

Archived at the Flinders Academic Commons:

<http://dspace.flinders.edu.au/dspace/>

This is the publisher's copyrighted version of this article.

The original can be found at: <http://ajte.education.ecu.edu.au/issues/PDF/323/Lewis.pdf>

© 2007 Australian Journal of Teacher Education

Published version of the paper reproduced here in accordance with the copyright policy of the publisher. Personal use of this material is permitted. However, permission to reprint/republish this material for advertising or promotional purposes or for creating new collective works for resale or redistribution to servers or lists, or to reuse any copyrighted component of this work in other works must be obtained from Australian Journal of Teacher Education.

PROSPECTIVE TEACHERS OF SECONDARY SCHOOL LEARNERS: LEARNING TO TEACH - TEACHING TO LEARN?

Felicity-ann Lewis
Flinders University

***Abstract:** Prospective teachers in their third year of a Bachelor of Education degree in secondary teacher education use a journal to respond to a range of questions about their experiences as learners prior to, during and after their first practicum. These stories are used as a source of data to analyze how 14 prospective secondary teachers understand the interaction between university-based and school-based studies; the points of conjunction and disjunction that they experience. The paper shows that during the first teaching practicum their ideas about learners and pedagogy are challenged and argues that more can be done in both the university and school to make 'learning to teach' a more connected experience for prospective teachers. This will require greater collaboration in a number of areas, along with the removal of structural barriers such as time and money.*

Introduction

On the 7th February 2005, the Minister for Education, Science and Training in the Australian Government announced the first national inquiry into the training of teachers in 25 years. This inquiry is in addition to others that have been held in recent years (e.g. Australian Council of Deans, 1998; Department of Education, Science and Training, 2003; Ramsey, 2001.) Dr Brendan Nelson at a press conference on 17th February, 2005 stated that the inquiry was to focus on; people that are being attracted to teach in Australia – from schools and mature age, attrition rates from university, the way Universities prepare the next generation of teachers to deal with students with disabilities, with learning and behavioural problems, philosophical underpinnings of teacher training in Australia, the extent to which our teachers are being supported in their training when they attend schools for practicum, the way in which schools are actually delivering mentoring and support to teachers that are in training and the way in which teachers are being prepared in terms of not just specific skills but the philosophies and scientific rigor of teacher training in Australia. The inquiry was anticipated to take 12-18 months to deliver its recommendations. Extensive consultation with all stakeholders occurred during 2005 and the transcripts of panel interviews and written submissions were made available on the Internet. 'Top of the Class: Report on the inquiry into teacher education,' was published in February, 2007.(House of Representatives Standing Committee on Education and Vocational Training, 2007).

In this climate of review it is timely to reflect on existing research into teacher education and continue to interrogate current programs. This paper begins with a review of recent research into teacher education in Australia and describes the similarities that exist with the United States and the United Kingdom as these countries have similar political and bureaucratic structures for the delivery of teacher education. All have faced criticism regarding the success of teacher education in the light of perceived academic failure and decline in standards. It introduces narrative inquiry as a method to investigate the experiences of a cohort of fourteen prospective secondary teachers in a Graduate Entry program at Flinders University. More specifically their stories are used as data to

analyze their understandings of the interaction between university- based and school-based studies, that is, the points of conjunction and disjunction that they experienced during a practicum in the middle of the semester.

Teacher education in Australia, the United States and the United Kingdom.

Researchers from within the university sector in Australia constantly grapple with the elements teacher education programs should contain and often look to academics in the United States and the United Kingdom, who share similar schooling systems, when developing teacher education programs. (Britzman, 2000; Cochran-Smith & Zeichner, 2005; Darling-Hammond, 2006; Korthagen & Kessels, 1999) The United States has a history of reviewing its teacher education programs in response to similar pressures such as those experienced in Australia and the United Kingdom. Borko, Liston & Whitcomb (2006, p.199) in an Editorial on Visions of Teacher Education, say, 'It's on the horizon again, another looming "crisis" in teacher education. Whether the decade is the 1930s with the Teachers College Dean William Russell's (1936) call for a "new charter for teacher education", the 1960s with Koerner's (1963) and Conant's (1963) respective critiques of teacher preparation, or the 1980s *Nation at Risk* (National Commission on Excellence in Education) (1983), teacher education has been inundated by multiple and persistent criticisms.' Borko, Liston & Whitcomb (2006, p.1) go on to say, 'The external criticisms are about overemphasis of theory, inadequate preparation for the practical realities of contemporary classrooms, lack of intellectual substance, too much focus on pedagogy' and as Minister Nelson states, a leftist-liberal indoctrination. They state that Schools of education and teachers colleges view programs in public schools as still having a 19th-century view of student learning and they should better reflect our current understanding of learning and address issues of social justice.

The most recent review of teacher education in the United States— Studying Teacher Education: The Report of the American Educational Research Association Panel on Teacher Education edited by Marilyn Cochran-Smith and Ken Zeichner (2005, p.9) reviewed existing research and called for a new research agenda. In summary it said, 'the body of teacher education research that directly addresses desirable pupil and other outcomes and the conditions and contexts in which these outcomes are likely to occur is relatively small and inconclusive. Concerns are also raised in the literature about the disconnection between time given to theoretical knowledge and practical preparation. Hartocollis (2005), favours the apprenticeship model of teacher 'training' and accepts that 'practice may not make the perfect teacher, but it does a better job than either theories of learning or ruminations on social justice.' This is supported by Poppelton, (1999, p.223) in a comparative examination of the proposed changes to teacher training in the United Kingdom. She says, 'When schools 'fail', the cause is often seen to lie in the quality of the training that the teachers receive, and finally, the quality of those who provide the training. As Cochran-Smith & Zeichner (2005, p.303) noted, 'To get from teacher education to direct impact on pupils' learning requires a chain of evidence with several links: empirical evidence in demonstrating the link between teacher preparation programs and teacher candidates' learning and their practices in actual classrooms, and empirical evidence demonstrating the link between graduates' practices and what and how much their pupils learn. Individually, each of these links is complex and challenging to estimate. When they are combined the challenges are multiplied.'

The criticisms of teacher education are not new. As Borko (2006, p.202) notes, they can be summarized as 'ideologically charged, value-based, and politically directed: most important practical, professional and policy debates are. However, professional integrity and institutional viability demand further attention to these critiques'. Borko, (2006) does not believe we can solve these conundrums as they entail irreducible and at times conflicting moral, educational and political visions. Cochran-Smith & Zeichner (2005) in a comprehensive review of teacher education in the

United States noted that due to the complexity of teacher education, no single method or theory could ensure an understanding of how and why teacher education influences educational outcomes. In Australia similar problems about the structure and substance of teacher education programs are also evident due to different educational traditions favoured by staff. Gore (2001, p.124) says we sometimes lose sight of our primary role: ensuring that our students are able to produce high-quality learning outcomes for all students. The outcomes Gore proposes are both social and academic. She describes a 'Four Dimensional Framework of Classroom Practice' which is based on research conducted in Australian schools. It aims to redesign teacher education as suggested by Darling-Hammond, (2000, p.166) 'to strengthen its knowledge base, its connections to both practice and theory, and its capacity to support the development of powerful teaching.' Drawing on multiple research traditions, four dimensions of classroom practice appear crucial in redesigning teacher education. These are intellectual quality, relevance, supportive classroom environment, and recognition of difference.' (Gore, 2001, p.133)

The focus would shift to fundamental questions of pedagogy, curriculum, and learning. What matters would then centre on how we can enhance these dimensions of classroom practice in our programs in terms of both how we teach and how we prepare our students to teach.

Narrative Inquiry in Teacher Education

Tensions exist between researchers into teacher education as to the methodology used to collect data. Calls for more empirical and evidence-based studies which are large scale, are countered by those who believe 'teacher preparation policies and practices can never be decided solely on the basis of empirical evidence, divorced from values.' (Cochran-Smith & Fries, 2005, p.53) Narrative inquiry (Blumenfeld-Jones, 1995; Clandinin & Connelly 1995; Polkinghorne, 1995) is the methodology used in this research. There are increasing numbers of researchers using narrative inquiry in the area of teaching and schooling. Using a professional journal to develop reflective practice is a common approach used by teacher educators internationally. (Dart, Boulton-Lewis, Brownlee, & McCrindle, 1998; Francis, 1995; Loughran, 1995; Mather & Handley, 1998; Mantovinic, 1995.) Narrative inquiry becomes the source of information through the story-telling, as well as the method of interpretation and reinterpretation of experience. (Carter, 1993; Casey, 1993; Connelly & Clandinin, 1990). Olsen & Craig (2001) describe the value of narrative as a method for hearing prospective teachers' voices. Use of journals written by prospective secondary teachers, provide stories of their experiences with learning to teach at university, and later, learning to teach in a school setting. Olsen (1995, p.123) says, 'Knowledge is personally and socially constructed and reconstructed in situations as people share their ideas and stories with others.'

Clandinin and Connelly (1998, p.150) use the terms 'personal and practical knowledge' to capture the idea of experience, "a moral, affective, and aesthetic way of knowing life's educational situations" and 'professional knowledge landscape' to describe the way knowledge is both formed and expressed in the contexts in which teachers live. Connelly and Clandinin (1990) support the use of journals to develop stories which allow individuals to reflect upon life and explain themselves to others and note the importance of finding the voice of the participant in a particular time, place or setting.

Critical Narrative

The cohort of prospective secondary teachers whose journals provide the stories in this paper, identify as secondary subject specialist teachers. None identify as indigenous, five are male

and eight are female. All are Graduate Entry students in their first year of a two year Education degree as they have completed a previous degree. They are representative of the total cohort of teacher education students at an Australian university as they are predominantly white, and middle-class. Five identify as being mature students. A narrative analysis of 11 journals written over the 14 week period included reflections about lectures and workshops, six weeks of practicum and a further 3 weeks of university classes. Three of the journals were written without the practicum experience and all show the development of greater understandings of the role of the teacher and give an insight into the challenges prospective teachers see in delivering quality learning experiences for their students.

Prospective teacher learning is encouraged through reflection and contemplation of their learning experiences through the journal writing activity. This task is used as a learning tool in a topic which also uses Problem-Based Learning strategies.

‘Narrative is a method of inquiry and a way of knowing—a discovery and analysis—just as scientism and quantitative research have methods and ways.’ (Ely, Vinz, Anzul, & Downing, 1997, p.64). In their journal entries prospective teachers reflected on where university learning about teaching and their school experience of teaching, had conjunction or disjunction. Reflections provided by the prospective teachers provide the story. An inquiry through narrative will (re)present their understandings through the researcher’s voice. (Clandinin and Connelly, 1994, p. 416). In this story prospective teachers demonstrate in their journal writing that they have personal practical knowledge about learning, from their personal experiences of learning. To better understand how this personal practical knowledge is shaped in the professional knowledge landscape of both the university and the school is another part of this story. Listening to the narrative of prospective teachers as they use experience from university course work and the school practicum to develop their knowledge and experience of the learning process, we may gain greater insight into how teacher education programs could be improved. ‘Voices offer a qualitative opportunity for scholars interested in generating critical, counter-hegemonic analyses of institutional arrangements.’ (Fine, 1994, p.20.) Using voices in social research involves, ‘carving out pieces of narrative evidence that we select, edit and deploy to border our arguments. The problem is not that we tailor but that so few qualitative researchers reveal *that* we do this work, much less *how* we do this work. A second dilemma arises when we rely on individual voices to produce social interpretations of group behaviour.’ (Fine, p. 22) I have included comments from the prospective teachers which are often oppositional as this demonstrates the difference in personal experience and values that they bring to their ‘learning to teach’. Convery (1999, p.145) suggests, ‘that assisting teachers to deconstruct stories and explore alternative readings – eg how cited oppositional figures might have given their version of events – might emancipate teachers from remaining victims of their own narratives. Narrative enquiry must not be an end in itself, it must be a means of improving educational experience.’

Experiences from my life as a teacher educator and former classroom teacher shape the selections and discussions that are chosen from the prospective teacher’s stories. The voices of the prospective teachers are interwoven with my voice as a teacher educator. The reader produces meaning and must do so in the knowledge that, ‘Narrativisation assumes point of view.’ (Stivers, 1993, p.424) It is always possible to narrate the same events in radically different ways, depending on the values and interests of the narrator (Kohler Riessman, 1993, p.64)

Personal Practical Learning

The personal practical knowledge that these prospective teachers bring to their learning are from their previous experiences. These are primarily, but not exclusively from their school and university experience, by far the greatest influence being from the “apprenticeship” they serve as learners in

schools for 12 years. (Lortie,1975).‘They often believe that they already know what teaching is all about.’ (Olson, 1995, p.119.) From their personal practical experiences of learning the prospective teachers understood the need to address learning in a range of ways. Many teacher education students enter teacher education programs with the assumption that they will learn to teach only in schools. It is critical to discuss and make explicit and relevant how they will also learn to teach during their university studies.

Learning to Teach-Teaching to Learn

The prospective secondary teachers in reflecting on what they had learnt in their university studies to this point, and how they would use this to develop student learning experiences in their classrooms, were asked to reflect upon the strengths of student-directed and teacher-directed learning. They wrote;

‘Practical learning rather than being directed’ and ‘Students need to be able to understand and engage with the learning task and process if they are to build authentic knowledge.’

The value of self- directed learning in aiding understanding and knowing more about how individuals learn best was generally seen as being important.

The theoretical understandings that were being presented in their university studies were interacting with their own experiences as learners. Interactions between their personal practical knowledge in the professional knowledge landscape are evident through journal entries like, ‘Constructivist learning is now what I know it is called. I didn’t have a name for it before.’

Not all of the prospective secondary teachers were convinced that a self-directed approach to learning was suitable for all students. Raising concerns about student –directed learning one prospective teacher wrote, ‘All we can really be certain about is what we have already experienced and thus, what it is we now know. The problem with this is that we may have drawn the wrong knowledge out of our experiences, misinterpreted it, or it has changed over time without our knowing it.’ The need to enhance understanding through teacher interaction and guidance is seen as an important part of learning by this prospective teacher when she says, ‘if we continue in this way will kids never be able to think abstractly or philosophise or compare?’

Most prospective teachers chose to opt for a combination of both student –directed and teacher –directed components to assist learning with statements such as, ‘I think the teaching –learning process needs both self - directed and teacher-directed components’ and ‘It takes less time for students to be ‘taught’ a concept than to ‘discover’ it for themselves.’

Teacher knowledge and enthusiasm for the subject area was seen as an important motivator for learning. ‘It can be extremely useful to gain insight into a subject through the knowledge of a teacher.’ The prospective teachers could describe learning as a complex task and had already developed ideas about how secondary students learn, based on their personal practical experience and university teaching in this area. The journal writing showed a strong attachment to learning approaches being advocated in their university topics, which were often different to those they had personally experienced at secondary school. However, their personal practical knowledge of the secondary school context with time constraints, inflexible classroom spaces and exams, was used to critique the university material. Despite being able to see the value of self-directed learning many could see that this was a goal which may be difficult to achieve in the current secondary school environment.

The extent to which prospective teachers are being supported in their ‘training’ when they attend schools for practicum was another area of inquiry by the federal government. After seven weeks of university study the prospective teachers embarked on their first experience as ‘learner teachers’. They had six weeks in a secondary school setting and were expected to teach in both of their subject specialisation areas. In their journals they were asked to discuss points of

conjunction and disjunction between their university and school- based learning. It was notable that for some of the prospective teachers, there were several aspects which were in both of these categories. The continuing development of the prospective teacher in the professional knowledge landscape was seen as exciting but frightening. The journals spoke of feeling unprepared for the challenges which they anticipated would confront them and they questioned whether they would 'know enough.'

Conjunction

After two weeks on practicum, prospective secondary teachers wrote that they had seen explicit teaching and were learning that, 'there are no simple answers' to many of the complex issues that arise in the classroom. They had been apprised of this possibility during the university lectures they had attended prior to undertaking the practicum, in the topic Development, Learning and Teaching(DLT). One said, 'DLT "education is problematic" is ringing true here.' The valuing of prior knowledge was seen as important and reinforced in the school setting by prospective teachers who saw some evidence of constructivist practices. Peer relationships and how, 'being popular or less popular has an impact on student engagement with their learning,' was a point of conjunction between what was learnt at university and addressed in school-settings. Several prospective teachers noted that their school had a focus on resilience and wellbeing. A prospective secondary teacher noted that, 'The Grade 8 teacher tolerates misbehaviour (close to chaos) in favour of group work so those with learning difficulties- mainly English difficulties are involved in the class.' Student differences were described as being catered for through the use of constructivist approaches, 'the teachers are definitely working to teach the students based on what they know already – basically at their level which is most likely below average'.

Disjunction

Reflection on the difference between university advocated practice and what actually occurs in schools, presents the prospective teacher with a dilemma. Which learning is most helpful or valuable for their future development as a teacher? Olson, (1995, p. 124) says, 'Depending on how we choose to attend to the stories we construct, narratives of experience can be used to confirm what we already know or to lead to new insights.' She goes on to explain, 'If students expect to live their stories as planned, surprise can be stories as "trouble" and as "not knowing enough." Students need to be encouraged to carefully attend to unexpected events in order to awaken to new ways to tell their stories.'(p.124)

A prospective secondary teacher said, 'little evidence of constructivist or democratic pedagogy being used –the students may get a small say in learning and content, but not much. They are passive receivers of knowledge, not architects of learning. Still many are excited on this type of delivery.' The predominance of teacher –directed learning that was noted by prospective teachers in their journals was seen as a disjunction between the university learning and school-based learning. 'The amount of 'chalk and talk' that actually does happen. The course at uni emphasises engagement and use of constructivist oriented activities – however the majority of classes I am doing have teaching that is fairly teacher oriented and content focussed.' Another said, 'A lot of lessons are teacher directed boring lessons with 'chalk and talk' as a feature particularly in senior secondary classes. Lollies and stickers were used as rewards and this was not advocated at university. There was little group work done in the lower classes and in defence of that, one prospective teacher wrote that 'behaviour management is such a big issue.'

Conjunction and Disjunction

Making a connection with students and developing relationships with them was mentioned in many journals as something that prospective teachers recognised as important for learning to occur. This had been promoted at university and was seen as an important factor in the classroom. 'I can see the benefits of 'connecting' with students. The teacher treats the students with respect and warmth and gets the same treatment in return.' This positive approach to students was not seen all of the time by prospective teachers and one remarked about 'teachers jokingly demeaning students rights' at a staff meeting and many teachers were seen as being 'very authoritarian.' Organisational matters at times had conjunction and in other school contexts there was disjunction. Some prospective teachers saw lesson plans that used the South Australian Curriculum Standards and Accountability Framework being developed and used while others wrote, 'No teachers use lesson plans- use Unit Plans and adlib.' There were many cases of conjunction and disjunction within the school, and between individual teachers.

Conclusion

What Can we Learn From our Prospective Teachers?

What have the professional journals of prospective teachers said that can assist the university and school to enhance their development as teachers? Preparing prospective teachers is complex. They require knowledge of their subject area supported by philosophical underpinnings and pedagogies which prepare them to teach students with disabilities, with learning and behavioural problems, and those from diverse cultural backgrounds. The extent to which our teachers are being supported in their 'learning to teach,' when they attend schools for practicum, is an area that needs greater attention from both the university and the school. The cooperating teacher may be able to assist while they are in the school context and this is desirable. A problem arises when the cooperating teacher/s may not value, or be able to demonstrate learning experiences that the university promotes, and the experiences of the prospective teachers used in this study show there can be significant disjunction when this occurs. How can this be explained and resolved, and who is available to engage in this discussion with the prospective teacher?

No single program has demonstrated a definitive solution for the comprehensive preparation of teachers. The evidence available suggests there needs to be a combination of theory and practice. How much of each appears to be highly contested.(Borko, Liston & Whitcomb, 2006).The quality of the practical experience gained in schools is an element that needs a level of 'quality control'. It is not only the cooperating teacher who has a role in supporting the prospective teacher with their learning to teach.Support in the education of prospective teachers when they attend schools for practicum is also a role for the university supervisor. The university supervisor may not be an academic from the school of education, and even if they are, they may not have a teaching qualification, or have the content knowledge that prospective teachers have been engaging with in their university studies to this point. There may be ways to improve this. However, supervision of the practicum is a time consuming endeavour. It is often an area of academic work which is 'bought out' by teacher education staff. It is not valued as 'high status' work. Part-time teachers are often used. These are teachers who have a sound level of teaching ability, but many do not know the university topics or the ideologies that are promoted within them. I have heard prospective teachers say that their supervising teacher from the university actively undermined what was taught in their university studies.

Enhancing the university and school learning conjunction is clearly still a challenge for both teacher educators and schools. The personal practical knowledge that prospective teachers bring to

their studies in the professional knowledge landscape at university and in schools needs greater connection with their theoretical and practical experiences. Professional development for teachers who are willing to undertake the role of cooperating teacher and professional rewards (not just financial) for their involvement could be investigated. In the university, greater incentives to perform the role of university supervisor through appropriate workload attribution, and training and development focussed on the knowledge and skills that have been promoted in the university courses undertaken by the prospective teachers would be a good start in addressing some of the disjunction that was identified by the students. How this can be achieved to enhance the 'learning to teach' for prospective teachers remains an area for further research.

References

- Borko, H., Liston, D., & Whitomb, J.A. (2006) A Conversation of Many Voices: Critiques and Visions of Teacher Education – Editorial, *Journal of Teacher Education*, Vol 57 (3) pp. 199-204.
- Britzman, D. P (2000). Teacher Education in the Confusion of Our Times, *Journal of Teacher Education* Vol. 51(3)
- Carter, K., (1993). The place of story in the study of teaching and teacher education. *Educational Researcher* 22, pp. 5–12.
- Casey, S., (1993). *I answer with my life*, Routledge, New York.
- Clandinin D.J. and Connelly, F.M., 1990. Narrative experience and the study of curriculum. *Cambridge Journal of Education* Vol. 20 (3), pp. 241–253.
- Clandinin, D.J. and Connelly, F.M. (1994). 'Personal Experience Methods.' in N.K. Denzin and Y.S. Lincoln (eds.) *Handbook of Qualitative Research*. London: Sage.
- Clandinin, D.J. & Connelly, F. M, (1998). Stories to Live By: Narrative Understandings of School Reform, *Curriculum Inquiry*, Vol. 28:2
- Cochran- Smith, M., & Fries, M.K.(2001). Sticks, stones and ideology : The discourse of reform in teacher education. *Educational Researcher*, 30(8), 3-15.
- Cochran-Smith, M. & Zeichner, K.M (Eds) (2005). “*Studying teacher education*”: *The Report of the AERA Panel on Research and Teacher Education*. Mahwah, NJ: LEA Publishers.
- Connelly, F.M., & Clandinin, D.J.(1990). Stories of experience and narrative inquiry. *Educational Researcher*, Vol. 19(5), 2-14.
- Convery, A.(1999). Listening to teacher’s stories :are we sitting too comfortably? *Qualitative Studies in Education*, Vol.12 (2).
- Darling-Hammond, L.(2000) How teacher education matters. *Journal of Teacher Education*, Vol. 51, pp. 166-173.
- Darling-Hammond, L.(2006). Constructing 21st-Century Teacher Education, *Journal of Teacher Education*, Vol. 57, (3), pp.300-314
- Dart, B.C., Boulton-Lewis, G.M., Brownlwee, J.M., & McCrindle, A.R.(1998). Change in knowledge of learning and teaching through journal writing. *Research Papers in Education*, Vol. 13(3), pp. 291-318.
- Ely M., Vinz, R., Anzul, M. & Downing, M.(1997). *On Writing Qualitative Research: Living by Words*. The Falmer Press, London.
- Fine, M. (1994) Dis-stance stances: Negotiations of power inside feminist research, in A Gitlin (Ed) *Power and methods: political activism and educational research*, London: Routledge
- Francis, D. (1995). The reflective journal: A window to preservice teachers’ practical knowledge. *Teaching and Teacher Education*, Vol. 11 (3), pp.229-241

- Gore, J. (2001) Beyond our Differences: A Reassembling of What Matters in Teacher Education, *Journal of Teacher Education*, Vol. 52 (2). Pp.124-135
- House of Representatives Standing Committee on Education and Vocational Training (Feb 2007) "Top of the Class: Report on the inquiry into teacher education." Commonwealth of Australia.
- Hartocollis, A. (2005). Who needs education schools?: What colleges teach. What teachers need to know. And they are not the same. *New York Times Education Supplement*.
<http://www.nytimes.com/2005/07/31/education/edlife/hartocollis31.html?pagewatned+print>
Retrieved July 31, 2005.
- Kohler Riessman, C.(1993). *Narrative Analysis*, Sage Publications, London.
- Korthagen, F., & Kessels, K J.(1999). Linking theory and practice: Changing the pedagogy of teacher education. *Educational researcher*, Vol. 28 (4) pp.4-17.
- Lortie, D.C (1975). *Schoolteacher: A sociological study*. Chicago: The University of Chicago Press.
- Loughran, J.J. (1995). *Developing reflective practice : Learning about teaching and learning through modelling*. London: Falmer Press.
- Mather, D., & Handley, B. (1998). Love of learning: Analysis of a dialogue journal of an outstanding preservice teacher. *Journal of Professional Studies*, Vol 6(1) pp. 7-18
- Matovinovic, D.(2000). Journal writing: A strategy to promote conceptual understanding in secondary science. *Alberta Science Education Journal*, Vol. 32 (2) pp. 3-8.
- Nelson, B. (2005, February 17))
Media Release –Inquiry into Teacher Training in Australia
<http://www.dest.gov.au/Ministers/Media/Nelson/2005/02/tran170205.asp> (Accessed 17/06/06)
- Olson, M., (1995).Conceptualizing Narrative Authority: Implications For Teacher Education, *Teaching and Teacher Education*, Vol.11(2) pp.119-135.
- Olson. M.R. & Craig, C.J. (2001). Opportunities and Challenges in the development of teachers' knowledge: the development of narrative authority through knowledge communities. *Teaching and Teacher Education*, Vol 17 (6) pp.667-684.
- Poppleton, P. (1999). Leading from behind: A comparative view of the proposed reform of teacher training. *Journal of Education for Teaching Vol.25, (3)* pp. 233.
- Stivers, C.(1993).Reflection on the role of personal narrative in social science. *Signs: Journal of Women in Culture and Society*, 18(2).p. 408-425