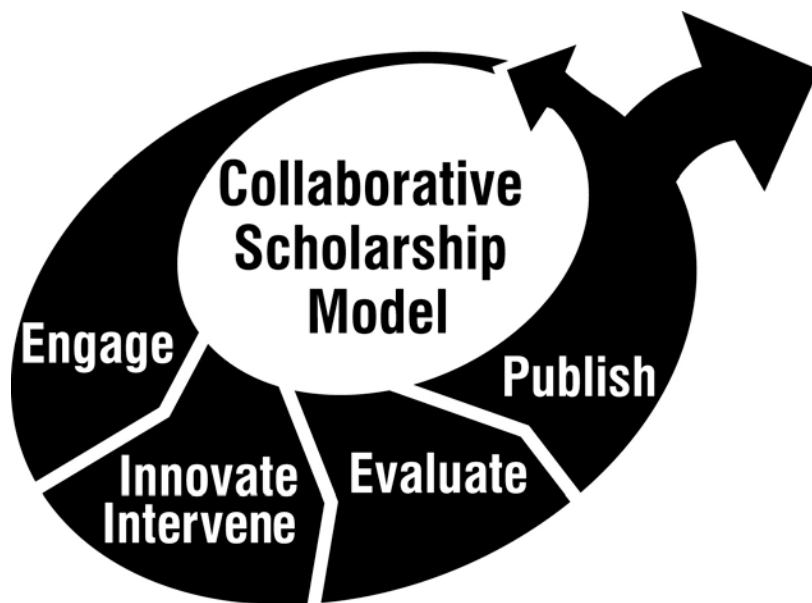


Figure 1. *The Collaborative Scholarship Model.*

This model requires academic members to engage with the literature, design a teaching strategy, evaluate its effectiveness and document the findings. This structured process encourages academic staff to think beyond

their identified teaching or learning need, and facilitates opportunities to develop learning and teaching research. The model stages are interlinked and ensure that each project has three key objectives: improvements in student learning, sustained improvements in teaching quality, and dissemination of the outcomes. The model is structured around collaboration, and involves Faculty-based academic developers working closely to mentor teaching academic staff through a project. These mentors have many years experience in both delivering PD programs on improving teaching practice, and in conducting educational research, so are able to effectively mentor the teaching and research aims of the model.

An overview of each stage of the collaborative model is described below.

Engage stage:

The engagement stage encourages participants to critically research the scholarly literature in an appropriate field, and prepare a succinct literature review. This stage ensures the project is informed by the latest thinking in the area, and enables the project to draw on the experiences of others. For many teaching academics, this is their first exploration into learning and teaching research, so this review process provides an invaluable supported experience. The role of the mentor in this stage is primarily one of constructive guidance – suggesting appropriate journals, and ensuring relevant literature is consulted.

Innovate or Intervene stage:

The Innovate or Intervene stage provides the opportunity for teachers to design an appropriate teaching strategy that meets their identified need. This might be an innovative approach, or an intervention to address a shortcoming – regardless of which, the strategy is researched and informed by current literature in the field. Mentor support is provided during the design stage, to assist participants to develop their ideas, to ensure planned strategies are aligned with the faculty and institutional directions, and play the ‘devil’s advocate’ role if necessary. This intensive support ensures that the strategy can be operationalised effectively. It is crucial at

this stage to ensure that a positive outcome for students is the primary focus for the proposed strategy.

Evaluate stage:

Participants are strongly encouraged to incorporate an evaluation stage as part of their teaching innovation or intervention project. This involves articulating relevant research questions (i.e. How will I know if this intervention has been successful?), and identifying appropriate methods to answer these questions. The mentors are actively involved in suggesting appropriate evaluation strategies. In some cases, funding (in the form of small grants) is available to assist with this phase. Since these are not highly research-active faculties, research assistants are not available, so the mentors assist in the data collection phase (for example, conducting focus group interviews), to ensure that students are able to provide feedback honestly and anonymously.

Publish stage:

The final phase of the model is to document evidence of findings from the evaluation stage and disseminate the results. Participants are encouraged to contribute their findings back to the academic community, via conference presentations, contributions to collections of case studies, or submissions of academic papers to peer-reviewed journals. Becoming part of the public scholarship in the discipline in itself is motivation for further engagement with the literature, completing the cycle of the Collaborative Scholarship model. The role of the mentor in this final stage is varied, and includes providing advice on dissemination strategies, to facilitate this using their own networks (for example, organising seminar presentations), providing constructive feedback on drafts of papers, and where appropriate, co-authoring papers for publication.

To implement this Collaborative Scholarship Model, similar approaches were adopted in two different faculties. In both cases, the mentors work closely in collaboration with individual academic staff on small research/teaching projects, encompassing all stages of the Model. The results of the evaluation projects

conducted, together with evidence of awards and publications, were identified as project outcomes, and were used to inform later reflections on the effectiveness of the model itself.

The model was evaluated by measuring three key indicators for each of the projects

- (1) Evidence of a change in teaching practice that had a positive outcome for students
- (2) Evidence of a scholarly publication (conference paper or journal article)
- (3) Changes in teaching practice sustained over time (as evidenced by ongoing reflection on the project or translation to other teaching projects)

Examples of how each of these approaches contributes to collaborative scholarship are described below.

Teaching-research projects using the Collaborative Scholarship model

This section outlines four examples of projects undertaken using the Collaborative Scholarship model. These projects were selected as case studies on the basis of their diversity, including both innovations and interventions in teaching practice. Under the model, each project included an evaluation, and these outcomes were used as indicators of the overall success of the model itself.

Blended teaching and learning in a first year unit (Faculty 1)

This project began as a faculty initiative in 2003 to increase the uptake of online teaching and learning and encourage staff use of Blackboard. A team of academic staff, led by the Unit Convenor and Academic Developer (as project mentor), worked to develop and implement a model of teaching and learning that embedded e-learning into the first-year student's learning experience. The mentor explored various teaching strategies and engaging uses of Blackboard (e.g. Chamberlain & Vrasidas, 2001; Kandlbinder, 2001; Palloff & Pratt, 1999) and shared effective practices with the teaching team to support facilitation of online communication, interaction and peer-learning approaches.

Project outcomes:

- (1) The project evaluation revealed that a collaborative online environment had produced a better quality of exchange and depth of discussion with students, becoming central to the production of knowledge. Students valued the flexibility and efficiencies of time and place, and the potential for self-managed education (Robbie, 2006; Whitehouse & Robbie, 2003).
- (2) Outcomes were disseminated in faculty-based, university-wide and national seminars and conferences (Robbie, 2006; Whitehouse & Robbie, 2003).
- (3) For over seven years this team has pioneered online learning developing creative ways of teaching. This immersion has led to transferability to other units and teaching staff and continued to evolve without direct mentoring support.

In addition, the teaching team has won a Vice-Chancellor's Teaching Excellence Award in 2006 and an ALTC Citation in 2007 on the basis of this project. The rewards and effectiveness of working in a team approach is highlighted in the following response:

Our team has worked closely with [mentor] in the development and implementation of an innovative online Design History unit. We particularly appreciate her ongoing professional and creative input to the team and the progression of the unit, with her focus on extending scholarly teaching and learning in an online context. [Mentor's] contribution has been vital in our achievement of both a VC and a Carrick award, leading to opportunities for conference presentations and papers (online teacher 2003-2009).

Implementing off-campus group work (Faculty 2)

The driving force for this project was a desire to facilitate collaborative group-work projects for off-campus students. The project involved the mentor working closely with a lecturer teaching a first-year unit through Open Universities Australia. After researching relevant literature on supporting group work (e.g. Choy & Ng, 2007; Elgort et al., 2008), Wikis were chosen as the tool to help students collaborate on an integrated

group report, and an appropriate assessment task was developed.

The mentor worked with the unit convenor and teaching team during the design and pilot stages of the initiative, and for several study periods following, as different aspects of the implementation and assessment of the group projects were modified. A simple evaluation project was conducted each study period, to monitor students' experiences with the use of the Wiki.

Project outcomes:

- (1) Off-campus students successfully engaged in collaborative group work, and reported enjoying the interaction with peers (Weaver, Viper, Latter, McIntosh, 2010).
- (2) The project has resulted in one published journal paper and two conference papers (McIntosh & Weaver, 2008; Weaver & McIntosh, 2009; Weaver, Viper, Latter & McIntosh, 2010).
- (3) Collaborative group-work projects using Wikis have now become an integral feature of this off-campus unit, and has proved an inspiring example to other colleagues considering implementing Wikis into their own teaching.

The publications from this project are the first for this academic staff member, and have the potential to have an enormous impact on this individual's career, as attested by this comment:

[Mentor] helped identify the appropriate pedagogical tool to facilitate team learning in the online environment, which solved the problem of real and effective teamwork for off-campus students. Each semester, my OUA students report that this is the most effective group learning that they have encountered, and their first real experience of a group dynamic in an educational setting. Working on this project was instrumental in assisting me to write my first conference paper, and as a result, I've embarked on a publishing career in an area that I didn't expect to be published in. (Unit convenor, Social Science unit)

Implementing Web 2.0 technologies (Faculty 1)

An opportunity to address a shift to digital photography inspired a unit convenor to explore and embrace Web

2.0 educational technologies. Relevant literature was consulted to determine not only the most appropriate methods for design critiques and technologies to use, but also for ideas on implementing these into teaching practice (Blythman, Orr & Blair, 2007; Owen, Grant, Sayers & Facer, 2006; Taylor & McCormack, 2005).

The social media website Flickr was trialled for image exchange, peer review and critique. Using student and teacher feedback the convenor and Academic Developer (as mentor) worked together to design and refine teaching approaches and student learning activities.

Project outcomes:

- (1) The implementation of Flickr increased peer-to-peer collaboration, and encouraged deeper analytical thinking, critiquing and feedback of the visual image. This led to high levels of student satisfaction, enhanced creativity and the production of higher quality work (Robbie & Zeeng, 2008a; Robbie & Zeeng, 2008b).
- (2) The mentoring partnership has resulted in peer-reviewed conference presentations and papers (Robbie & Zeeng, 2008a; Robbie & Zeeng, 2008b).
- (3) For teachers, the implementation of Flickr has reignited enthusiasm, promoted online teaching and created greater opportunities for immediate, regular and constructive feedback to students

In addition, the project formed the basis of a successful ALTC Citation and has been selected as a national case study in an ALTC funded project on teaching online using Web 2.0 technologies (Zeeng, 2010).

The positive impact of this mentoring model is highlighted in the following comment:

Being introduced to Web 2.0 by [mentor] helped me implement an innovative approach to teaching design students. I have developed a unique programme that has seen high standards in outcome, better understanding and critical analysis of images. Using Web 2.0 has opened avenues for presentations publications and overseas partnerships that I would not have considered without the assistance of [mentor] (Unit Convenor, 2009).

Restructuring assessment to improve engagement (Faculty 2)

This project was initiated in response to an investigation into a unit identified as a 'poorly-performing' unit (i.e. student feedback was critical about the organisation and content of this unit). Accordingly, this project sits under the 'Intervene' category.

Students reported a lack of engagement and stimulation, reflected in poor attendance at lectures and tutorials and an overall decline in final grade (compared to previous years). To respond to these issues, the Unit Convenor and Academic Developer (as mentor) consulted the literature to ascertain areas where effective improvements could be made. Earlier studies have shown that students who attend classes on a regular basis perform significantly better in terms of final results compared to those who attend irregularly (Schmidt, 1983; Park & Kerr, 1990; Romer, 1993).

The strategy implemented in this example was to introduce continuous assessment into scheduled tutorial sessions, with students working in pairs for these assessment tasks. Evaluation was conducted across several semesters.

Project outcomes:

- (1) The intervention generated a marked and sustained improvement in both attendance (45% in 2006 to 85% in 2008) and in student grades (from an average final mark of 59% in 2006 to 71% in 2008) (Esposito & Weaver, 2008; Weaver & Esposito, in press).
- (2) The outcomes of this project were published in a conference paper and a subsequent journal paper.
- (3) The improved student outcomes have been sustained for the subsequent four years, and have encouraged the unit convenor to implement a similar strategy into other units he teaches, with similar positive outcomes.

In addition, the academic teacher has used the evidence from this project to successfully apply for an ALTC

Citation. The convenor of the unit commented that:

Working with [mentor] has consolidated and strengthened my ideas and approaches to improving my teaching. In addition, her insistence that we review the relevant literature ensured that the changes made to improve student outcomes were founded on state-of-the-art teaching practices (Unit convenor, Second-year Economics unit).

The four cases presented here are indicative of the overall impact of the Collaborative Scholarship Model. These projects represent examples of projects aiming to address an identified shortcoming in a teaching strategy (an intervention project), or projects aiming to implement a new technology (an innovation project). The diverse nature of each individual project means project outcomes are varied. Common to each project is a change in teaching strategy or practice that has resulted in a positive and sustained improvement to student learning. Additionally, each of these four projects has contributed to the scholarly literature through the dissemination of findings.

The impact on individual academic members, extending beyond the period of intense collaboration with the mentor, includes improved engagement with the literature, reinvigorated passion for both teaching and research, and increased focus on maintaining their publication output. We have witnessed evidence of these outcomes, and are cautiously positive that these outcomes are likely to have an ongoing impact for most participants. The innovations initiated via each project have now been sustained and managed by the teaching staff involved without mentor support.. Signs of a 'flow-on' effect are also emerging, where the successes of individuals is providing inspiration for colleagues to review practice and look for opportunities for themselves.

Discussion

A decentralised model of academic development embedded within the academic teacher's discipline and

combining teaching scholarship with a research project is likely to achieve greater improvements in teaching practise and hence better outcomes for students (Hawkins 2009; Reid & Petocz, 2003; Trigwell, 2011). The authors have proposed that a Collaborative Scholarship model, as described in this paper, can provide a framework for supporting academic staff to focus on teaching and learning outcomes and structure teaching innovations as research opportunities, thus adopting the scholarship of teaching approach proposed by Boyer (1990). For many teaching-only staff, completing the processes of applying for ethics approval, applying for funding, and designing an evaluation plan provides invaluable practice for developing their research skills. Doing this in a mentored relationship with a trusted colleague, who can provide expertise, advice and encouragement at each step, provides a focused, rich learning opportunity for the academic staff member, leading to professional and personal achievements in teaching and research.

Measuring success of such a program is difficult, since often the greatest outcome is a change in behaviour of program participants. However, some measurable outcomes can be used as indicators of the impact of the program. Within each project, an evaluation was undertaken to address key questions identified as part of the project, and each of these projects has successfully demonstrated that the project aim has been met – whether this was an increase in student engagement, or teaching innovation.

Overall implementation of the Collaborative Scholarship model has to date resulted in:

- Four successful national teaching citations
- Six peer-reviewed journal papers (with a further two journal articles in preparation)
- Eight peer-reviewed conference papers
- One Faculty-based Scholarship of Teaching Fellowship
- One Vice Chancellor's Teaching Excellence Award
- Several successful promotion applications

In addition, projects completed under this model have been used as case studies or exemplars of teaching practice in several nationally-funded collaborative projects led by other institutions.

Limitations

While the one-on-one mentoring relationship is a key strength of this model, it is also the major limiting factor to scalability. The faculties described in this paper were each assigned a single Academic Developer (employed by a central unit) for two days per week. This seriously limits the number of individual projects that can be mentored by these developers. Initial hopes that project 'graduates' could themselves become mentors have not been feasible, due to high teaching loads. Hence, it is critical for mentors to ensure they collaborate with as many different individuals as possible to sustain their impact. A challenge in achieving this was to ensure that individual projects are designed with a pre-determined finish date. This limitation may be ameliorated by the establishments of Communities of Practice (CoPs) (Lave & Wenger, 1991) to foster wider participation and facilitate further flow-on effects. The model is clearly designed to encourage localised changes, and is targeted at individual academic practice. The model itself is easily translated across multiple disciplines, and with the inclusion of CoPs, may have greater institution-wide impact without being overly resource-intensive.

Conclusions

The Collaborative Scholarship Model described in this paper demonstrates that a personalised one-on-one mentoring arrangement can improve participation in, and contribution to, teaching scholarship. The model is designed to bridge the gap between longer-term PD, and one-off workshops or seminars, in an attempt to produce more sustained improvements in teaching practice and student outcomes informed by deeper engagement with the scholarly literature.

The impact of this model enables a deeper and more focused approach, which can be perceived as highly relevant as it is situated in academics' own teaching practice. This has potential to create a snowball effect sustained over time, fostering a culture of ongoing reflection, evaluation and publication of teaching practice. Benefits for individuals have also included recognition via teaching awards, promotions, and appointments to more senior roles.

The model is labour-intensive, and hence expensive, and is likely to suit smaller campuses, rather than large metropolitan campuses, where centrally-delivered PD can reach larger numbers of staff more easily. The one-on-one mentor relationship also suits small faculties, where academic staff have more opportunities to work closely with each other over an extended period of time. However, it is tempting for mentors to continue working on interesting projects over several semesters, particularly as innovative developments are implemented and modified. Mentors must ensure that academic staff members are gradually transitioned to independent research, i.e., encouraged to 'fly solo'. By this method, it is possible to ensure that over time, mentors can work with the maximum number of staff while still having a major impact with individuals.

Current indications show that as long as projects are working effectively and can be managed by the teachers themselves with some mentoring, they can be sustained over long periods of time. Often, the original project need (i.e. the identified gap or intervention) is the impetus, and if the project addresses that need with positive outcomes, then it can be sustained. A key challenge for the teacher is to continue with their own scholarly research and reflection, and not consider that 'the job has been done' once the initial objective is seen to be achieved. Our observations are that peer recognition (by awards, promotions and publications) is an enormous incentive, and drives ongoing engagement.

We believe the Collaborative Scholarship Model has incorporated the key essence of Boyer's theory of the scholarship of teaching. The model has provided opportunities to advance a research trajectory and has been enthusiastically embraced by Faculty Heads across both faculties. The model bridges the gap between

scholarly teaching, reflective practice and research. It is envisaged that this model has the potential for customisation across the university and other institutions. It also bridges the gap between longer-term credentialed programs, which are believed to have some sustained impact on teaching quality (Gibbs & Coffey, 2004; Stes et al., 2009; Willcoxson, 1998), and one-off workshops and seminars, with minimal impact (Wright & O’Neal, 1995). The flexibility of a one-on-one project, designed specifically for the individual teacher’s needs and context, aligns well with the recommendations of Reid (2002):

An ideal approach to academic development, then, would be one based on a conceptual change model, one that is firmly integrated with specific department directions and needs, that is consultative and recognises the different developmental focuses of all levels of the academic community, and finally, one that leads to the continuing development of quality learning and teaching. (p. 9)

Acknowledgements

We are very grateful for the input of Kym Fraser, who helped us articulate our approach into the stages in our Collaborative Scholarship model, and for excellent constructive feedback from three anonymous reviewers.

Notes on contributors

Debbi Weaver is an academic developer at Swinburne University. Her work has spanned the range of institution-wide professional development through to one-on-one collaborative projects with individual academic staff, and her current research focuses on how to foster improvements in online teaching practice.

Innovation, empowerment and passion are key principles that drive Diane Robbie. Diane’s interest in facilitating relationships between students and teachers is paramount. Diane is Learning Design Manager at Swinburne Online. Previously she was Program Coordinator of the Graduate Certificate in Learning and Teaching and academic developer at Swinburne University.

Sue Kokonis is Director of Teaching at Swinburne Online. Prior to this she was Associate Dean Learning and Teaching at Swinburne University. Sue has been actively engaged in the field of Education for the last 25 years and her research interests include student engagement and collaborative learning.

Lucia Miceli is a lecturer in the Faculty of Design, Swinburne University of Technology. As a designer and educator Lucia has focused on creative design and innovation. Lucia's research interests centre on cultural diversity. Currently she is researching how creative processes emerge in multicultural collaborative group projects.

References

- Blythman, M., Orr, S., & Blair, B. (2007). Critiquing the Crit: Final report. October (pp. 1-7). London. Retrieved April 20, 2012, from: <http://www.adm.heacademy.ac.uk/library/files/adm-hea-projects/learning-and-teaching-projects/crit-final-report.pdf>
- Boyer, E. (1990). *Scholarship reconsidered: Priorities for the professoriate*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching, University of Princeton.
- Brew, A. (2010). Transforming academic practice through scholarship. *International Journal for Academic Development*, 15(2), 105-116
- Brookfield, S. (1995). *Becoming a critically reflective teacher*. San Francisco: Jossey-Bass.
- Chamberlain, R., & Vrasidas, C. (2001). Creating engaging online instruction. Proceedings of the 17th Annual Conference on Distance Teaching and Learning (pp. 79-83). Madison: University of Wisconsin System.
- Choy, S., & Ng, K. (2007). Implementing wiki software for supplementing online learning. *Australasian Journal of Educational Technology*, 23(2), 209-226.
- Ehrich, L., Hansford, B. & Tennant, L. (2004). Formal mentoring programs in education and other professions: A review of the literature. *Educational Administration Quarterly*, 40, 518-540
- Elgort, I., Smith, A., & Toland, J. (2008). Is Wiki an effective platform for group course work? *Australasian Journal of Educational Technology*, 24(2), 195-210.
- Esposito, A., & Weaver, D. (2008). Strengthening teamwork to improve student engagement in Managerial Economics and Strategy. Proceedings of the 31st HERDSA Annual Conference, Rotorua NZ, 1-4 July. Retrieved April 20, 2012, from <http://www.herdsa.org.au/wp-content/uploads/conference/2008/media/Esposito.pdf>
- Gibbs, G., & Coffey, M. (2004). The impact of training on university teachers on their teaching skills, their approach to teaching and the approach to learning of their students. *Active learning in higher education* 5(1), 87-100.
- Hawkins, M.M. (2009) Enhancing scholarly work on teaching and learning: Professional literature that makes a distance – by Maryellen Weimer. *Review in Teaching Theology & Religion* 12(1), 95-97

- Hubball, H., Clarke, A. & Poole, G. (2010). Ten-year reflections on mentoring SoTL research in a research-intensive university. *International Journal for Academic Development* 15(2), 117-129.
- 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.
- Kandlbinder, P. (2001). Peeking under the covers: Understanding the foundations of online academic staff development. In L. R. and J. Lidstone (Ed.), *Flexible Learning for a Flexible Society* (pp. 372-378). Toowoomba, Qld: Proceedings of ASET-HERDSA 2000 Conference, 2-5 July 2000. ASET and HERDSA.
- Knapper, C. (2003). Three decades of educational development. *International Journal for Academic Development*, 8(1–2), 5–9.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- McIntosh, P.C., & Weaver, D. (2008). Fostering collaboration amongst off-campus students. Proceedings ASCILITE, Melbourne, December 2008, (pp618-621). Retrieved April 20, 2012, from <http://www.ascilite.org.au/conferences/melbourne08/procs/mcintosh.pdf>
- Owen, M., Grant, L., Sayers, S., & Facer, K. (2006). *Social software and learning*. FutureLab, Bristol UK. Retrieved April 20, 2012, from http://archive.futurelab.org.uk/resources/documents/opening_education/Social_Software_report.pdf.
- Palloff, R., & Pratt, K. (1999). *Building learning communities in cyberspace: Effective strategies for the online classroom*. San Francisco: Jossey-Bass Publishers.
- Park, K., & Kerr, P. (1990). Determinants of academic performance: A multinomial logit approach. *Journal of Economic Education*, 21(2), 101-111.
- Reid, A. (2002). Is there an 'ideal' approach for academic development? Spheres of influence: Ventures and visions in educational development. 4th World Conference of the International Consortium for Educational Development (ICED), Perth, Australia. Retrieved April 20, 2012, from http://www.csd.uwa.edu.au/iced2002/publication/Anna_Reid.pdf
- Reid, A. & Petocz, P. (2003) Enhancing academic work through the synergy between teaching and research. *International Journal for Academic Development*, 8(1), 105- 117.
- Robbie D. (2004) Reflecting on students' use of Blackboard to inform academic staff development activities. Blackboard Asia Pacific conference, Sunshine Coast, Queensland

- Robbie D. (2006) The Swinburne story- An EDAs experience. Blackboard Asia Pacific conference, Sydney, New South Wales
- Robbie, D., & L. Zeeng. (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. Proceeding ASCILITE Melbourne, December 2008. Retrieved April 20, 2012, from <http://www.ascilite.org.au/conferences/melbourne08/procs/robbie.pdf>
- Romer, D. (1993). Do students go to class? Should they? *Journal of Economic Perspectives*, 7(3), 167-174.
- Rust, C. (1998). The impact of educational development workshops on teachers' practice. *International Journal for Academic Development*, 3(1), 72-80.
- Schmidt, R. (1983). Who maximises what? A study in student time allocation, *American Economic Review*, 72(2), 23-28.
- Schon, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass Higher Education Series.
- Stigmar, M. (2010). Scholarship of teaching and learning when bridging theory and practice in higher education. *International Journal for the Scholarship of Teaching and Learning*, 4(2), 1-14.
- Stes, A., Coertjens, L., & Van Petegem, P. (2009). Instructional development for teachers in higher education: impact on teaching approach. *Higher education*, 60(2), 187-204.
- Taylor, M.J., & McCormack, C. (2005). Creative critique in visual communication: Effective feedback in design projects through voice-centred studio-based communication and online delivery. Australian Council of University Art and Design Schools (ACUADS), Thinking the future: Art, design and creativity conference, 1-11.
- Trask, B.S., Marotz-Baden, R., Settles, B., Gentry, D. & Berke, D. (2009). Enhancing graduate education: Promoting a scholarship of teaching and learning through mentoring. *International Journal of Teaching and Learning in Higher Education*, 20(3), 438-446.
- Trigwell, K. (2011). Scholarship of teaching and teachers' understanding of subject matter. *International Journal for the Scholarship of Teaching and Learning*, 5(1), 1-7.
- 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. & Esposto, A. (in press). Peer assessment as a method of improving student engagement. *Assessment and Evaluation in Higher Education*. Retrieved April 20, 2012, from <http://www.tandfonline.com/doi/abs/10.1080/02602938.2011.576309>
- Weaver, D., Viper, S., Latter, J., & McIntosh, P.C. (2010). Off campus students' experiences collaborating online, using wikis. *Australasian Journal of Educational Technology*, 26(6), 947-860.
- Whitehouse D., & Robbie D. (2003). Design history online: New experiences, new skills, new knowledge, new expectations. Blackboard Asia Pacific conference, Melbourne, Victoria.
- Willcoxson, L. (1998). The impact of academics' learning and teaching preferences on their teaching practices: A pilot study. *Studies in Higher Education*, 23(1), 59-70.
- Wright, W.A., & O'Neil, M.C. (1995). Teaching improvement practices: International perspectives. In W.A. Wright & Associates (Eds.), *Teaching improvement practices*, Boston, MA: Anker.
- Zeeng, L. (2010). Using FlickrR as an online classroom - Case study [video]. In Learning to Teach Online. Retrieved April 20, 2012, from <http://online.cofa.unsw.edu.au/learning-to-teach-online/ltto-episodes?view=video&video=163>.