
CHAPTER 3: RESEARCHING OUR OWN PRACTICE

Dorothy Spiller and Pip Bruce Ferguson

INTRODUCTION

In the tertiary sector, it has been traditional to separate the activities of research and teaching. We have not completely discarded the stereotype of the absent-minded professor burrowing away at some obscure minutiae, while teaching is sometimes seen as a practical activity at the coalface which does not require the same level of intellectual sophistication and rigour as research. This approach doesn't help anybody and is reinforced by divisions in the tertiary sector that distinguish between research-intensive institutions and those that focus predominantly on teaching. Instead, we should be considering how we can build productive links between the two activities. In this chapter, we argue that using research to inform our teaching is a vital element in the reflection process and empowers us to keep developing our teaching in ways that can be transformative for ourselves and our learners.

RESEARCHING OUR PRACTICE

Consulting the scholarship of tertiary teaching

For many of us, researching practice may involve consulting the considerable literature on tertiary teaching which is now available. Often this is a good process to use before actively looking into an aspect of our teaching. The literature on tertiary teaching includes works by authors such as Biggs (2003) and Ramsden (2003) who draw on research findings and synthesise key ideas or introduce readers to certain theoretical perspectives. There is also a vast array of books that look at teaching and learning theory or discuss empirical research. Additionally, there is a wide range of higher education journals, both generic and discipline-specific. These journals contain articles which mostly report on teaching-related research and discuss its implications, while some articles discuss particular theoretical stances or viewpoints. If you are new to the research on teaching, articles in these journals can familiarise you with what's available in the field, demonstrate different methods and approaches and help you to get a feel for current perspectives in relation to the teaching of your discipline. Reading these works will help you to familiarise yourself with the tertiary teaching research terrain.

We encourage all teachers at any stage of their career to make a habit of regularly reading the current scholarship. In addition to the general benefits previously outlined, the research scholarship can provide you with specific insights and evidence to enrich your teaching perspective and practices. It can confirm for you where your practice is currently sound, and give you some ideas for extending that practice. For example, you may have been in the habit of getting regular feedback from your students on their learning progress, and the literature will reinforce the importance of this practice and extend your strategies for collecting systematic formative feedback. At times in our work, however, we have had tertiary teachers react negatively to this idea because they believe they need to concentrate on the research in their own discipline. Yet it seems unfortunate to ignore findings that can actually help us to deal with the unique teaching requirements presented by our discipline and the complex needs of our learners. For example, research on student learning orientations (such as that of Entwistle, 2010) may help us to understand why certain students do not respond well to the classroom environment that we create. A teacher who will not consult the evidence and continues with practices that are shown to be detrimental to learning is similar to a medical practitioner who continues to prescribe particular drugs after their adverse effects have been scientifically investigated and communicated.

As tertiary teachers, we need to consult the available scholarship to inform our practice in numerous ways. If, for example, you are unhappy with a particular part of a course, are finding students unresponsive or an assessment task unsatisfactory, the scholarship provides you with exemplars that you can use to reflect on your own context and situation as well as suggest alternative strategies for going about your work. Research findings can therefore give you tools to reflect on your practice and resources and strategies to trial in your own teaching. The scholarship of teaching in these ways lets you compare your practice with that of others who deliberately seek to improve teaching. An excellent recent resource on the scholarship of teaching and learning can be found in the journal *HERD* (Higher Education Research and Development), Vol. 30, No. 1, 2011, available online from www.informaworld.com/smpp/title~db=all~content=g931483210

This resource consists of a series of papers from various disciplines, showing how teachers reflect on and strive to improve their work, based on established scholarship.

Conducting a research investigation on aspects of your own practice

In the disciplines that we teach, we all expect ideas to be supported by evidence based on rigorous and systematic research. As scholars in our subject, we recognise the importance of evaluating both theory and practice and taking account of new findings. We encourage our students to make evidence-based decisions. We try to encourage them to think critically about a topic and consult different sources. In order to be professional

teachers with the capacity to continually revitalise and grow our practice, we should be willing to apply the same degree of rigour and critical scrutiny to our teaching work. Furthermore, informing our practice with research can sharpen the focus of our efforts to improve our teaching, enhance our confidence in the classroom and provide us with a language to communicate to others about effective practice.

How to conduct research on your teaching

There is no one right way for doing this, but we suggest that the model of action research is well suited to investigating your teaching. That's because its methods are open-ended and well suited to the complexities and continually evolving nature of our teaching and learning environments. Furthermore, the action research model with its elements of action and reflection is naturally suited to the ongoing process of teacher practice and reflection. Reflective practice operates by practitioners looking at their teaching and reflecting on how it might be improved. This is frequently a 'private' activity and is often not informed by relevant reading, nor are the results often published.

Extending this practice, action research

- *always* aims to improve practice in some way
- is collaborative, as practitioners work together to develop practice (although inquiries may *seem* to be undertaken by one person at times, they operate in a social context in which others are necessarily affected)
- seeks to draw on relevant reading or theory to provide a sound base for the work
- aims to share results with others, either in the immediate context or more broadly, recognising that given the localised nature of interventions, results may not always be generalisable.

It needs to be noted, however, that there are some criticisms made of action research. For example, Sarland (1995), analysing six action research projects funded in the United Kingdom, noted that "Criticisms of action research include the difficulty of developing valid insider research methodology; the dominant influence of academic discourses or, by contrast, the tendency of reports to rely too heavily on description; ignoring the wider contexts; an absence of reference to known research findings; inadequate training; and unacknowledged hidden costs" (abstract).

However, there is a wide range of teaching-based action research work happening around the world. Reference to websites such as that of Jack Whitehead (www.actionresearch.net/) or Jean McNiff (www.jeanmcniff.com) will enable you to check out international work that is occurring using the action research approach. An excellent introductory booklet on conducting action research is available free from Jean's

website (www.jeanmcniff.com/ar-booklet.asp). This is expanded upon very clearly in her book *Action research for professional development* (2010).

Closer to home, in *Reflection to Transformation: A Self-help Book for Teachers* (Zepke, Nugent, & Leach, 2003), one of the authors of this chapter presented work done in conjunction with a polytechnic staff member using action research (Bruce Ferguson & Kennington, 2003). This showed in a very practical way how Anne Kennington was able to improve her practice using the action research model. Anne taught foundation-level students in a computer-assisted learning programme, and struggled with their levels of literacy. Diagrams of Anne's process appear below.

» **Research question:** *What can I do to encourage the development of writing skills in computer-assisted learning students?*

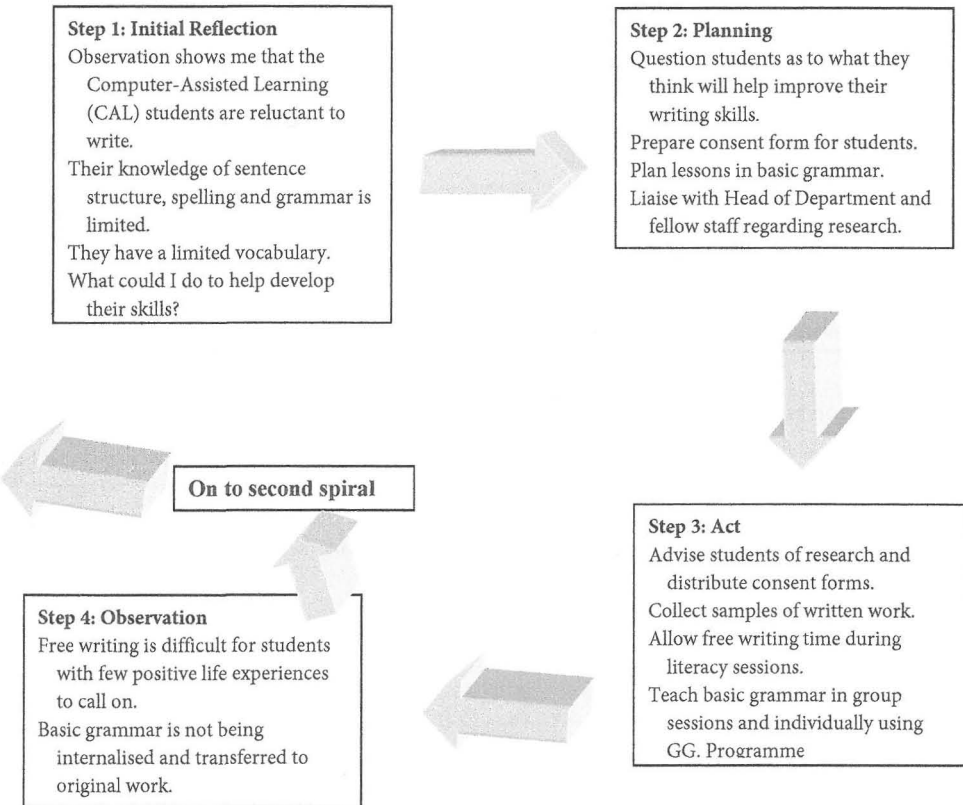


Figure 3.1 Action research planner, initial spiral – Anne Kennington

» **Research question:** *What can I do to encourage the development of writing skills in Computer-Assisted Learning students?*

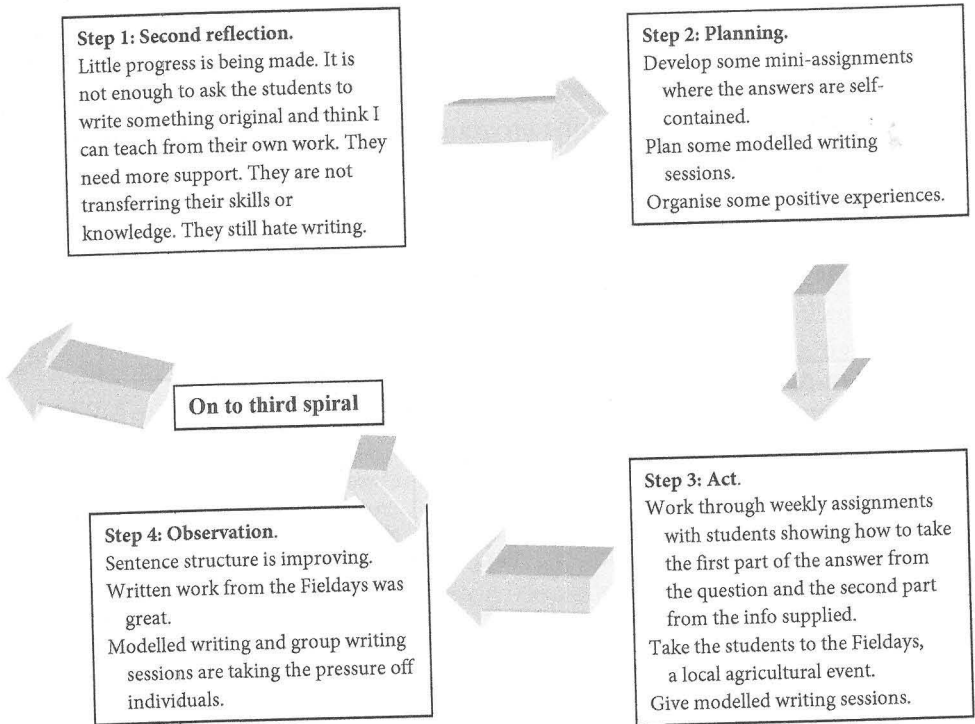


Figure 3.2 Action research planner, second spiral

» **Research question:** *What can I do to encourage the development of writing skills in computer-assisted learning students?*

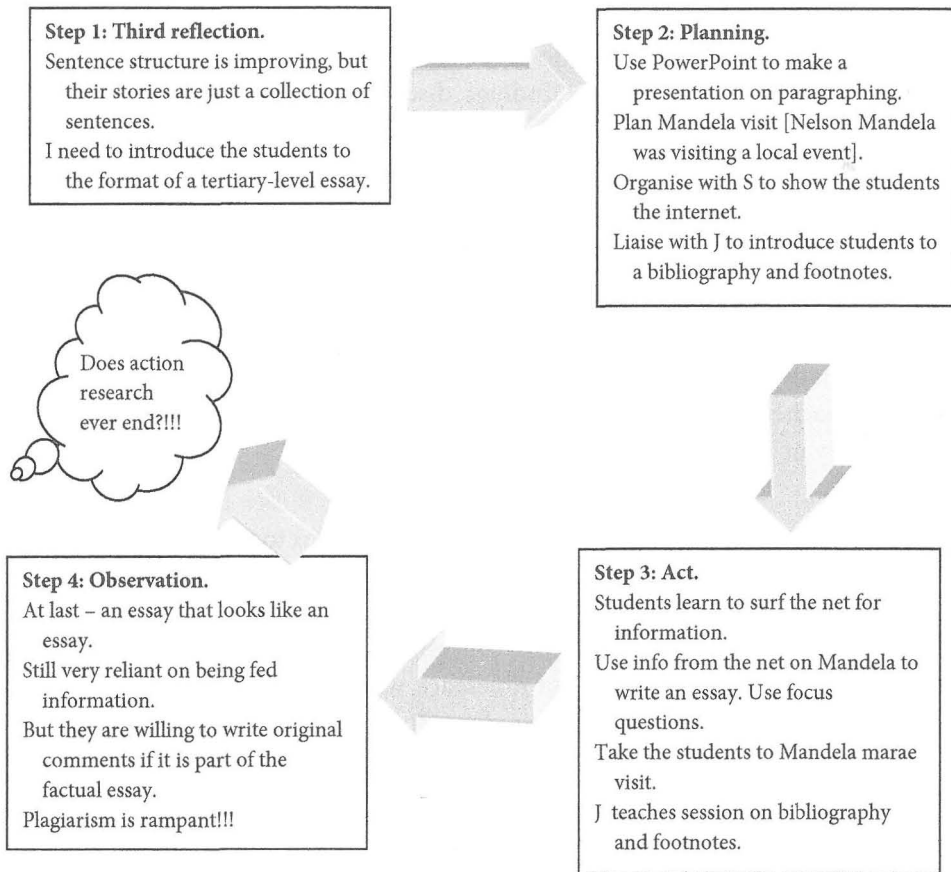


Figure 3.3 Action research planner, third spiral

Note: As you can see from this diagrammatic display of Anne's work, her inquiry is very practical and focused around the needs of her students and how she might better facilitate their learning.

In the rest of the chapter, we present examples of work from a variety of different professional and educational contexts. As Altrichter, Feldman, Posch, and Somekh (2008) state, "drawing on cases from different professional groups is enormously helpful in allowing us to better understand our own practice as action researchers. Differences

destabilise our assumptions and make it possible to ask new kinds of questions about our own cultural norms” (p. 5).

It is not essential to work strictly within the action research model, and in our Postgraduate Certificate in Tertiary Teaching [PGCert (TertTchg)] we simply ask participants to conform to a set of basic requirements. Students (tertiary teachers) have to conduct a research investigation into some aspect of their teaching or assessment, evaluate it systematically, report on the findings, discuss them in relation to the intended outcomes of the task or activity and the relevant literature, and suggest refinements for future work. Possible publication of the report in a relevant journal is also encouraged, although not mandatory.

The process has six essential steps.

- 1) *Students need to identify an area of their teaching or assessment that they want to examine closely within a research-based framework.*

There can be many different reasons for selecting a focus for investigation. In some instances, the teacher may be teaching something new or wanting to experiment with a different strategy or teaching approach.

Example:

Michele teaches Management Communication. She plans to teach a paper on events management for the first time. The radical aspect of her plan is that the primary assessment for the course will involve the students planning, running and evaluating an event. While these processes are taught in many tertiary management settings, the point of difference was that in Michele’s course, students will actually implement their plans. This will be done in groups. The events will raise money for charity and need sponsorship and publicity. All these activities involve a wide range of skills, including liaising with stakeholders, communicating in public and working effectively in teams. Michele is excited about the high level of relevant practical activities that the students will engage in, but concerned about the logistics and integrating the course into a university academic framework. Michele identifies her first attempt at designing this new course as an ideal focus of a research investigation.

The teacher may want to help students to develop an important skill or competency and be interested in investigating the best way for this to happen.

Example:

Anne is a teacher educator of chemistry. She believes in the importance of reflection for ongoing teacher development and initiates a weekly reflective component in her Chemistry Education paper. In the first iteration, Anne is disappointed with the surface and descriptive nature of the students’ reflections and decides to introduce a range of strategies to deepen the reflection process

and to conduct research to explore the effectiveness of these strategies. She recognises that for many of her students with science majors, reflection is a new and sometimes uncomfortable process. She also begins with the premise that reflection is something that needs to be both explicitly taught and practised.

The teacher may also want to investigate how best to support students when they are away on field-based or practicum study.

Example:

Pam is a nursing educator who is keen to help her students to engage more deeply in how to become effective practitioners, rather than just to meet assessment requirements. She has found, when supervising students on their clinical placements, that they are not accustomed to 'deep engagement' in conversations about how they are working with clients, preferring to discuss just the clinical aspects of what they are doing. She is interested in how to move them forward in their development.

Often, the prompt for the research investigation is an aspect of teaching or assessment that is troubling or niggling the teacher, and he or she wants to experiment with an intervention to deal with it.

Example:

Suzanne is a teacher in a management paper in which a considerable proportion of the assessment is done in groups. Suzanne has observed frequent communication problems and conflicts among group members, and she notices that the students often have inadequate records of group meetings, obligations and responsibilities. Arrangements are often made via text messages, so students often do not have even an email record of their interactions. Suzanne decides to try an intervention to improve group process and records. She decides to introduce a group log on Moodle and evaluate whether it can improve group communication processes.

In some instances, the teacher's research may be motivated by local issues that are important for the discipline:

Example:

Julia¹ wanted to investigate how to create a student-centred learning environment that catered for *industry* needs in her Certificate in Hairdressing Level 4 programme. She indicated that the programme has been constantly

¹ Julia is a winner of an Ako Aotearoa National Teaching Excellence Award (2007). She is not one of our PGCert (TertTchg) students, but has completed an adult education-related Bachelor of Applied Social Sciences. We have included aspects of her practice, with her permission, as she teaches in a 'trades-related' polytechnic programme.

redeveloped “to further encourage employment opportunities for students during and after course completion”. One aspect of Julia’s intervention was to look at ways of working across disciplines as well as seeking authentic learning experiences for her students.

- 2) *Once the student has identified the focus of investigation, he or she needs to consult the relevant scholarly literature.*

Consulting the literature helps to provide a practical and theoretical basis for designing and implementing a particular teaching or assessment task. Instead of relying on instinct, we can look to the scholarly literature to see what other people have done in similar contexts and also to investigate the kinds of learning and student engagement that our proposed initiatives may help to promote. Reading the literature may also indicate current gaps or difficulties in what we are proposing so that we can anticipate these complexities and instigate steps and processes to try and pre-empt them. Identifying gaps in the literature also enables us to find an area where we might extend knowledge through publications, if that is an issue for us. A further advantage of consulting the literature is that it can be very confirming for us as educators to see how and where we might already be using good practice in our own disciplines.

Example:

As Michele plans her new course, she starts by rehearsing her understanding of the principle of alignment as developed by Biggs (2003) as she is committed to trying to achieve a synergy between her learning goals, teaching and assessment. She also canvasses the discipline-specific management education literature to look for other examples of courses that teach events management. She looks to Kolb’s theory on experiential learning to provide the rationale for setting up a paper in which the experience of organising the event and all the associated activities provides the core learning of the paper. As the students will run their events in groups, she canvasses the literature on setting up and managing group processes (Kriflik & Mullan, 2007). The linking of the event to charity also leads her into a discovery of a literature on service learning which aligns well with her own goals for her students (Larson & Drexler, 2010).

One way that many of the staff on our PGCert (TertTchg) programme, as well as staff elsewhere, become familiar with the literature is through study towards further education-related qualifications.

Example:

Julia has developed a teaching philosophy of collaborative practice, authentic learning and flexible delivery partly from her own experiences as a hairdressing trainee, but also through her engagement in study to develop her own

knowledge and skills, thus modelling lifelong learning to her students and peers. As she says, reflecting on her BAppSocSci study, “I used the knowledge gained to further develop my student-centred teaching and learning strategies and share new concepts with colleagues.”

The literature review may also incorporate reading that will help you to design and evaluate your research as well as specific tools for assisting students to develop a particular competency.

Example:

Once Anne recognised the need for more active intervention to develop students’ reflection skills, she decided to use the model of action research as formulated by Cresswell (2005) to monitor her initiative. As reflection was her main focus, Anne needed to look at a range of sources that consider promoting reflective skills, particularly in the teacher education context (for example, Bain, Mills, Ballantyne & Packer, 2002; Moon, 1999). Anne also wanted to find a specific framework that student teachers could use to examine their use and development of chemistry-specific pedagogical knowledge. For this, she developed the framework articulated by Shulman (1987) examining Pedagogical Content Knowledge.

The literature that you draw on in your intervention may be both general education-related, and also relevant to your own specific discipline. Your own discipline-related literature can help you to see ways of bringing about improvements that you might not have considered on your own.

Example:

In investigating how to encourage students to engage more deeply with clients and discussion while out on clinical practice, Pam used both the nursing literature (e.g., Benner’s 1984 framework on novice to expert development in nurses) and general education literature (Biggs & Tang, 2007, on how to encourage deep rather than surface learning; Vygotsky, 1978; Kanevsky & Geake, 2004, on Zones of Proximal Development). These works showed her that there is a well-acknowledged problem in helping novice nursing practitioners to engage deeply, and also to consider how assessment types and loads might encourage a surface, rather than a deeper, approach to practice. Pam’s question, using an action research-based approach, is “What strategies can I employ to assist students on clinical placement to improve their critical thinking skills and maximise the learning opportunities provided by the placement?”

Some proposed initiatives may attempt to bring together strategies that draw on a mix of teaching and learning strategies and theoretical foundations.

Example:

For Suzanne, the essence of the problem that she had identified focused on communication and interpersonal dynamics in group learning activities. In particular, she wanted to develop an intervention that would promote better communication and documentation as well as a greater degree of accountability for each team member. While she had some ideas about getting the students to use Moodle for these purposes, she needed to begin by reading some current literature about typical difficulties in group work and strategies for managing them. A first look at the literature indicated to Suzanne that this was a very broad area and that she could be swamped by information, so she decided to focus mainly on a few research articles on group work in a Management context (Hansen, 2006; Forman & Katsky, 1986) and one more generic guide to group work (Stevens, 2007). This reading helped Suzanne to clarify her objectives and define what she wanted from introducing a Moodle component. She was then in a position to look at the relevant literature which discussed using Moodle for similar purposes and to evaluate the extent to which it could be implemented to support her pedagogical purposes (for example, Boateng & Boateng, n.d.; Leidner & Jarvenpaa, 1995; Milheim, 2007).

- 3) *After deciding on the focus for a research investigation and clarifying and refining the goals in relation to the relevant literature, the next step is to describe the design and the implementation of the teaching or assessment initiative.*

This step of the process is a straightforward one in which teachers outline their plan for the teaching or assessment initiative and describe its implementation.

Example from Anne's research:

"This year I introduced purposeful coaching of reflective skills into my pedagogy to scaffold students' learning of these skills and promote higher levels of reflection (Bain et al., 2002)." These strategies included

- exposure to learning experiences that provide the 'raw material' for reflection, that is, experiences which deliberately challenge their existing ideas about science and teaching science
- allocation of set periods of time (about 10 minutes) for reflective writing in each of the workshops after students engage in activities designed to increase their understanding of how to teach science
- use of Shulman's knowledge categories (1987) as a reflective tool (the categories identified by Shulman are: knowledge of educational purposes and values, content knowledge, general pedagogical knowledge, curriculum

knowledge, pedagogical content knowledge, knowledge of learners and their characteristics, and knowledge of educational contexts)

- explicit sharing of the nature of skills to be learned (Clarke, 2001) through the use of exemplars ... I used exemplars from previous years ... along with pieces of writing from current students
- focus on feedback that relates to the exemplars to improve journal writing (Hume, 2008, pp. 23–24).

The planned improvement should consider specifics, such as the particular learning needs of given groups of students.

Example from Pam's research:

“Drawing on the theory discussed I systematically planned my interaction with the students.”

Recognising from an initial consultation with students on placement that there was a wide diversity of ‘starting points of knowledge’, adapting practice to meet the diverse needs better, “I therefore adopted different approaches, as is compatible with student-centred learning, and also takes account of Vygotsky’s zone of proximal development (ZPD) ... The three areas I focused on were use of scaffolding, establishing students’ level of theoretical and personal knowledge or ZPD, plus use of critical reflection through dialogue and journaling. I also included tutorials and group discussion which aided discussion.”

Proposed improvements should also take into consideration the skills that the programme’s graduate profile says will be developed in students. In Julia’s case, this meant encouraging student autonomy and preparedness to enter their profession.

Example from Julia’s research:

“I set case studies that require students to solve these in groups, but also to discuss the results individually. Students working together, away from the course tutor, encourages autonomy, further assisting school leavers in their transition to the adult learning environment.”

Julia further developed a ‘Feature Artist’ block where successful international and local stylists have galleries and career outlines set up. These enable students to view the information and post questions, which are then answered by the stylist. The purpose of this activity is to develop student awareness of possibilities for their career development and to interact with people who started “from humble beginnings to rise to great heights”.

- 4) *At this point it is also essential for the teacher to decide on the strategies that will be used to evaluate the initiative. Teachers should be able to tell whether and how their initiative has been successful.*

One of the key elements of researching your practice is to design a way of evaluating it systematically. Journal editors sometimes comment that even experienced academic writers do not always take the rigorous approach to evaluating their teaching initiatives that they would in a research investigation in their discipline. In order to give research rigour to your study and to maximise opportunities for enhancing students' learning, it is valuable to use more than one strategy for evaluation. In particular, it is important to design an evaluation strategy that focuses specifically on the particular initiative.

Examples:

Michele designed her evaluation to incorporate a number of key components.

- In an effort to tap into the students' learning and to prompt metacognitive thinking, students were required to write an evaluation essay, worth 15 per cent, on the process of planning, designing and implementing an event. The guidelines invited students to examine a number of aspects of their learning process, including their experience of working in groups.
- A second method of evaluation was to hold a facilitated conversation in the final lecture period for the class to find out how students had felt about the course. The discussion was facilitated by one of the tutors on the course using a set of questions that were based on the model of Appreciative Inquiry.
- The third element in the evaluation plan was to co-design some specific questions with the course appraisals administrator so that the students could give feedback through the formal anonymous appraisals system.
- Michele kept a diary and recorded her own observations on the progress of the course.

Anne planned to evaluate the introduction of components to improve students' reflection skills through interviews with her students which were conducted and transcribed by an independent interviewer. The interview schedule included questions specifically related to each aspect of the initiative. To complement this in-depth feedback from the students, Anne focused on the quality of the reflections that the students produced, especially when compared with the previous iteration.

Suzanne approached the Teaching Development Unit at her university to help her to design and analyse a survey on the students' experience of using the Moodle log. She also sought information from course tutors who worked

in a first-hand way with the student groups. As well she monitored the logs to personally evaluate their usefulness.

Pam cross-checked the accuracy of her data in a variety of ways. She had her own reactions and notes on how the initiative was going, based on her 'expert' perspective; she asked students to keep reflective diaries which were available for reading; she monitored progress through her weekly meetings with students on clinical placement; she gathered data at student-directed tutorials.

- 5) *The evaluation will be conducted, and the teacher needs to analyse and report on the findings.*

In this section the teacher reports on the findings and tries to identify patterns in the feedback or the learning that the students demonstrated during the course of the initiative. This is a very important part of the research process, as it encourages us to determine how effective our intervention has been, and what, if anything, needs changing for future work. It also lets us determine, sometimes with peer advice, to what extent our changed practice is contributing new knowledge to the literature.

Example:

Michele learnt from the feedback and her own observations that many students were unhappy about the timing of the two-hour lecture on Wednesdays between 5–7 pm. In their evaluation essay, many students reported on the unequal quality of participation in the group's work.

From the formal appraisals, Michele recognised that many students did not fully grasp the connection between the learning outcomes and the assessment.

Michele's own reflections led her to recognise that in the two-hour lecture period she easily slipped into a transmission approach and did not get the students to take enough responsibility for their own learning.

Example:

The interviews conducted on Anne's behalf provided her with specific detailed feedback on the different components of the paper that she had introduced to coach students explicitly in the development of reflection skills. Additionally, she had students' reflection exemplars to help her to assess the level of competency that students achieved in reflection.

The interview responses, for example, confirmed Anne's practice of reading exemplars from the students in the class at each meeting. As one student commented:

“Yeah, I found it hard initially until I probably heard some other people’s writing and then I was able to go ... ‘Okay, that’s what they are after. I need to think a bit deeper, not just skim the surface.’”

Example:

Pam’s evaluation of her initiative showed success in some areas. Where a student had anticipated quickly getting bored in a restricted practice setting, her feedback was “I want to stay, there is so much more to learn.” Pam wrote: “This change in attitude, I think, can be linked to her growth in reflecting on her actions.” Pam credited her intervention with provoking lively dialogue on issues between students, noting that they seemed to want to ‘outdo’ each other in contributions. One said: “It’s really good when you question us, it *makes us think*.”

However, not all aspects of the research were successful. Her evaluation showed Pam that “Of all the initiatives, the reflective journal proved the least effective”. Her analysis of why this had been gave her some pointers about how to strengthen this initiative for future students.

- 6) *The discussion reports on the findings in relation to the learning outcomes, the theoretical framework and the themes from the literature.*

In this section, the teacher reports on the findings in relation to the goals of the initiative, the themes in the literature and discusses possible refinements for the next cycle of the work.

Example:

Students’ comments and Michele’s own observations led Michele to rethink a number of aspects for the next iteration.

She recognised that there was a lack of synergy between her transmission delivery in the lecture and her learning outcomes. Additionally, she realised that she needed to respond to the students’ perception of unfairness in group work. Michele plans to work on the design of the two hours allocated to lectures to respond to both of these concerns. The lecture, to be at noon on Mondays, will be one hour long. The following hour will be used for activities that require participation and also help to monitor group process. As she reports:

“the second hour of teaching will be in a form of online communication – which will get the individuals in the group active online with research for the event, writing goals and objectives and suggesting programming.”

Example:

Anne’s concluding comments return to the literature that informed her initiatives, but also emphasise the distinctive aspects of her own initiative which were validated by her findings. She concludes:

“This initiative has been based primarily on the application of well-known theories and strategies to develop student teachers’ reflective skills for enhanced professional learning through reflection (e.g., Schön, 1987; Shulman, 1987) ... However what I believe is significant about this study is the positive impact of pre-teaching these skills ... The targeted teaching included the use of timetabled slots solely for reflective writing early in the year, exemplars of reflective writing and regular feedback and feedforward comments from myself about their writing.”

At the same time, Anne plans to keep introducing different refinements to the initiative and to continue using the action research model to plan, implement and evaluate them.

Example:

At the end of her research project, considering progress from her own perspective, Pam wrote: “I was aware I was much more engaged with the students and felt empowered by their obvious enthusiasm for our sessions together ... I shall continue to employ these strategies in my future work.”

She felt that given her intention to encourage more critical thinking, take into consideration students’ differing zones of proximal development and how to better support them in their progress from novice to expert, she had been largely successful. “In the final analysis the strategies introduced did appear to stimulate the students’ critical thinking skills. This observation was supported by excerpts from student communications. More refinement may be required but the basic concepts appeared effective.”

CONCLUSION

As you have seen through the wide range of examples provided in this chapter, practitioner-based research is alive and well in New Zealand. Whether we do it for credentialling purposes (as have our PGCert (TertTchg) students and Anne Kennington); for Ako Aotearoa Teaching Excellence Awards (as has Julia); or ‘just’ to become better teachers because we care about our students, we challenge you, as we continue to challenge ourselves, to see how we can seek to improve our practice. You may find the action research approach a natural one to follow, or not. In a recent article Tay and Hase (2010, p. 5) cite a claim by Davis (2001) that people “are ‘hard wired’ for action research so that the capacity to be an action researcher is innate at birth and unconscious”. However, research by one of us (Bruce Ferguson, 1999) indicates that good teachers are reflective practitioners innately, and this is how they reflect upon and renew their practice, even if they don’t necessarily publish the results in any way.

We encourage you to consider how *you* can contribute to increased knowledge about teaching in *your* area, by carrying out your own research and publishing the results.

A good book for following up the ideas in this chapter is J. McNiff's *Action Research for Professional Development: Concise Advice for New and Experienced Action Researchers*.

If you would like to see if action research could work for you, do this exercise, described in McNiff (2010, p. 8). You could do it with a friend, or by yourself, using your reflective journal. (Your journal can be a beautifully expensive book or a systematic collection of papers, or even take the form of a series of emails or messages to friends on Twitter. Determine the best way to keep a record of what you are thinking.)

- Think of any work-based issue that you are interested in. Do you want to raise standards? Do you want to improve something? Do you want to help someone?
- Draw a picture of the 'thing' that you are interested in. Now draw a picture of yourself (perhaps draw a stick figure) and the issue you wish to investigate.
- Think: Where do you position yourself? Are you standing outside the issue, observing it but not doing anything about it? Or do you see yourself as part of it, influencing it?

Doing this exercise will help you decide whether you wish to do traditional research, where you investigate something 'out there'; or whether you wish to do action research, where you investigate something near to your heart with a view to taking action to improve the situation.

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