

FACILITATING A SPACE FOR A DIVERSE GROUP OF ACADEMIC PRACTITIONERS TO INNOVATE

Kay Salehi and Llewellyn Mann
Swinburne University of Technology
Australia

Abstract

This paper reports on a year long effort to create and facilitate a creative space for a diverse group of business academics to develop educational innovations involving new technologies. The expected outcomes were to enhance student engagement, reduce teaching time, and to develop scholarly practices around teaching and learning. The Academic Development Advisor's (ADA, first author) role was to facilitate the group of academics from different disciplines, who had a range of research experience, career aspirations and approaches. The research question is: "How might an Academic Development Advisor effectively facilitate a space for a diverse group of academic practitioners to innovate?" This paper will present the background, process, lessons learned, future plans, and advice for others on how to create a similar space for innovation.

Introduction

The Faculty of Business and Enterprise (FBE) at Swinburne University of Technology (SUT), like many Business Faculties, is facing spiralling staffing costs, increasing numbers of students from a wider range of backgrounds, funding cutbacks and greater competition. Further, academics are expected to be excellent teachers, continuously improving the student experience, and be active in discipline research including winning external research grants. This can be particularly problematic for business academics that have an applied background and who have not focused on discipline research. Many excellent teaching academics find it increasingly difficult publishing in their own discipline area. Involving business academic staff in the Scholarship of Teaching and Learning (SoTL) provides opportunities for them to develop their research expertise around their own teaching and curriculum practice and enhance the overall student experience (Vardi 2011). Involvement with SoTL has also led to opportunities for such academics to be nationally recognised and rewarded for excellence in the Australian Learning & Teaching Council (ALTC) Citations, Awards and Teaching Fellows.

At the end of 2009, the FBE created a number of competitive teaching 'innovations' grants. The idea was to encourage excellent teachers who were not

researching in their discipline area to consider developing innovative teaching and learning projects. These were focused on student engagement, learning outcomes and student feedback and retention. Successful applicants would be provided with funding and support for two years to develop their project into a viable and sustainable curriculum innovation. They needed to articulate a clearly defined issue, propose a feasible and innovative curriculum design plan and commit to disseminate their findings. Successful projects also needed to demonstrate the potential to take advantage of the opportunities and affordances of new media and educational technologies. The faculty ADA would work closely with each grant recipient to develop the project and the research pathway and to liaise with support staff from Digital Media Services (DMS), Information Technology Services (ITS), and the Library.

This paper chronicles the journey of developing a space for academic staff to innovate their teaching practices using educational technologies. It explores the development of ways to support the individual needs of the grant recipients, as well as creating a viable, collegial space to bring the grant recipients together over the twelve-month period and to facilitate the dissemination of their findings to faculty colleagues and beyond. Methodological issues and considerations will be discussed. Three case studies will be presented to illustrate what technologies were used, combined with how a scholarly approach was encouraged to explore, develop and trial individual project innovations.

Methodological Considerations

A number of frameworks were used in developing the space for innovation:

- an Action Learning Approach (Revans, 1980) was used to engage with individuals;
- the development of a Community of Practice (CoP) (Wenger, 1998; Wenger, McDermott, & Snyder, 2002) was used to develop the collegial, creative space;
- the Scholarship of Teaching and Learning (Hutchings & Shulman, 1999) was used with a focus on Action Research (Cherry, 1999); and
- the space was created using a resilience framework that supported the approach to facilitate the process.

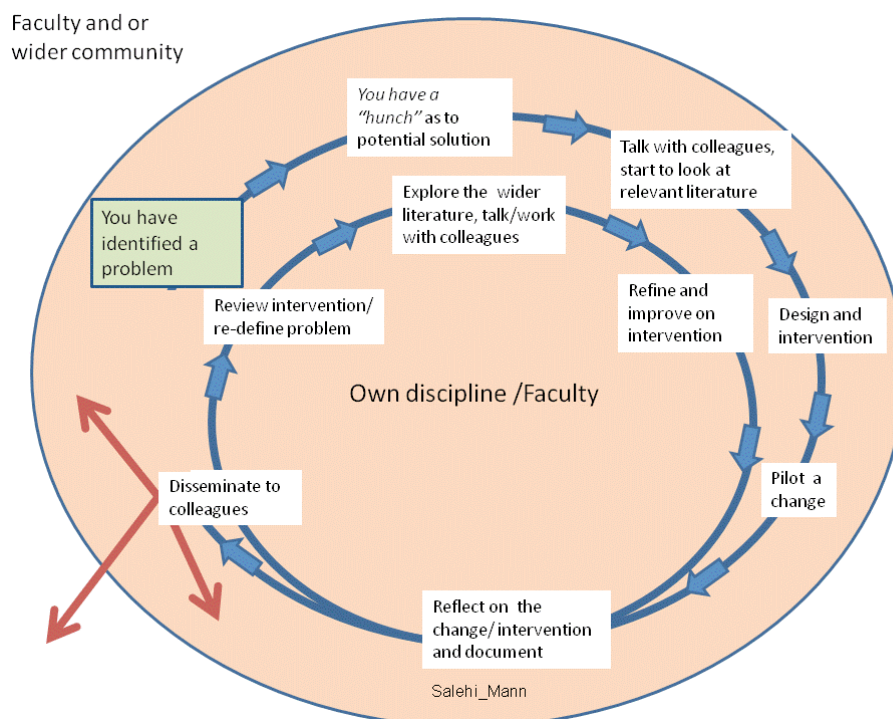
An Action Learning Approach (Kember, 2000; Revans, 1980) was used. A definition that illustrates what was also relevant in this project is that an action learning project involves a “process of learning and reflection that is supported by colleagues . . . individuals learn with and from each other by working on real problems” (McGill & Beaty (1995, p. 21) cited in Kember, 2000). In this case, a problem had been identified by each grant recipient from their own practice, and

their learning involved designing and implementing a trial solution to that problem and reflecting and revising the solution. As part of their initial application process, recipients had conducted a literature review and had discussions with appropriate support staff as to the feasibility of ways to address their problem.

The grant recipients were invited by the ADA to come together on a regular basis to share, discuss, reflect and revise their various approaches, to accumulate and share knowledge, building collegial relationships and scholarly identities. This CoP enabled recipients to support each other in solving their practice problems.

The ADA (the first Author) drew on the expertise of an Educational Research Expert (ERE) (the second Author) from another faculty, who not only mentored the ADA, but also attended the monthly innovations meetings. The ERE provided educational research expertise to the innovations group and individuals in the development of their educational research plans. As a result of discussions between the ADA and the ERE, a boundary object was created to describe the process of SoTL to support the grant recipients in their understanding of the SoTL process. (See Figure 1)

Figure 1: Scholarship of Teaching and Learning Cycle

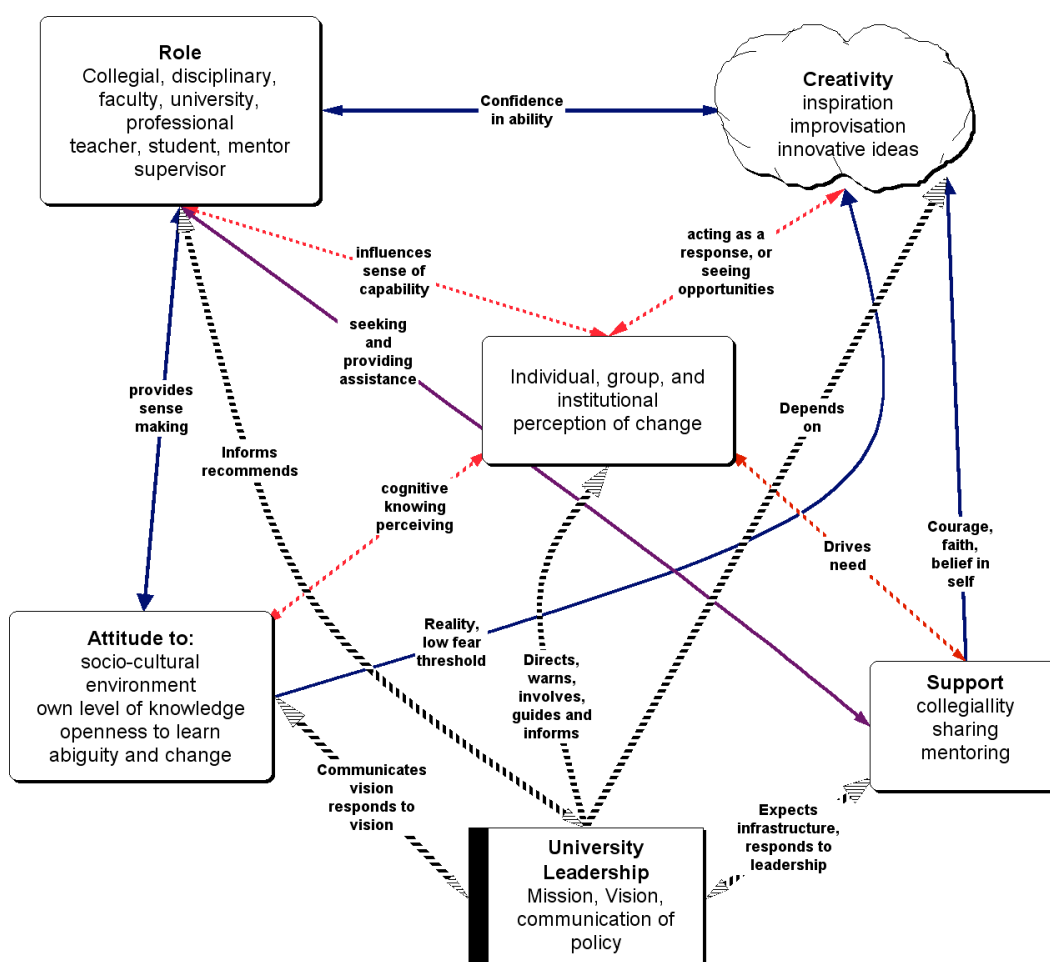


Using this object, academics were able to identify where on the cycle they were located. They may have a 'hunch' (an intuitive feeling) for a reason or a solution to a specific learning issue, such as high failure rates may be due to changes in

student demographics, cost of living, growing student diversity, changes in prerequisite knowledge required, all potentially impacting on the unit. Or the academic may be on a second iteration of the cycle, piloting a change, but have not realised they are following this SoTL process and not linked yet with the current literature, or considered formally gathering data. This object became a useful tool for developing a shared understanding between the innovations group members as to identifying the stages of their own action learning process.

A fourth framework grounded the development of the collegial space. This framework originated from the ADA's unpublished master's research in 2006 looking at what the essential elements were in the academic environment to support the building of resilience in the face of uncertainty and change. In discussions with the second author she realized she was intuitively drawing on this prior study in her current practice. This framework, originally developed based on the earlier work of Weick (1993) and Coutu (2002), is shown in Figure 2.

Figure 2: Elements Impacting on Capacity to be Innovative



Source: Salehi (2008)

This framework applied to the current environment in helping participants find creative solutions to their practice problems (*Creativity*). The ADA was intuitively building the collegial space between these very different academics who were previously unaccustomed to working outside their own discipline area. Grant recipients were faced with ambiguity and forces for change at the same time they were required to be looking for ways to be innovative in finding creative solutions. Early on, the ADA had suggested to the Deputy Dean that the Faculty leadership provide their expectations to the grant recipients at the initial orientation, thus providing the group with the Faculty mission and expectations (*Leadership and Vision*):

... With clear guidance from the senior management, and increased opportunities to develop skills, individuals and groups will be able to enhance their sense of self-efficacy to deal with change. (Salehi, 2006, p. 27)

Communication of the university vision by the leadership needs to be consultative, timely and clearly articulated, which is seen as critical to assist participants with forming their own sense of direction and mission. (Salehi, 2006, p. 34)

The grant recipients required certain common elements to be in place to build their capacity to face uncertainty and consider changes in their own practice. Intuitively using this framework the ADA had been keen to establish a supportive community of peers to share and explore ideas together in a safe and non-competitive space (*Collegial and Supportive Space*):

... collegial support is highly regarded where informal modes of support of “like-minded” staff get together to discuss and support each other. (Salehi, 2006, p. 45)

Grant recipients were encouraged to reflect and review their current identities as teachers, to consider broadening their identities to being scholars of teaching and learning. They were exposed to the broader concept of SoTL at the initial orientation and in subsequent meetings. In partnership with the ERE, the ADA was able to develop a credible scholarly space to promote and support the grant recipients, not only to develop their curriculum projects, their collegial relationships, but also to provide scholarly advice around their individual SoTL research projects. Through this, there was the development of an awareness of the value and opportunities of SoTL in their formal reporting of their innovations projects (*Role and Identity*).

At the end of the year, as a requirement of the project funding, a day to disseminate findings was provided to Faculty academics. The “Excellence in Teaching and Learning Day” was designed by the group members, embedding the individual educational technology projects under the larger pedagogically focused

headings of supporting diversity, building critical thinking skills, large group teaching and theory to practice. This day generated a high level of interaction and engagement from the wider community of academics and was a highly successful outcome of the years work to date.

Case Studies

This section shares the journey of three funded recipients in the following case studies. Names have been changed to maintain privacy.

Case Study 1 — Cheryl

Cheryl is an enthusiastic, organized and committed economics convenor within the Faculty. Cheryl had observed over time that students had a wide range of mathematical capabilities, commitment and engagement with the finance curriculum. She needed to understand how to best meet the range of learning needs. She was also required to develop her research expertise and saw SoTL as an opportunity to achieve her goals. Cheryl proposed to use educational technologies to provide greater support and flexibility for the diverse needs of her students. The main focus was on finding practical and flexible ways to enhance student engagement in learning financial maths, reducing the attrition rate and increasing student satisfaction rates. She hoped students would benefit by having enhanced confidence in using and applying financial concepts to complex real-life problems.

A specific technology was identified — the “Mimio” Interactive Whiteboard Technology (<http://www.presentationtek.com/2006/06/18/interactive-whiteboards-an-overview/>) defined as “dry-erase whiteboard writing surface which can identify the location of any contact on its surface and capture any writing or drawings electronically” including sound. Cheryl used the Mimio to record short video clips that not only demonstrated how to solve complex financial concepts, but provided expanded explanations along side the calculation advice. These demonstrations were directly related to the weekly lecture. Combined with the short demonstration was an associated quiz with a similar problem and targeted feedback within each section of the quiz. This supported all levels of student capability and could be used as often and whenever the students chose to use them. She was shown how to access the Learning Management System (LMS) usage statistics to evaluate the level of student take up.

As Cheryl began to observe usage statistics, she was amazed and encouraged to see the level of usage, and when they were being used as reflected in a comment she made to the ADA: “This student was working on them at 3am!!!”; “this student looked at this recording 10 times!!!”; “this student has not looked at any of them!!!” Students were using the resources very differently to what she expected. Cheryl was also encouraged by the positive informal feedback she received from students and this encouraged her to continue developing further weekly resources.

With the help of the ERE, the ADA and Cheryl refined the research question and survey instruments, and successfully submitted an Ethics Application to collect formal data at the beginning of the second semester in July 2010. The initial results are being presented in a companion paper at this Conference “Empowering diverse cohorts of students to build confidence in mastering complex financial concepts beyond the classroom” by Barry and Salehi.

As a result of being a grant recipient, she has engaged deeply with the literature and has begun to use a scholarly approach to enhancing student learning outcomes, engagement and motivation. She has explored and evaluated the value of using online video and self-diagnostic resources as a way to meet diverse learning needs. She is now able to draw on her reflections of her learning journey as part of her research data, as well as use technical and curriculum documentation to support her own future development and also to share with colleagues. Cheryl is now planning for her next iteration of the project and consideration is currently being given to further develop support resources for the second half of the semester.

Case Study 2 — Jenny

Jenny has been an active and innovative economics convenor over many years, investing much time in improving the learning experience of her students, enhancing her teaching practice and the curriculum. As a successful grant recipient, she was now able to invest time on exploring new opportunities to improve student learning outcomes in her second-year macroeconomics unit.

The consistently high failure rate of students was her main concern, and she was keen to address this issue. Students had difficulty in understanding how to apply theories to current economic issues in the media or other sources. She was concerned that students were dependent on textbook answers and interpretations from teaching staff. Jenny wanted to challenge students to identify critical information and to be able to make sense of current economic issues related to a typical business environment. She felt that macroeconomics would become more relevant and engaging for students if they could work directly with current issues, and be empowered beyond the semester curriculum. In the past she had attempted to engage her students with current links to news reports within her lectures but had found the technical process too demanding and unreliable. She was aware of the value of using current news clips in her teaching for student learning, but was too time poor to persist to develop any sustainable use of these resources.

As a grant recipient she was provided with technical support to systematically identify and incorporate a wider range of internet sources into her teaching. Having recognized workload included was invaluable to facilitate the development of her ideas. The ADA met with her regularly to review progress and to identify any training and support needs. The ADA facilitated discussions between Jenny and Library staff to identify how to best use the licensed but under-utilized online news resources. It was identified that extra support and

documentation needed to be provided by the Librarians to make access and usability of these resources more user-friendly. Information Technology Support (ITS) was also asked to provide user-friendly instructions on how to technically access and use the current news feeds within the various teaching spaces. This added support provided her with a safety net to build her confidence and capability with a reliable IT system that was more sustainable. Feeling more in control of her environment gave her greater self-efficacy to develop her ideas and enhance the curriculum.

As a result of being involved in SoTL, she was thinking critically about her curriculum as well as the educational technology innovations and she began to review the curriculum alignment. She needed more guided practice opportunities for students to build their capabilities in the critical analysis skills being assessed. Incorporating live news data directly within her lectures combined with facilitating students to critique the news reports, engaged her students to make links between the theories they were learning and the current news. Many students were able to demonstrate higher levels of analysis and critical thinking skills as a result of this innovation within her teaching. This preliminary research has assured Jenny of the benefits of using reliable educational technology to enhance teaching and learning. She is considering additional ways to embed more opportunities for students to practice the critical skills she is assessing.

At the end of the year, at the Faculty Teaching and Learning Excellence Day, she confidently engaged faculty staff of the benefits of using current news sources from the internet within their own discipline area, sharing documentation and practices on how to use the technology within the teaching space. At the same time, she has built up her SoTL identity by developing educational research conference papers and journal articles.

Case Study 3 — Catherine

Catherine is a young academic, relatively new to teaching in higher education. She has prior research and consulting experience and is completing her PhD. She has been convening a large first year unit for a few years and has a number of part-time tutors who have a range of teaching experience. Her motivation for applying for the funding grant was to explore new ways to use contemporary educational technologies to engage students from a wide range of backgrounds enrolled this first year core unit in the Bachelor of Commerce. This unit requires a high level of experiential activities involving action and reflection to be meaningful, requiring time for students to experience this process. Due to large cohorts and limited teaching spaces, the experiential nature of the unit was being compromised. She strongly believed that if students had more class time for experiential activities they would more readily be able to apply the theories to practical applications seeing their relevance to their current work practices and future careers.

After initial discussions with the ADA and other grant recipients at the Innovations Group meetings, she decided to develop some online pre-recorded lectures and online activities to time shift the delivery of content out of scheduled class time, thus providing opportunities for more experiential activities during class time. She made contact with the Digital Media Services group (DMS) who worked closely with her to develop skills in using screen capture software (Camtasia) and she created two online “lectures.” In one online lecture she introduced the topic of ethics, produced a short ethical dilemma and using the online survey tool Opinio (<http://www.objectplanet.com/opinio/>) provided a poll to collect student opinions on the ethical situation. The plan was to use the poll results in the following lecture. Catherine was able to assess the level of access by looking at the LMS user statistics. While the original idea was a good plan, due to the constraints of time the curriculum design process was limited. Catherine had concerns about the workload involved in creating the online lectures and was disappointed with the low level of engagement with them evidenced by the user statistics. She found the poll results were limited and had to resort to deliver her lecture in the traditional method.

Catherine was on leave for the second half of 2010 and had time to reflect on the experience. She also had more time to look into the student engagement literature, to see how to embed online learning resources in a hybrid learning environment. She discussed these ideas with the ADA and reflected on what would need to be done to create more interactive large group teaching sessions. She would need to review her teaching approach and to also consider getting her tutors involved with her project on her return.

A new plan was developed that involved exploring a range of educational technologies. She also decided to actively involve her tutors with the project. She would also need to consider how to balance of time between scheduled lectures and tutorials. With the help Catherine clarified her research question, successfully submitted her Ethics Application. She has now collected initial data from students related to their work experience, needs and interests to guide her in the design of the online learning elements and activities. She is now trialling interactive forums, wikis and online polls, combined with re-designed lectures as large group teaching sessions. She plans to run focus groups at the end of the semester to gain feedback on the efficacy of the new approaches being trialled. Her early experience has highlighted to her the need to involve the tutors (to get buy-in) and the importance of the curriculum design process for ultimate success.

Catherine has now rejoined the Innovations Group meetings to share her new approach with her peers. She plans involve her tutors in the evaluation of the various online educational technologies, implement changes as required and reflect on the impact these will have on teaching practice. As a result of this project she is developing her expertise in curriculum design and educational research. Her students are expected to be beneficiaries of the enhanced

curriculum. The tutors are also gaining professionally by being involved with her in this educational research project.

Discussion

At the end of 2010, the group of funded recipients had a clearer understanding of SoTL and many were now publishing on their developments. They had a self-sustaining community of practice where they were supportive of each other's developments, shared resources and provided a space for collegial discussion around each other's approaches. They had worked together to design the FBE Teaching & Learning Excellence day that was well attended with positive feedback. The practical outcomes for the funded recipients, who began their journey in February 2010, are a number of educational technology advances being trialled. In most cases these are being formally evaluated resulting in scholarly output. Increasing confidence in approaching such developments by the funded recipients is evident in the range of conference and journal papers being written. There have also been requests by the faculty to share their findings with their colleagues. Library staff and IT support staff are now more aware of the user-support requirements of academics and have developed these over time. The Faculty leadership has demonstrated added confidence by funding a further two staff members to join the program, who began their journey in August 2010.

The work of the Academic Development Advisor has been challenging to facilitate the space, but with the support and collegial input from the ERE, she has built her own expertise through this process. She will be co-writing research papers and journal articles as a result of the work. As the first group has now become more self-supporting, it is felt that the group will need less hands-on support from the ADA. This is important as the Faculty intends to call for expressions of interest from a new group of academics to be funded again for two years starting from mid-year 2011.

A number of lessons have come out of this research:

Ways to support academics:

- have short regular meetings with each academics to support the learning process;
- link academics to other colleagues with similar interests;
- provide pedagogical advice on ways to prepare students for the effective use of any educational technology resources being trialled;

- provide funding for academics to take time to develop their ideas; and
- recognise the workload required in development activities.

Academic Development Advisor needs to ensure that academics:

- know what support is available and how to access it;
- consider student diversity in developing online resources;
- inform students of the purpose of the technology developments and how they relate their learning goals;
- have access to advocates on their behalf for technical, library and other support services;
- rigorously test any online technologies prior to release to students;
- ensure their workloads are sustainable during and beyond any special funding phase; and
- have a safety net for those non-technical academic staff to build confidence and capability.

Encourage academics to:

- collect informal feedback from students on technology developments;
- keep a learning journal that can become part of their research data;
- document technical and curriculum developments to support future work and to share with colleagues;
- reflect on the impact of incorporating educational technology on accessibility, different learning styles and student motivation;
- reflect on the alignment between the various new elements being trialled and the impact this has on the overall curriculum;
- focus on the pedagogical goals rather than the technology “bells and whistles;”

- consider dissemination opportunities to engage academics of the benefits of using IT resources within teaching within and outside their own curriculum;
- extend their research to include SoTL as part of their professional practice;
- develop practices that are sustainable long term beyond the project; and
- involve other teaching staff in the development of the online technology resources.

Conclusion

Bringing together a group of academics who are funded to take time out to explore and develop learning and teaching practices has been challenging and inspiring. Academics from different disciplines have found value in forming a community of practice, and used the common ground between them to further develop their practice and ideas. The faculty has provided encouragement for these staff to venture into new ways of using the learning spaces, and allowed these funded recipients to explore and develop sound and pedagogical ways of using the new media and other educational technologies to improve overall student learning outcomes. To facilitate a space for academics to innovate has required faculty support and mentoring of each individual funded recipient by the ADA. The mentoring of the ADA by the ERE has been an essential element in the success of the ADA's role. The contributions from the ERE, the ADA, the technical support team, the library staff and other peers has been essential in the successful outcomes of this project.

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