



Colloquia

Effective critical reflection: Creating a sustainable culture during (and after) initial teacher education

Kathryn White
New Zealand Tertiary College

Since the early 1980s reflective practice has been widely endorsed as a well tested and valued means of understanding our teaching and of prompting its development. In the early eighties, in their synthesis of several studies on the topic, Boyd and Fales (1983) expressed the groundswell of the time when they foresaw that reflective learning would become “an extremely significant concept in the future” of professional learning and in their heightened enthusiasm claimed there was no need to “await the findings of further studies to confirm the importance of reflective learning” (p. 114). Calderhead (1989) was less convinced. He noted that, in the discussion of the nature of the professional training of teachers, ‘reflective teaching’ had become a widely used term. Referring to the term’s proliferation in pre-service training, he perceived a danger of it becoming more a slogan than an effective strategy. Calderhead acknowledged that many idealised models of reflection alternatives had not yet been fully explored and pointed out the lack of empirical testing.

The debate has continued over time yet reflective practice remains at the heart of many teacher education programs. In this article I reflect on the discourses associated with reflective practice as an effective tool in the development of teaching and learning, and the role of educational leaders in promoting a culture capable of sustaining a daily habit of self-inquiry leading to successful outcomes. I explore the importance of reflective practice to my teacher education institution, and through a survey of 17 educators involved in postgraduate studies in educational leadership. These educators were asked to identify the factors hindering their own reflective practice in New Zealand today.

That *critical thinking* about teaching practice and learning should be an integral part of being a teacher is not generally in dispute. A commitment to the ongoing production of critical thinking reveals a commitment to growth and development. Researchers who question *reflection* as a valid tool would be hard pressed to argue against *critical thinking*. Creating a culture of *reflection/critical thinking* requires practitioners to engage meaningfully, whether or not the reflections are to be shared or assessed.

Colin Gibbs (2006) distinguishes between *reflective* (deliberate, contemplative) and *reflexive* (spontaneous) thinking, presenting a useful distinction. Effective *reflective practice* must have at its heart a commitment to active and deliberate critical thinking. Much of the writing on the topic of reflective practice in teaching and learning derives from a few key theorists beginning with the “seminal impact” (Ottesen, 2007, p. 31) of John Dewey (1910, 1933). Reflection has many definitions in the context of teacher cognition (Gibbs, 2006) but primarily involves structured activity in response to a need to find a solution. Here, uncertainty provokes an active and organised searching, rather than a random stream of consciousness of general thought processes, in order to find materials that will resolve a doubt and settle a perplexity (Dewey, 1910, 1933).



One criticism of reflection revolves around the term *reflection* itself for we may ask if this is not something we do every day anyway, as natural as breathing? The writing down of reflections for a teacher is then one way of making these important thoughts more organised, obvious, structured and explicit. “When we take the trouble to write something down” then we “take ownership... and think more deeply” (New Zealand Tertiary College [NZTC], 2007, p. 17).

An interest in reflective thinking as a tool for teachers to improve their practice came about “partly as a reaction to the overly technical and simplistic view of teaching that dominated the 1980s” (Mohlman Sparks-Langer & Berstein Colton, 1991, p. 37). In the late 1970s when I embarked upon my own teaching career this technical approach was indeed the main focus and staff room folklore was that teachers learnt from being thrown in at the deep end (Calderhead, 1989) – the ‘sink or swim’ methodology, or as it would have been formally described: the experimental and quantities research tradition (Mohlman Sparks-Langer & Berstein-Colton, 1991).

Donald Schön (1987) took reflective practice a stage further and his explorations of the topic are often “considered a watershed” (Ottesen, 2007, p. 31) with his concept of reflection-in-action and the importance of linking theory with practice. Schön places teaching among those professions which require the context of practice to create the information to create effective change (Hammerness, Darling-Hammond, Bransford, Berliner, Cochran-Smith, & McDonald, 2005). Loughran (2002) emphasises, as the most important aspect of developing reflective practice, the ability to ‘frame’ and ‘reframe’ (Schön, 1987). Such theories support the importance of coaching and the utilization of mentors for novice teachers.

Valid experience

One of the main requirements of effective reflection is the need to have *valid experience* on which to reflect. Novice teachers may lack the schemata to allow for this. Beginning teachers are often too busy mastering the basic skills of organisation and keeping their head above water to be able to reflect on their own practice. Leinhardt and Greeno, (1986) suggest that experienced teachers have deeper and better developed schemata, or scripts, to draw upon when making a decision in contrast to the less experienced. Novices may also lack the theory or knowledge to answer the questions they set for themselves

The validity of a teacher’s judgment drawn from relevant experience, though well accepted in teacher education by the end of the twentieth century (Costa & Kallick, 2000) is not confined to educational practice. Writing from a business and commercial viewpoint, Daudelin (1996) concludes that the development of reflective practice requires someone to model it with basic questions and instructions as produced in her *Reflection Workbook*.

Loughran (2002, p. 33) cautions that an expert cannot simply instruct students how to reflect, likening such techniques to “a lecture on cooperative group work”. He reminds us that reflective practice, however useful and informing, is of no use if not effective in its goal – to offer a lens for questioning existing practices and assumptions from new perspectives. Annan, Lai and Robinson (2003, p. 34) consider inquiry into existing practice and reflection on the alternatives as a fundamental collaborative task in the



improvement of student learning, and stress the importance of there being an expert involved in the process to balance teacher-led reflection and inquiry. They admit that the learning talk at the basis of reflection is not always easy in our school culture as it can involve practitioners moving out of comfort zones and accepting critical feedback.

Ottesen (2007) argues that although reflective practice is now well established in teacher education and professional development programmes the concept remains rather vague. In her study she analyses reflective conversations between student teachers and their mentors, introduces the term 'modes of reflection' (the direction that the reflection takes) and the cultural resources utilised, and identifies and explores three such modes: as induction to warranted ways of seeing, thinking and acting; as concept development and as off-line or imagined practices. She distinguishes between "reflection as an objective... and reflection as a discursive tool in mediating learning" (p. 32). Ottesen's focus is on *how* these reflective conversations take place and *what* they accomplish and refers back to Vygotsky's (1986) recognition of reflection embedded in sociocultural contexts. However, Ottesen accepts that while reflection is generally assumed to promote understanding and insight this view is disputed by others.

Cornford (2002) is one such sceptic who, like Calderwood (1989) two decades earlier, is strongly critical on the basis of the lack of empirical evidence to support the view that increased reflection will result in improvements in teaching and learning. He is wary in general of fashions in teaching but accepts that there is much and long lasting enthusiasm for the approach. Cornford (2002) calls for an approach where the technical teaching skills and techniques applauded in the 1970s and 1980s are merged with reflective practice. This in my view would appear logical and desirable.

Barriers to effective reflection

If we accept the majority belief that reflective practice is advantageous to the improvement of teaching and learning how then do we proceed? A key barrier appears to be the contexts through which reflective practice can be supported. According to Cole (1997) we are thwarted by numerous impediments to reflective practice. Cole highlights a theory-practice rift having emerged where educational research has not helped teachers to *become* ongoing reflective practitioners. Cole considers the stumbling blocks of effective reflective practice and explores two related observations on the role of reflection in teachers' professional lives: firstly that many teachers who employ systematic reflective practice do so secretly away from their place of work; and secondly that while reflective practice has become mainstream in the academic and educational community the professional contexts do nothing to support it.

Effective professional learning communities require safe and non-threatening environments. Cole outlines major impediments to reflection created by the conditions in which teachers work in their external and, referring back to Jersild's constructs (1955), internal psychological structures. Cole reflects on certain physical scenarios where her own experiences support her claims of professional scepticism, unsupportive and judgmental colleagues and physical and mental exhaustion. Her illustrative scenes elucidate the "conditions that facilitate or constrain practice" (p. 10).



In order to consider some of the current impediments to reflective practice in the early childhood sector in New Zealand today it is also important to recognise the shortage of qualified teachers. Five years after the launch of *Pathways to the future: Ngā Huarahi Arataki*, the 10-Year Strategic plan for early childhood education (Ministry of Education, 2002), early childhood centres are desperate to put newly qualified and provisionally registered teachers into leadership roles; acting as mentors to student teachers. I would argue that this may not necessarily always be as dangerous as might otherwise appear for, as Cameron (2007) points out, “unlike their colleagues in the school and state kindergarten sectors, many Provisionally Registered Teachers may have been teaching and studying...for many years” (p. 6). However, it is certainly far from ideal when issues of high workload and management demands take precedence. The international literature and research on induction in early childhood settings in particular is sparse. One study in Queensland (Noble & Macfarlane, 2005, cited by Cameron, 2007) identifies problems of isolation for beginning teachers in some early childhood settings while the stresses of heavy workloads result in reduced opportunities to work with more experienced colleagues.

In the recently released *Learning to Teach* (2007), commissioned by the New Zealand Teachers Council in response to the significant problem of the retention of quality teachers, Cameron (2007) refers to the growing awareness that the quality of professional experience and support in the beginning years of teaching is crucial to teacher retention. Mentors are responsible for providing advice and guidance for newly qualified practitioners and her research reveals that such support is variable in its quality.

The mentor and the critical friend

During teacher education and the first few years of teaching support is essential to assist the new teacher to interpret their experiences so they can become more effective. Without effective mentoring they are more likely to repeat their mistakes. The empirical support for linking theory to practice as referred to by Hammerness et al. (2005) is a compelling rationale for field-based rather than classroom-based training of teachers. I fully support Cole's position that researchers need to shift attention from *the need to think / how they think* to the consideration of *the ways to make it more possible for them to do so*. Support, time and opportunity need to be made available.

Hammerness et al. (2005) consider how teacher educators and expert teachers can help prospective teachers to address the multiple challenges of their profession and offer a framework where new teachers become involved in a community that enables them to develop a philosophy, a set of understandings and dispositions about how to use their knowledge, practices that allow them to act on their intentions and above all tools that support their efforts. These tools would, in my view involve the context of a supportive environment, free of the internal and external impediments as described by Jersid (1955) and Cole (1997). Hammerness et al. (2005) emphasise the need to support beginning teachers following their pre-service period of training and highlight the responsibility of teacher educators to set the foundations for lifelong learning, while recognizing the danger of 'lifelong learning' itself becoming just another educational cliché. Their study looks at ways to help teachers to become “adaptive experts” (p. 359). and pays particular attention to three problems of learning to teach:



- i. The need to address preconceptions as a result of one's own schooldays and in some cases to unlearn such lessons.
- ii. The need to learn to "think like a teacher" and put knowledge into action.
- iii. The problem of complexity - the juggling of several academic and social goals.

In order to do all of these the practitioner must develop the metacognitive habits of mind to guide reflection on practice which will in turn lead to good decisions. Expert teachers are able to multi-task without having to stop and think about 'how to' and these teachers, who may be acting instinctively, are a valuable resource for the mentoring and encouragement of student and newly qualified teachers. Such collaborative mentoring and reflective teaching brings together the enthusiasm of the new teacher with the expertise of the established practitioner (Souto-Manning & Dice, 2007).

Hammerness et al. (2005) stress that innovation requires "moving beyond existing routines" (p. 361); reframing key ideas, practices and values. This requires taking risks and that can only take place in a non-threatening environment. (Chambers, Odeggard & Rinaldi, 2007). According to Cole (2007) it is necessary to develop a culture where teachers have the supportive contexts in which reflective practice may take place and where there are plenty of opportunities to learn from others. Hammerness et al. (2005) strongly support increased opportunities to "practice and reflect in supervised classrooms" (p. 365) and suggest the use of video taped lessons for discussion in order to engender feedback. Learning in the field is regarded as being more important to a student or beginning teacher's subsequent practice than being in a book based classroom. While acknowledging that many teachers might find this intimidating, these collaborative ventures are seen as crucial and lead to the concept of the critical friend.

Reflection and conversation with colleagues encourages teachers to think critically about pedagogical practices and to consider their effectiveness (Farquhar, 2003). Feedback on reflection must be of a high caliber because merely writing reflective narratives without quality feedback from mentors and peers will not make a practitioner more reflective. For a student or beginning teacher reflection is frequently unstructured, and therefore not assessed. If this is the case will it be considered important enough to spend time on? While most student teachers take to reflection like ducks to water there are others who fight it, can see little point in it and have to be constantly encouraged to submit reflections even for summative feedback.

Ottesen (2007) calls for critical friends, mentors and teacher educators to be more aware of the theory that directs what they do. Mentor teachers are enormously influential in the education and support of new teachers. Educational leaders must take responsibility for providing effective and accountable professional development to underpin quality mentoring. In New Zealand the INSTEP (In-service Teacher Education Practice) research project provides regional facilitators and advisers to support teachers in their reflective practice (New Zealand Education Gazette, 2007). Education leaders must keep abreast of the many global developments available, including through the rapidly expanding online facilities (Dall'Alba & Barnacle, 2005). Initiatives in this direction include, in the United States, the MTP (My Teaching Partner) technology-driven professional development resource and online learning conversations as offered by the John Hopkins and Morgan State university website. Further empirical research is called for and researchers must become stakeholders in education by pursuing an



advocacy role and taking on a more active role in “working *with* and *for* teachers to prepare educational contexts more conducive to their learning and leading” (Cole, 1997, p. 22).

Research and practice

In connection with this paper I carried out an informal survey of a group of 17 educators to explore Cole’s premises. While 10 of the 17 participants claimed to engage in reflective practice most days the remainder claimed they did not engage as often as they would like. This supports a generally held belief in the merits of reflection but the findings reveal that the impediments still remain and that while teachers are fundamentally reflective practitioners in their day-to-day professional lives this is not readily supported in practical ways.

Amongst the external impediments the entire sample cited time and workload issues as the main enemy. Nine participants referred to negative attitudes and the unwillingness of colleagues to interact. Cole (1997) refers back to Jersild’s constructs - internal impediments of anxiety, fear, feelings of isolation, meaninglessness and hostility; all states of mind for survival rather than deep thinking and learning (Jersild, 1955). While two of the sample claimed to be frequently affected by internal impediments only one of the seventeen claimed never to have experienced such. Those who claimed occasional internal impediments were more highly represented: anxiety and fear (12), loneliness, isolation and meaninglessness (11), helplessness, hostility (9). Other comments included not being in the right frame of mind, being tired, colleagues not necessarily being negative but sharing a common ignorance, silly meetings, unpredictable occurrences that had a higher priority, and family commitments.

The responses also highlighted the lack of provision of mentoring of beginning teachers in the institutions represented by the sample, supporting Cameron’s (2007) findings. Eight practitioners answered the *Advice and Guidance Program* question relating to their own institutions. When asked whether their institution encouraged critical reflection by allocating a mentor, three answered in the affirmative, three in the negative and a further two claimed yes in theory but that in practice this did not happen. In only one case was non-contact time allocated on a daily basis; two stated that this happened in theory but not in practice. One recently qualified teacher said that he organised his own reflective practice group in an effort to maintain a higher level of professional practice.

The conceptual framework of my own teacher education institution, NZTC, underpins its Bachelor of Teaching (ECE) qualification. It emphasises reflective practice as a core component of effective teaching (NZTC, 2005). Reflection is explained to student teachers as a means “of documenting the experiences, thoughts, questions, ideas and conclusions that signpost the journey of a developing teacher” (NZTC, 2007, p. 17). At every stage of study, student teachers are encouraged and given opportunities to fully *reflect*, or *think critically*, upon the theoretical and philosophical foundations of their practice.

NZTC currently provides for over 650 early childhood teachers who will enter the sector as graduates over the coming few years and seek to meet the robust requirements for teacher registration (New Zealand Teachers Council, 2005). NZTC student teachers are expected to effectively link



theory to practice and are required to be working or volunteering for at least 16 hours per week in the field, supported by a qualified associate teacher. While politically in New Zealand field-based teacher education may not be popular, the field-based model provides important opportunities to develop reflective practice in association with a mentor. Associate teachers, as teaching-mentors, offer pragmatic solutions from their own deep pool of practical experience.

There is then a twofold onus for distance and field-based institutions that, if approached carefully and constructively, may realise the enormous potential for the expansion of reflective practice in teacher education (Ottesen, 2007). The ongoing triadic relationship between field-based or distance student teacher, their home centre associate tutor, and the teacher education institution provides immense scope for fostering the kind of learning community that can best enable reflective practice. These relationships are already in place, the challenge is to fully understand their potential.

Conclusion

“Leadership...is a critical prerequisite to ensuring teachers are supported in the work they do” (Kane & Mallon, 2006, p. xii) and without this active and practical support we cannot effect the deep and positive changes in practice which are brought about by teacher engagement, inquiry and reflective dialogue in our professional learning communities. Teachers must feel unthreatened and empowered to criticise, and to accept criticism in order to improve learning outcomes (Toole & Seashore Louis, 2002) and it is the responsibility of leaders of education to create these safe environments.

John Dewey contended that “while we cannot...be taught to think, we do have to learn *how* to think well, especially *how* to acquire the general *habit* of reflecting” (1933. p 35). We need to ensure all practitioners are provided with the best opportunities to sustain this habit of effective reflection and to model and encourage it in the next generation of teachers. As leaders we must focus on *enabling* and *encouraging* rather than *constraining* and *discouraging* (Cole 1997) so that future teachers will receive the right kinds of support in order to fulfill their potential as educators, avoid burn-out and make a real difference to the next generation. We should demonstrate “professional artistry” (Schön 1987, p. 22) in the support of effective reflective practice.

References

- Annan, B., Lai, M. K., & Robinson, V. M. J. (2003). Teacher talk to improve teaching practices. *Set 1*, 31-35, 2003. Wellington: NZCER.
- Boyd, E. M., & Fales, A. F. (1983). Reflective learning: Key to learning from experience. *Journal of Humanistic Psychology*, 23(2), 99-117.
- Calderhead, J. (1989). Reflective teaching and teacher education. *Teaching and Teacher Education*, 5(1), 43-51.
- Cameron, M. (2007). Learning to teach: A Literature Review of Induction theory and practice. New Zealand Teachers Council. Te Pouherenga Kaiako o Aotearoa.



- Chambers, P., Odeggard, E. E., & Rinaldi, E. (2007). Risk taking and reflective learning. *Reflective Practice*, 8(2), 163–176.
- Cole, A. L. (1997). Impediments to reflective practice: towards a new agenda for research on teaching. *Teachers and Teaching*, 3(1), 7-27.
- Cornford, I. R. (2002). Reflective teaching: empirical findings and some implications for teacher education. *Journal of Vocational Education and Training*, 54(2), 219-235.
- Costa, A. L., & Kallick, B. (2000). Getting into the habit of reflection. *Educational Leadership*, April 2000, 60-62.
- Dall’Alba, G., & Barnacle, R. (2005). Embodied knowing in online environments. *Educational Philosophy and Theory*, 37(5), 719-744.
- Daudelin, M. W. (1996). Learning from experience through reflection. *Organizational Dynamics*, 24(3), 36-48.
- Dewey, J. (1933). *How we think. A restatement of the relation of reflective thinking to the educative process*. Chicago: D. C. Heath and Company. (Original published in 1910).
- Farquhar, S. E. (2003). *Quality teaching early foundations (ECE): Best evidence synthesis*. Wellington: Ministry of Education.
- From research to action – Just how is the INSTEP project influencing teacher educators practice and the work of teachers? (2007, February 19). *Education Gazette*, Retrieved June 1, 2007, from <http://www.edgazette.govt.nz.ezproxy.auckland.ac.nz/articles.php?action=view&id=7>
- Gibbs, C. (2006). *To be a teacher: Journeys towards authenticity*. Auckland, New Zealand: Pearson Education.
- Hammerness, K., Darling-Hammond, L., Bransford, J., Berliner, D. C., Cochran-Smith, M., McDonald, M. (2005). How teachers learn and develop. In Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 358-389). San Francisco, CA: Jossey Bass.
- Jersild, A. T. (1955). *When teachers face themselves* (Ch. 2-4). New York: Teachers College Press.
- John Hopkins University/Morgan State University. (2007). *Portfolio Module: Articles on teacher reflection*. Retrieved 15 April, 2007, from <http://www.sitesupport.org/module1/teacherreflection.htm>
- Kane, R. G., & Mallon, M. (2006). *Perceptions of teachers and teaching*. Wellington: Ministry of Education.
- Leinhardt, G., & Greeno, J. G. (1986). The cognitive skills of teaching. *Journal of Educational Psychology*, 78(2), 75-96.
- Loughran, J. J. (2002). Effective reflective practice: In search of meaning in learning and teaching. *Journal of Teacher Education*, 53(1), 33-43.



- Ministry of Education. (2002). *Pathways to the future: Ngā Huarahi Arataki: A 10-year strategic plan for early childhood education*. Wellington: Learning Media.
- Mohlman Sparks-Langer, G. & Berstein Colton, A. (1991). Synthesis of research on teachers' reflective thinking. *Educational Leadership*, March, 37-44.
- New Zealand Teachers Council Te Pouherenga Kaiako o Aotearoa (2005). *Standards for qualifications that lead to teacher registration. Guidelines for the approval of programmes*. Wellington: New Zealand Teachers Council. Retrieved June 10, 2007, from www.teacherscouncil.govt.nz/pdf/200502-guidelines-for-approval-feb05.pdf
- New Zealand Tertiary College. (2005). *Conceptual Framework as a component of the degree consultation process*. Auckland: New Zealand Tertiary College
- New Zealand Tertiary College. (2007). *Field Practice Handbook*. Auckland: New Zealand Tertiary College.
- Ottesen, E. (2007). Reflection in teacher education. *Reflective Practice*, 8(1), 31-46.
- Schön, D. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.
- Toole, J. C., & Louis, K. S. (2002). The role of professional learning communities in international education. In K. Leithwood & P. Hallinger (Eds.), *Second international handbook of educational leadership and administration* (pp. 245-279). Great Britain: Kluwer Academic Publishers.
- Vygotsky, L. (1986). *Thought and language*. Cambridge, MA: The MIT Press. (Original written as a PhD thesis in 1925. First published in Russian in 1965).