

The transformative power of reflection on teaching and learning roles in an online environment

Catherine McLoughlin

Australian Catholic University, Australia
c.mcloughlin@signadou.acu.edu.au

Reem Al-Mahmood

University of Melbourne, Australia
reem@unimelb.edu.au

Abstract: *According to Arthur Koestler, “Creativity is a type of learning process where the teacher and pupil are located in the same individual”. To teach successfully, one must also learn, and one of the most effective ways of learning is to teach another. This reciprocity and duality of roles is central to reflective practice. Teachers and online course developers need to experience online learning in order to become reflective practitioners, and thereby enrich praxis through creating challenging online learning environments. Educators can do so through engagement in learner roles through experiential online learning, thereby enabling transformation and deep reflection on online teaching. Using qualitative in-depth interview techniques with a group of online educators/ students, the study explores perspectives on reflective practice afforded by these experiences.*

Keywords: *online pedagogy, reflective practice, learning environments*

Introduction

We often hear about reflective practice through professional development courses and quality assurance monitoring, but more often than not reflection as a practice needs to be propelled and practised. Reflection may not be an activity that we engage in easily as part of our day-to-day professional practice (Burge, Laroque & Boak, 2000), and especially during intensive teaching. However, reflection can help in questioning and exploring underlying assumptions, values and beliefs and move us into new zones to inform our praxis (action-in-reflection) (Brookfield, 1995). Ultimately, “Reflection leads to self-knowledge and this is fundamental to the development of our professional practice” (Kuit, Reay & Freeman, 2001: 139), within formal and informal spheres for example through staff development programs or other avenues.

The paper draws some significant inspiration from the work of Elizabeth Burge et al. (2000: online) who emphasise “that it is time now to encourage the writing of intrapersonally reflective and frank records of our experience with Web-based practice”, out of which began the investigation described in this paper on developing transformative practices. First the literature on reflective practice is outlined, and the reflective practices of web-based practitioners is described. We then outline our methodology, results

and discussion of interviews with 5 online educators/ students across two Australian universities. The research focuses on ways to rethink/improve online teaching through engagement in experiential online learning in order to improve and transform pedagogical practices. Educators achieve improvement by reflecting on and extending their own roles and by listening to student experiences, allowing for a heightened sense of awareness of learner needs. The findings can inform how reflective practitioners can provide engaging and empowering online teaching and learning environments that extend our reflective practices to extend established pedagogies (Al-Mahmood & McLoughlin, 2004).

Transforming practice through reflection

Reflection is a key factor in improving our teaching and learning and has been emphasised by many theorists and practitioners. Schön (1983) was one of the first in his pioneering work to advocate that both ‘knowing-in-practice’ and ‘reflection-in-practice’ are innate practices and that ‘reflection-on practice’ is a retrospective practice. Reflective observation also became a key component of Kolb’s (1984) learning cycle positioned in the second phase. It was indeed Dewey (1933) who first emphasised the importance of reflection based on experience. Since then many others have developed and expanded on the notion. The seminal works of Schön (1983, 1987, 1995) suggest that the ability to ‘reflect-on-action’, which is to engage in a process of continuous learning, was a crucial feature of professional practice. He was strongly against professional training models of ‘Technical Rationality’ — which involved giving participants materials to apply later in the world of professional practice, and he argued that this contradicts how professionals ‘think-in-practice’. Schön (1987: 123) saw ‘knowing-in-action’ and ‘reflection-in-action’ as “increasingly complex components of reflective practice”. Reflection-in-action requires “restructuring, theories of phenomena, or ways of framing the problem ...” (Schön 1987: 35). Reflection-on-action is a more retrospective process and another important component in Schön’s theory of reflection. The cultivation of the ability to reflect in-action (during the event) and on-action (after the event) have become important elements of professional training and staff development programs in many disciplines, at least in theory.

To add to the multiplicity of the issues of reflective practice, there are various other works on reflective practice and ways of ‘doing reflection’ that have been used since Schön’s (1983) seminal publication, despite its suggested weaknesses and lack of reflexivity, as it still counterbalances techno-rationalist perspectives of developing professional practice. Reflection is now seen as a generic professional skill (Brookfield, 1995; Connelly & Clandinin, 1999; Schön 1983, 1987, 1995). Some of these various methods advocated by theorists have been summarised by Kuit et al. (2001).

Whilst there are many ways ‘to do’ reflection, a useful generic definition is suggested by Boud, Cohen & Walker (1993) where reflection involves the description of the processes of exploring the experiences to enhance understanding. So even though reflection techniques are varied, it is one of the important ways of learning about one’s own practices of teaching and learning that moves beyond prescriptivist ‘telling’ modes of professional practice. “Therefore, reflective practice is about the process of teaching rather than about a simple evaluation of teaching, questioning why we do something rather than how, and most important of all, learning by this process. This is a continual reiterative process, which can be visualized as an infinite line of connected loops with each loop representing a cycle of reflection” (Kuit et al., 2001: 130-131). Reflection in its various forms encompasses multiplicity and its aim should always be to improve learning. Applying this principle to our research, the aim was to investigate the reflections of online teachers when they assumed the student role and learnt first hand the essence of an online experience.

Online educators' perspectives

There are a handful of notable online practitioners who utilise reflective practices as an integral part of their work. Notably Burge (1993, 1994, 1996, 2000a, 2000b), Burge and Haughey (2001) and Evans and Nation (2000) who have looked at reflective practices of teaching from an educator's perspective and investigated students' reflective practices regarding online learning experiences. Gunawardena (2001: 119), another significant reflective practitioner, from the teaching and learning perspective adds: "I continue to be interested in examining evaluation questions related to learning from two perspectives: What did participants learn about the subject that was discussed? And what did they learn about the medium of computer conferencing and its influence on the learning process?". She also discusses her own online role shifts from teacher-centred to student-centred teaching. Others such as Campbell-Gibson (2000) explore reactions and reflections on the teacher role as an online educator based on her students' reflections. Salmon (2000) provides some reflections on the experience of being an online facilitator and suggests the need for more action research to inform practice. Many reflective practitioners have been calling for greater understanding of the student experience in terms of the 'lived-experiences'. O'Regan (2003) also reports on online student experiences from phenomenological perspectives, beyond quantitative analysis and course outcomes. In summary, these studies indicate that the impetus for investigation must come from educators and designers not driven by technology, but by student needs and the desire to create improved social spaces for learning. Both factors need to be tied in to reflective practices of educators about teaching and learning online.

Rationale for the study

The reflective practice literature about online learning described above is still in its infancy and has focused on reflection from either the teaching role or the student experience. What has not been done to date in any significant way is reflection on online teaching roles and practices through changing roles from online educator to authentic online student (except for example, Robinson 2000a and O'Reilly & Ellis, 2002). What is suggested in this study is that this experience can provide a powerful way to experience being an online student to and hence, to inform teaching practice based on heightened awareness of the online 'lived-experience'. The accompanying reflective process is one that moves beyond the traditional paradigms of professional development courses that 'tell' about how to teach and learn online. By actively shifting roles from online teacher to online learner, we can challenge Ball's (cited in Kuit et al. 2001: 129) notion that "Reflection has become little more than a mantra rather than a model of practice".

The study drew upon data collected from online teachers who had also experienced being online students, and the major thrust was centered on:

1. how direct experience of learning online triggers reflection on online pedagogy;
2. how the experience of being an online learner could lead to change in pedagogy.

Participants and instruments used

Participants who had experiences of being both an online educator and an online student, involved calling upon colleagues and using snowballing techniques (Patton 2002). The participants were educators at tertiary level in the higher education sector and one also had previous experience in the TAFE sector, with adult learners. All had been online educators first, prior to being online students, except in one case where the person had been an online student first. All had considerable experience teaching online in university settings.

Questions were designed for in-depth interviews using elements of reflective phenomenology (Van Mannen, 1990, 1995), as Burge (1993) and others have called for more phenomenological explorations of 'being online' from student perspectives. In designing an interview schedule the variety of reflective practice techniques, described earlier, were used asking participants about their stories about online experiences. They were then asked to reflect on critical incidents and the best and worst online encounters, how they experienced interaction and support as learners, their perceptions of roles, learning and dialogue and how these experiences would in/trans/form their online teaching. These were elicited through reflective face-to-face interviews with participants who were with five teachers across two Australian universities across two states. Interviews ranged between 45 minutes to two hours. The interviews were recorded and transcribed and thematic analysis was used after listening and reading over the transcripts a number of times. Open coding and then axial coding was used for the emergent themes (Miles & Huberman, 1994; Strauss & Corbin, 1998). The data was analysed by two researchers, in order to ensure inter-rater reliability.

Analysis of data and summary of emerging themes

In the following sections, the results are summarised and outlined, while the overall emergent themes regarding shifting to the online student mode are discussed. Rich data from participants is used to illuminate each of the categories presented. In the final section some of the transformations/re-learning that participants described for their online teaching are described in the light of their experiences as online students. Applications and recommendations for practice are then drawn out of these scenarios. The responses were categorised under the 5 issues of (1) presence, relating to teacher presence, feelings of isolation and engagement; (2) access and equity, relating to technical matters and flexibility; (3) empowerment issues, relating to experiential dimensions such as autonomy, fear, emotionality, communicative ease; (4) metacognitive aspects, relating to learning about one's own style, learning preferences and motivation; and (5) pedagogical aspects which include matters of feedback, support, clarity of instructions and roles. Table 1 summarises the emergent themes and key phrases about the experience of being an online student.

To illustrate and validate these themes, some of the participants' quotes are revealed. Each of the five categories is illuminated by using direct quotes from respondents.

Presence issues

The lecturer didn't come into the picture at all. I see a lazy lecturer who put up everything for everyone to read and that was it. But where is the lecturer's voice? (Dianna)

Access and equity issues

I got a big buzz of being able to sit at home and access the journals, when I was in another country. (Brenda)

Empowerment issues

It was mainly with international students... and I adored it! Because of the time differences I couldn't wait to get up in the morning to see what had been posted up the previous night! Oh it was just totally addictive!... We had such a lot of fun on this course! (Connie)

Metacognitive issues

[I] Learnt about my own learning style. (Anne)

Pedagogical issues

The best part was knowing that one could contact the tutor anytime and get some guidance. (Anna)
With the best course I did, we got individual private feedback each week based on reflections from the teacher. Absolutely fantastic! (Connie)

Presence issues		
Where is the lecturer's voice?	Invisibility/ Visibility online	Isolation
Would still like to meet people face-to-face	Dominant voices online	Engagement
Access & equity issues		
Convenience	Flexibility	Access to resources
Social convenience	Passwords	Freedom
Access to lecturer/tutor	Technical aspects	Diversity of participants
Barriers flying up unexpectedly		
Empowerment issues		
Addictive (in a positive way)	Student-centred	Learner autonomy
Very positive experience	Constructivist philosophy	Enabling communication
Fun	Own pace	Intimidated to respond to forum
'Glorified text'	Gender issues and styles online	You hear different voices online
Learning new skills		
Metacognitive issues		
Opportunity to reflect on self	Reflect on motivations to study	Maintain motivation
Reflect on learning preferences	Be self-directive	Opportunity to learn about own practice
Raising awareness of student online perspectives		
Pedagogical issues		
Assessment overkill	Unclear about quantity and quality of contributions	Need to move beyond 'glorified text' online
Unclear expectations between hurdles and compulsory aspects	Takes much longer/ need more time	Pressure to contribute to forum
Need to belong to community Feedback needs to be two-way	Needs to be socially rewarding Knowing what's going on?	Timely feedback Individual private feedback essential
Progressive feedback is essential Lack of time to think & reflect	Compulsion and assessment types	Importance of facilitation expertise

Table 1. Some emergent themes and key phrases from online educators about being online students

The data also revealed the centrality of the role of the teacher online, although the pedagogy is nevertheless student centered. “The teacher, or if you wish the facilitator, plays a key role throughout the e-learning experience – even when the discourse and activities are controlled by the students. The teacher is an ever-present and key person, managing and monitoring the process. We suggest that teacher presence is a necessary part in both formal and non-formal learning contexts” (Garrison & Anderson, 2003: 75).

The themes are congruent with what has emerged in the literature about online student experiences. For example, many studies already reveal the importance of presence in its variety of forms from social, cognitive to teaching presence (e.g. Tu, 2002; Garrison & Anderson, 2003; Gunawardena & Zittle, 1997; Stacey, 2000; Hudson, 2002a, 2002b). Also, Burge (2000a) highlights that the type of strategies that adults use are metacognitive. “Becoming oriented, managing the learning process, and evaluating outcomes all require metacognitive strategies in knowing how to plan, regulate, and assess learning” (p.11). Her learners said that the “most important skills in learning with technology are self-direction, self-discipline, self-motivation, time management, taking initiative, staying on track, and skills in organising resources” (p.11).

Transformations to teaching online

By actively becoming reflective practitioners, participants commented that their conceptions of their role had changed and moved beyond familiar notions of online teaching. The experience of being an online student was extremely valuable as Brenda indicated: “... raising awareness of the student view is important” and Dianne said: “It is a must for everyone!” Given the range of online student experiences depicted by our participants, the predominant themes for changing pedagogy, related to presence, pedagogical issues, metacognitive and access and equity issues. The next section provides a summary of the way that the participants have suggested they would transform rethink their teaching as a result of their online student experiences, together with comments made by the teachers themselves.

The transformational shifts identified by participants were categorised as (1) The need to move beyond familiar practices – to be aware of new possibilities, such as blogging and wikis Brenda commented: “*I think that setting it up so that students can follow a course of study independently without any hiccups is a goal for now; also I would definitely encourage more web publishing by the students, creating websites to display*”. (2) Establishing presence through greater visibility and proactive support, as Connie highlighted: “*I guess it’s just about remembering that it is a person on the other end. That it is a person on the other end of the text... it is flesh and blood*”; and also emphasised by Brenda was the importance of establishing belonging: “*You must establish a sense of belonging! What people are not necessarily seeing when they move into online is the need to establish this feeling of belonging to the students or this feeling that someone out there cares and knows who they are and where they are and knows what’s happening*”; (3) Improving assessment practices and provide ongoing feedback, as Donna commented: “*If you are going to lecture in an online environment then assessment has to be very clear in what to expect*”. (4) Being aware that online teaching is different from face-to-face. Donna’s comments illustrates this point quite clearly: “*We aren’t taking advantage of the web structure, it’s about having multimodality versus linearity. We need to take advantage of this.*”. (5) Being reflective and aware of one’s own teaching approaches. Brenda said: “*Raising awareness of the student view is important and also for staff raising their awareness of what’s out there... if you don’t know what’s possible, how can you decide what to bring into your teaching?*”

Conclusion the centrality of reflective practice

Koestler’s quotation cited in the abstract, emphasises that creative teaching requires approaches where “the teacher and the pupil are located in the same individual”. Participants in this study assumed learner roles in their quest for self-knowledge and insight into online teaching. Their experiences demonstrate

the centrality of becoming a reflective practitioner, as the ultimate goal of learning to teach is to make enduring changes and improvements in practice. In this micro study of a number of online teachers, the individual reflection on practice were evident when participants revisited and critiqued their own pedagogies, during and after teaching online. The process was not linear, but spiral as the teachers emerged from the experience with action-oriented alternative solutions to how they might teach online, and meet the needs of their students. The reflectivity engaged in by participants was situated within their professional experience, and was transformative insofar as it resulted in changes to how they would teach online.

In summary, the reflections of participants in this study highlight that being reflective about our professional practices can help us engage in a dialogue between our thoughts, beliefs and actions to allow our practices to evolve creatively, and help to improve practice.

References

- Al-Mahmood, R., McLoughlin, C. (2004). Re-learning through e-learning: changing conceptions of teaching through online experience, In *Beyond the Conference Zone, Proceedings of the ASCILITE Conference*, 2004 (In press).
- Ballantyne, R. Bain, J. D. & Packer, J. (1999). Researching university teaching in Australia: Themes and issues in academics' reflection. *Studies in Higher Education*, 24 (2), 237-257.
- Boud, D, Cohen, R. & Walker, D. (Eds) (1993). *Using experience for learning*. Buckingham, England: Society for Research into Higher Education and Open University Press.
- Brookfield, S.D. (1987). *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting*. San Francisco, CA: Jossey-Bass.
- Brookfield, S.D. (1995). *Becoming a critically reflective teacher*. San Francisco, CA: Jossey-Bass.
- Buckingham, S. (2003). Perspectives on the experience of the learning community through online discussions. *Journal of Distance Education*, 18 (2), 74-91.
- Burge, E. J. & Haughey, M. (Eds) (2001). *Using learning technologies: International perspectives on practice*. London: Routledge.
- Burge, E. (1993). *Students' perceptions of learning in computer conferencing: A qualitative analysis*. Unpublished doctoral dissertation, University of Toronto, Ontario. Accessed 22 June 2004, available online at: <http://www.lib.unb.ca/Texts/EducationReserves/Burge.html>
- Burge, E. J. (1994). Learning in computer-conferenced contexts: The Learner's perspectives. *Journal of Distance Education*, 9 (1), 19-43.
- Burge, E. J. (1996). Inside-out thinking about distance teaching: Making sense of reflective practice. *Journal of American Society for Information Science*, 47 (11), 843-848.
- Burge, E. J. (2000a). Synthesis: Learners and learning are the issues. In E. J. Burge (Ed), *The strategic use of learning technologies: New directions for adult and continuing education*, 88. (pp. 89-96). San Francisco, CA: Jossey-Bass.
- Burge, E. J. (Ed) (2000b). *The strategic use of learning technologies. New directions for adult and continuing education*, 88. San Francisco, CA: Jossey-Bass.
- Burge, E. J., Laroque, D. & Boak, C. (2000). Bearing Professional Souls: Reflection on Web Life. *Journal of Distance Education*. Retrieved 25 May 2005 from: <http://cade.athabasca.ca/vol15.1/burge.html>
- Campbell-Gibson, C.C. (2000). The ultimate disorienting dilemma: The online learning community. In T. Evans & D. Nation (Eds), *Changing university teaching: Reflections on creating educational technologies* (pp. 133-146). London: Kogan Page.
- Connelly, F. M., & Clandinin, D.J. (Eds) (1999). *Shaping a professional identity: Stories of educational practice*. New York: Teachers College Press.
- Evans, T., & Nation, D. (2000). *Changing university teaching: Reflections on creating educational technologies*. London: Kogan Page.
- Garrison, D. R. & Anderson, T. (2003). *E-Learning in the 21 Century*. London: Routledge Falmer.
- Gunawardena, C. N. (2001). Evaluating online learning and teaching. In E. J. Burge & M. Haughey (Eds), *Using learning technologies: International perspectives on Practice* (pp. 115-124). London: Routledge.
- Gunawardena, C. N. & Zittle, F. J. (1997). Social presence as a predictor of satisfaction within a computer-mediated conferencing environment. *The American Journal of Distance Education*, 11 (3), 8-26.
- Hudson, B. (2002a). Critical dialogue online: personas, covenants, and candlepower. In E. Rudestam, & J. Schoenholtz-Read, *Handbook of online learning: Innovations in higher education and corporate training* (pp. 53-90). Thousand Oaks, CA: Sage.

- Hudson, B. (2002b). The jungle syndrome: Some perils and pleasures of learning without walls. In E. Rudestam, & J. Schoenholtz-Read, *Handbook of online learning: Innovations in higher education and corporate training*. (pp. 185-220). Thousand Oaks, CA: Sage.
- Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood-Cliffs, NJ: Prentice-Hall.
- Kuit, J. A., Reay, G. & Freeman, R. (2001). Experiences of reflective teaching. *Studies in Higher Education*, Oc, 24 (3), 315-330.
- O'Reilly, M 2002 'In at the deep end – swapping roles through staff development online' in A. Williamson, C. Gunn, A. Young & T. Clear (Eds.), *Australasian Society for Computers in Learning in Tertiary Education, Auckland: UNITEC Institute of Technology*, pp. 485-494. Retrieved 25 May 2005 from <http://www.ascilite.org.au/conferences/auckland02/proceedings/papers/206.pdf>
- Miles, M. B. & M. A. Huberman (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks: Sage Publications.
- O'Reagan, K. (2003). Emotion and e-learning. *Journal of Asynchronous Network*, 7 (3), 78-92. Accessed 22 June 2004, available online at: http://www.sloan-c.org/publications/jaln/v7n3/pdf/v7n3_oregan.pdf
- O'Reilly, M 2002 'In at the deep end – swapping roles through staff development online' in A. Williamson, C. Gunn, A. Young & T. Clear (Eds.), *Australasian Society for Computers in Learning in Tertiary Education*, Auckland: UNITEC Institute of Technology, pp. 485-494 <http://www.ascilite.org.au/conferences/auckland02/proceedings/papers/206.pdf>
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications.
- Robinson, P. (2000a). *In the Matrix: A Hermeneutic Phenomenological Investigation of Students' Experiences in Web-based Computer Conferencing* (PhD Thesis). Accessed 22 June 2004 from <http://www.otal.umd.edu/~palette/Dissertation/reflections.html>
- Robinson, P. (2000b). The body matrix: A phenomenological exploration of student bodies on-line. *Educational Technology and Society* 3, (3). Accessed 22 June 2004, available online at: http://ifets.ieee.org/periodical/vol_3_2000/c05.html
- Salmon, G. (2000). *E-moderating: The key to teaching online*. London: Kogan Page.
- Schön, D. A. (1987). *Educating the reflective practitioner*. San Francisco, CA: Jossey-Bass.
- Schön, D.A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D.A. (1995). Knowing in action: The new scholarship requires a new epistemology. *Change*, 27(6), 27-34.
- Stacey, E. (2000). *Quality online participation: Establishing social presence*. Ch 13. Accessed 20 July 2004, Accessed 25 May 2005 from <http://www.deakin.edu.au/education/RIPVET/conferences/completed%20conferences.htm>
- Strauss, A. & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Tu, C. (2002). The measurement of social presence in an online learning environment. *International Journal on E-Learning* 1(2), 34-45. Accessed 20 June 2004 from <http://www.aace.org/dl/files/IJEL/IJEL1234.pdf>
- Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Canada: Althouse Press.
- Van Manen, M. (1995). On the epistemology of reflective practice. *Teachers and teaching: Theory and practice*, 1(1), 33-50.

Copyright © 2005 Catherine McLoughlin and Reem Al-Mahmood: The author assigns to HERDSA and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The author also grant a non-exclusive licence to HERDSA to publish this document in full on the World Wide Web (prime sites and mirrors) on CD-ROM and in printed form within the HERDSA 2005 conference proceedings. Any other usage is prohibited without the express permission of the authors.