Bridging two worlds: An alternative pathway to teaching

Annette Green Charles Sturt University Australia

Introduction

In 2003 a group of seventy beginning teachers with varied career experience took up duty in Australian secondary schools. Unlike most of their colleagues, they have a trade background with extensive industry credentials. Their teacher education was funded by the Department of Education to meet teacher shortages particularly in the technology disciplines, which was exacerbated by the introduction of accredited vocational education (VET) courses into schools in Australia as these courses have been taken up by senior students in greater numbers than expected. Teachers working in VET in Schools programs need current industry knowledge to ensure that such courses are accepted beyond school. Despite a limited academic background, those selected to become teachers demonstrated an interest in life long learning beyond their initial trade qualifications and their skills and life experience are recognised by the University. As adult learners, they have changed career to become teachers in a system which often did not satisfy their own original goal, to become a teacher.

The Accelerated Teacher Training Program (ATTP) currently offered at Charles Sturt University (CSU) is an alternative response developed to cater for such different learners in an accelerated and innovative course. The program combines on-line and distance education, problem-solving methodologies and site-based workplace learning opportunities to provide a course which is accelerated in terms of length while being pedagogically attuned to a diverse cohort.

This paper will discuss the ATTP course, examining the first cohort, who began teaching in 2003, in terms of participants, course design, context and implementation. The professional practice and problem solving elements of the course promoted a partnership and a dialogue between current practitioners in the field and the student teachers as researchers and apprentices, making for a very different pathway into a new career.

The ATTP program

In planning the structure of the course, much thought went into examining the essential elements of a teacher-training program. The overarching design had the intention of ensuring that the students developed both theoretically and practically within an accelerated time frame. The combination of the following elements in one program makes this course unique in its composition, theoretical underpinning and support mechanisms. The course is offered by distance education, which means students who would not usually be able to access teacher education in traditional on-campus programs are able to be included. This also means that some of the cohort are from, and will remain in, rural and isolated areas which are difficult to staff. Problem solving methodology in the curriculum subjects through the development of portfolios is designed to encourage students to investigate the intersection of curriculum theory and practice in the school workplace where their internship will be completed. On line support encouraged students to discuss their learning experiences both with the lecturer and each other as they form communities of learners. This is a crucial element for providing scaffolding in the problem solving activities in schools.

Extended in-school experience during the problem-solving phase, combined with the internship, encourages the enculturation process, so necessary when facilitating a shift in workplace culture from industry to school. Recognition of trade and other qualifications, and recognition of prior learning from work experience on entry means that the subject expertise of these students is valued appropriately by the University. The course was accelerated by using clever combinations of strategies, such as covering many key aspects of teacher training

within the three extended residential schools and by combining curriculum methodology subjects in the work-based problem focused in-school phase. These strategies, combined with use of a summer school period, telescope two years into eighteen months of study without sacrificing quality or scope.

The course began with a residential school, which focused initially on academic literacy issues, such as essay writing, research skills and interpretation, deconstruction and analysis of assessment questions. During the residential school, the ATTP students also became familiar with on-line access to e-mail, forums and other on-line facilities available through CSU. Information literacy was explored and identified as an area to be further developed during the course. The students were encouraged to form study groups that have been maintained beyond the course. A second residential school preceded the first experience of the ATTP students in schools. During this residential school, the focus shifted to the skills of teaching, lesson planning, programming and classroom management. During the third and final residential school, students prepared to participate in the two-term in-school professional experience and internship that concluded their course.

CSU has been acknowledged as an Australian leader in on-line and distance education. From the inception of this course, these facilities and strengths were used to facilitate the learning, to support the students and encourage them to support each other as a community of learners. The most basic facility, and the one students most frequently return to, is e-mail. Students e-mail each other, in subject interest groups, maintaining close contacts despite time and geographical limitations. The practicum coordinator used e-mail and an electronic mailing list continually during the practicum experience. This meant that students could write about their problems, triumphs, issues and questions before, during and after their in-school experiences, and the entire community of learners would benefit from their learning. It assisted in preparing for the practicum, gaining an understanding of the key areas of preparation required and offering advice about potential pitfalls in classroom management and related issues. The electronic discussion list was supplemented by lecturer comments and student discussion on the postings. All school and teacher names, and in the case of more sensitive issues even the ATTP student's names, were omitted in these discussions.

Each subject offered in the course also used an on-line forum, which is open to all members of the cohort enrolled in that subject. This can be used for subject discussions and the sharing of resources, in particular web-sites and other on-line resources. Questions are raised and advice given on assignment work and in depth feedback on work is presented. Residential school topics and questions, as well as feedback from students on the residential school experiences and needs, are other points of discussion. The conversational tone and the knowledge of other participant's activities also indicated the level of continuing discussion and support students are offering each other within the community of learners. An example is the manner in which students from all over the state were able to source appropriate TAFE programs and locations to supplement and complement the trade qualifications with which they started the course. The frequency and level of shared information and support has been a key element in the success and attitude of the ATTP students.

The selection of a school site as a learning site for teacher training means that students are learning about curriculum while having a significant time for enculturation while completing assignment activities. The change of attitude and direction for the ATTP students takes time, which is the underlying intention of basing the problem-based learning activities in the same school where students will be teaching for ten weeks, using materials prepared during their professional practice time. Problem-based learning is used as a way of designing the curriculum while placing students in the constructivist role of problem solvers. Thus it is also learning and teaching strategy which invites students to develop their knowledge, skills and abilities in a context, working on an ill-structured problem which reflects the real world (Brennan & Green, 2002). The problem based learning component of the course consists of

the amalgamation of three university curriculum studies subjects into a whole that covers and combines the outcomes of the three subjects. While in the school, the ATTP students seek their own individual solutions to the two problems, using the school, their mentors and the school community as a primary source of information. The university group facilitator scaffolded the problem solving activity by providing further materials, direction and questions to support the study.

Context and background for research

The literature indicates that there is considerable interest on the part of policy-makers in the topic of VET in Schools, although far less emphasis and discussion on the recruitment, training and orientation of teachers who can deliver in terms of industry expectations while still being adequately educated in terms of general teacher education requirements. The examination of representatives of a cohort selected and trained specifically for their industry expertise and life skills aims to begin to address this identified gap.

VET in Schools can address the training needs of young people making the transition from school to work (Kilpatrick, Kilpatrick & Bell, 2000, ANTA 1998, Malley et al, 2001). A recent study, 'The Cost to Australia of Early School-Leaving', discusses the critical role of teachers supporting school leavers in their transition to labour markets and their re-entry into education and training (NATSEM, online at http://www.dsf.org.au). Other recent research points to the improved outcomes both in schools, and beyond school, for many students who have gained from their participation in programs involving VET traditional approaches and benefited from the affirmation and appreciation provided by learning experiences in the workplace (Teese, 1999; Teese, 2000; Malley, 1998; Spark, 1999; Frost, 2000). Although the efficacy of VET in Schools has been established, critical questions remain about changing school cultures and the changing roles of teachers (Shaw, McDonald, Childs & Turner, 1999). Arguably, new teachers who have moved from an industry background to school teaching may be participating in a process of fundamental change to schools' culture and organisation.

Since the 1991 Finn report, the move towards VET in Schools has been escalating at a rapid rate until the current situation where vocational education and training is now delivered in 80% of secondary schools and colleges in Australia with 169, 809 students participating in 2001 (MCEETYA, 2002). "Vocational education and training in schools has provided the impetus for some of the most extensive reform and renewal activities affecting schools over the last 30 years" (Frost, 2000, p.47). Driving, implementing and managing these changes are teachers with a plethora of experience, training and pedagogical approaches. A detailed examination of a small number of these teachers will begin the exploration of some of the issues in these shifts in emphasis.

Working hypothesis

The introduction of VET in Schools across Australia has meant that systems have been under pressure to train, retrain and recruit staff to manage, teach and develop the programs which put policy into practice. The high take up rate by students across the whole country has brought further pressure to systems, both public and private. To make it work, these educators must have vocational knowledge and industry experience; they must have developed pedagogical expertise; they also require an understanding of secondary education. Teachers need to bring together their experiences at the intersection of diverse and changing schools and post-compulsory systems, adolescents and parents needs, and the world of work and training in order to develop new and innovative programs. Requirements include relevant current industry knowledge, academic credentials suitable for various systemic requirements, general knowledge and understanding of the needs of young people within educational institutions as well as a sound knowledge of the National Frameworks of VET. To develop teaching programs to meet the competencies specified in the relevant Training Packages, teachers must adapt pedagogical practices to fit within the frameworks of both VET sector approaches and school practices.

Research questions

The research intends to examine the lived through experience of a small number of the beginning ATTP graduand's new careers. What are the effects of an industry background and an accelerated teacher-training course on the orientation to teaching and learning of teachers in VET in Schools? Is the approach these teachers have to students, the curriculum and the culture of senior secondary school significantly different from other beginning teachers; or do they adjust to the dominant cultural ethos of the school to become similar to other beginning teachers? Are they operating as agents or signifiers of change, or are they 'made safe', socialised into the way things are?

Methodology

The study selects from an eclectic range of research paradigms within the qualitative repertoire. By selecting across a range of options, the research design can be tailored to suit the changing discussion as these new teachers become more confident in their own identity as teachers, so that a 'quasi' constructivist method can complement the interviewing and case study methodologies (Grbich, 1999). Diverse paradigms are found in the literature on research theory, each of which contains particular ontological, epistemological and methodological assumptions (Guba & Lincoln, 1989). As Woolcott (1995) suggests, it is not always helpful to refer to particular research traditions or paradigms, or to locate a research study in the tradition of a particular theorist. This study is designed to understand what the experiences and discussion from the data are saying about the reality of beginning teaching from a very different background from what is considered traditional or 'normal'. This is seen as a participatory process involving collaborative attempts by both the participant beginning teacher and the participator to become reflective practitioners (Schon, 1983). Individual and shifting perspectives require a more constructivist orientation in order to consider the complex and evolving nature of teacher development.

The methodology is based on the premise that 'the ability of humans to reflect on their own behaviour' (Burns, 1997, p8) means that the researcher can use a series of interviews and e-mailed conversations to collect some perspectives in order to explore the adjustments these teachers make to move from a non traditional background in industry to the world of the secondary school. 'VET in schools ... brings divergence of experience and cultures into a reasonably rigid system, with change as a natural consequence of this diversity' (Green, 2000). The methodology selected is intended to ensure that '...the research problem under investigation properly dictates the method of investigation' (Trow, 1957, p33). The background and educational history of each participant will be described in detail as a starting point of the study. To be selected for the ATTP course, the criteria for entry included applicants having recent and substantial industry experience or equivalent, demonstrated mastery of specific content and evidence of a commitment to continuous lifelong learning.

The participants

The teachers who participate in this study will be sixteen newly qualified Technology and Applied Studies (TAS) teachers selected by seeking volunteers from those appointed to rural schools from the cohort who completed the first ATTP in 2002. The participants come from a diverse range of backgrounds. They have all completed trade qualifications, or equivalent, in addition to having significant industry experience and evidence of further learning, showing a predisposition to the pursuit of life-long learning. This evidence included further post-trade qualifications, professional development or, in some cases, prior university studies. Thus the students' understanding and skills from their industry experience was the foundation upon which the theoretical and practical knowledge needed for teaching in the TAS disciplines was constructed.

Conclusion

Learning to teach is not easy. To move from a successful career in an industry context to the world of school, and to participate in a transformative journey involving apprentice status requires many personal and professional accommodations. In some ways, these teachers mirror or reflect the changes in the senior schools system, as well as being part of a response to implement these changes. Researching their teaching journey will add to the knowledge collected about other types of beginning teachers, as they construct a teaching identity (Danielwicz, 2001). To complement their trade knowledge, ATTP students needed systematic preparation in the classroom. By offering the maximum time in schools, supervising teachers worked collaboratively with the intern student as they provide support, models and experience to contextualise the learning of the novice. The ATTP program depends on forging partnerships with other education and training providers and recognises that teachers can come from a multiplicity of backgrounds. As teacher educators, the ATTP team endeavours to facilitate the crossing of boundaries building on experience and expertise to offer teacher preparation in a culturally and socially sensitive way. The research aims to investigate these new teachers whose backgrounds and CSU teacher preparation may contribute to a profound change in school cultures. The process for successful outcomes included student determination and growth as learners and teachers; the supportive learning community built through both virtual and real discussions, debates and knowledge sharing; the excellent advice, nurturing, modelling and encouragement provided by the in-school supervisors and mentors; the introduction to the possibilities of theoretical knowledge and research through academic study; and the efforts of the ATTP teacher educators staff who have developed and implemented the program. The first graduands, when they returned to collect their testamurs in April 2003, were inspiring in their discussions of the challenges being faced in isolated, remote and city 'hard to staff' schools. A systematic and longitudinal study of their approaches, attitudes and values over time should demonstrate the effect of these factors on the teaching identities these educators construct.

References

Australian National Training Authority 1998, *A bridge to the future: Australia's national strategy for vocational education and training 1998-2003*, Brisbane, ANTA. Brennan R & Green A (2002), *Doing it well at a distance: Stretching the boundaries in*

teacher preparation, (Forthcoming).

Burns R (1997), *Introduction to research methodology*, (3rd Ed.), Australia, Addison Wesley Longman.

Danielewicz J (2001), *Teaching selves: Pedagogy and teacher education*, Albany, State University of New York Press.

Frost M (2000), *Releasing the genie: The impact on education of vocational education and training in schools*, Curriculum perspectives, Vol 20, No.1. April.

Green A (2000), Voices in VET: What is it like to be involved in VET programs in schools? An apprentice researcher's journey, Canberra, AVETRA.

Grbich C (1999), 'Qualitative research design' in Minichiello V (Ed.), *Handbook of Health Research*. Sydney, Addison & Longman.

Guba E G & Lincoln Y S (1989), *Fourth generation evaluation*, Newbury Park, California, Sage Publications.

Kilpatrick S, Kilpatrick P & Bell R (2000), *Vocational education and training in rural schools: Education for the community* Canberra, AVETRA.

Malley J (1998), 'Youth transition and VET in schools', from an address given to the Australian Council for Educational Administration at the Lampe Oration Dinner, Nov 5. Malley J, Keating J, Robinson L, & Hawke G (2001), *The quest for a working blueprint: Vocational education and training in Australian secondary schools*, Adelaide, NCVER. Ministerial Council for Education, Employment, Training and Youth Affairs,

(MCEETYA) (2002), *Report from MCEETYA Task force on transition from school,* Adelaide, MCEETYA.

NATSEM & King A (2000) 'The Cost to Australia of Early School-Leaving', available online at www.dsf.org.au

Schon D (1983), *The reflective practitioner: How professionals think in action*, New York, Basic Books.

Shaw M, McDonald D, Childs M & Turner P (1999), 'Imagining Pathways West', University of Western Sydney, Nepean, Workbased Learning Unit.

Spark C (1999), *What's happening with VET in senior secondary schools?*, in proceedings of the AVETRA conference, 11-12 February, pp 323-329.

Teese R (2000), *The burden of failure: Scholastic power and social inequality in Australia,* Melbourne, Melbourne University Press.

Teese R (1999), Academic culture and economic self-interest: The case for VET in schools. VOCAL, Vol 2, 5-6.

Trow M (1957), 'Comment on 'Participant observation and interviewing: A comparison', *Human Organisation*, Vol 16, 3, Pp 33 – 35.

Wolcott H F (1995), The art of fieldwork, Walnut Creek, CA, Altamira Press.