

# **Following through: Longitudinal research into new VET in School teachers with an industry background**

## **Abstract**

This paper will present some of the findings from a four year longitudinal study into a group of teachers who have made a career change from an extensive industry background to a career teaching technology subjects and VET in schools courses in rural and regional schools in NSW. The research explored the effects of the background and the accelerated teacher training program of this teacher's orientation to the world of schools. Are these teachers acting as agents of change in the schools to which they are posted? Many of the participants in the study expressed a desire to make a difference as their major reason for changing careers. Further down the track, is this vision becoming a reality or are they overwhelmed by the reality and demands of teaching, often in quite remote or 'hard to staff' schools? The researcher has used biographical data, phone and emailed conversations as well as school site visits to attempt to capture some of the realities of school life for these teachers, with a particular focus on their attitudes and approaches to learning and teaching.

## **Introduction**

Following a group of former students who all have in common many years of experience and a previous career in an industry area such as hospitality, construction

or information technology has made for fascinating research. One of the questions that is fore grounded is what made these people decide to change direction completely and enrol in a University Distance Education course to become secondary technology and VET in Schools teachers? As the majority of those who have followed this pathway have accepted scholarships from the NSW Department of Education, at the end of the course, they have been posted as full time teachers in either western NSW rural or remote schools or alternatively in hard to staff western Sydney schools for a period of three years to fulfil their contractual obligations to the Department. As the researcher has mainly experienced rural, regional and remote schools, the participants in the study are all located in either regional high schools, central schools or small more remote schools in western New South Wales.

The next interesting question is how do these new teachers cope with the shift in career, the pressures of working with adolescents and the learning demands of a life in a very different context? The emerging themes and early data from interviews conducted with a group of fourteen teachers who have just completed their third year as teachers allow this paper to look at the way such a career change provided an opportunity for 'later learners' to reorient themselves as ongoing learners in the educational context. The interviews reveal the resilience, the reflective practices and the commitment of these teachers, who are integral participants and co-researchers in a longitudinal study of their first three years of teaching, with the researcher also having been involved in their teacher education processes, in particular in their in school experiences during practicum and internship at two schools. During the accelerated teacher training program (ATTP) they all completed by Distance Education at Charles Sturt University (CSU) in 2002, these students spent three weeks

in a supervised professional experience and then a semester in a second school completing their curriculum studies in an on site problem-based learning phase followed by a ten week internship in the same school. They have all just also completed their three year period that was compulsory as part of their deed of agreement with the NSW DET, their employing authority.

The 15 teachers, all currently completing their second year as teachers, were members of the first cohort of the ATTP at CSU. The ATTP 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 group of beginning teachers offered to participate in the study.

### **Questions for investigation**

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? 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'. In their study exploring who is choosing teaching as a career and why (2006), Richardson and Watt found that the three main motivations was the belief students had they had skills which that were worth passing on, they had altruistic ideas about teacher's social contribution and value and they wanted to be part of shaping the future for young people. In this study, these motivations have already emerged. In the participatory process involving collaborative attempts by both the participant beginning teacher and the participator to become reflective practitioners (Schon, 1983), these motivations were explored further. They are diverse and intricate to analyse as individual and shifting perspectives require a more constructivist orientation in order to consider the complex and evolving nature of teacher development.

### **The methodology**

The researcher was actively involved with the participants from the beginning of their teacher education pathway, so in using a qualitative inquiry method, the researcher continued the discussion begun during their studies with the participants in the research. The study bases its assumptions on working with and empowering people or participants to be actively involved in generating their own knowledge. The process of using emails and phone calls as discussion tools was initiated in the distance education mode of the ATTP course, but as these former students are now in different contexts, this methodology permits these discussions to continue in the early stages of

each participant's teaching career. The methodology is therefore 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. The researcher acknowledges that the relationship developed with the participants may lead to a 'halo effect' of the teacher student relationship, where the participants may be inclined to show themselves at their best advantage in conversations and comments. However, the opportunity to use a biographical methodology intertwined with other approaches means the relationship establishes further trust and openness between the researcher and subjects, so the interviews become conversations rather than question and answer sessions as such. Issues of neutrality, reliability, and validity may be seen to be addressed in part through both literal transcription of the interviews, emailing each transcript back to the interviewee for checking and further commentary and checking emergent findings and conclusions with participants. The participants, after Hodkinson (1998), have control over the construction of their comments and reflections, but the researcher acknowledges the influence of the relationship developed during the research process and the topics and themes included in the interviews. However, by doing a series of both interviews and visits, the themes will be influenced by the aspects of initial interviews which incite the most interest in the respondents and other themes not considered initially by the researcher are already beginning to emerge.

As Bawden (1997) argued, knowledge is unique and evolving within the context of practice. Qualitative study permits the research to study the selected issues as widely

as possible and is not constrained or limited by predetermined categories of analysis. 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. Ball and Goodson (1985) point out that studies of career patterns and options in professional development encourage deeper understanding of the importance of critical reflection or even what Boud, Keogh and Walker refer to as ‘inward’ critical self reflection (1985) .Through an evolving series of discussion topics, 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.

Zeichner and Gore (1990) assert that "researchers need to pay attention to both uniqueness and commonality in the socialization of teachers" (p. 27). Thus examining teachers’ biographies as well as considering the other external influences mean that listening to and analysing the interview data allows a multi-faceted perspective on their identity formation which encourages further insight into the socialization

experiences of individual teachers. Lortie (1975), the original and prime source of information on teacher socialisation, created the term 'sink or swim socialisation', an expression which is still in use and has particular meaning when examining new teachers in a rural, remote or isolated environment lacking many of the structures of larger more traditional schools, particularly in the small technology faculties.

### **The participants in the study**

The teachers participating in this study are fifteen recently 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. These teachers expressed a desire to become teachers from the time they were at school themselves. However the majority left school and took other options, in particular apprenticeships, as they were not able to continue at school, or did not achieve results commensurate with attending a tertiary course to fulfill their desire to become teachers. The ATTP course gave them a second opportunity to act upon their earlier vocational desire. The majority of the cohort also was limited from accessing University and, in many cases, the participants are from families where the expectation is that professions and tertiary education do not form part of the family experience or expectations. These participants 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.

### **Topics for discussion during the interviews**

Whilst the researcher deliberately selected a semi-structured interview protocol, a short list of interview topics was selected for the interviews. These include:

- Major concerns about beginning teaching
- Teaching – planning and implementation issues
- Managing classrooms
- Communicating and working with students and staff
- Monitoring and assessing student learning
- Reflecting on teaching
- Beliefs about teaching at this stage of their career
- Their journey towards becoming a teacher
- The teacher preparation they experienced both at University and in schools during their course

At the start each interview and visit, as pre-arranged in the scheduling phase, participants were invited to start talking about any aspect of their career or teaching life which seemed most significant or relevant. In almost every case, interviewees preferred to start from the suggested topics then move on to their perceptions of what issues were most relevant to them. This confirmed the decision to keep changing and refining the interview topics as the themes emerged out of these conversations and

visits in a spiral way, with each interview set influencing the direction and tenor of the next round.

### Emerging themes

The early interviews were conducted by telephone during Term 4 of the participant’s second year of teaching. Participants had already volunteered comments on their life in school and aspects of starting on a new career so radically different from their past working lives. The participants became very familiar with emailing their thoughts and reflections to the researcher during their student experiences and have continued to send introspective comments and observations. This made for multiple data sources:

Emails while at CSU & post	Phone calls - Unsolicited	Site visits – a full day at each site over a four month period, Semester 2 2006)	Emailed brief biographies
Forum postings as students	Phone interviews (three per participant)		Supplementary additional ‘Life History’ responses

The fact that many are working in rural and isolated schools may have encouraged this on-going discussion as a different form of reflection. Some of the themes which have recurred most frequently to date include the teacher's life experience and its effect on their teaching, literacy, confidence, their teacher preparation and coping in rural schools. Interestingly, despite one participant referring to the staff room at his school as 'Changi', all interviewees expressed deep satisfaction with their career move and their current posting with most planning to stay on after their compulsory time at the school will finish next year. Since the end of the data collection, however, one has started a position in a second rural school as the first Head Teacher (Male, Information Technology). Another has fulfilled his obligations as a sponsored teacher and has accepted a Head Teacher position in a private school in another state which has an excellent reputation in VETiS (Male, Industrial Arts – Metals) They also seem to have developed confidence in all aspects of teaching and their own self- perception of their value to the school and their students. Prior to their appointment, many felt that they 'didn't think I'd be able to do it', but now at least three of those interviewed reported they had been mentoring other teachers, albeit unofficially, and taking quite a leadership role within the school, which may reflect their relative maturity as beginning teachers, most being in their late thirties or beyond. Perhaps due to all except one having a less academically successful school career themselves, many were nervous about their own content knowledge. However one computer teacher commented her students 'didn't know as much as I thought they would' and all found the more challenging issues were more about planning and programming in order to meet the needs of their students and their context as well as the importance of engaging learners in the process.

### *Life experience*

One of the first significant themes which recurred in many responses is that these teachers are drawing on their life and work experience prior to teaching and their teacher education learning. Already, and during their studies, these participants see themselves as very different from teachers who have followed the traditional pathways of school, university or college then back to school. This difference may be in style, approach, culture or even in the beliefs about the purposes and intentions of secondary education. However, both this different background, combined with the shorter teacher education program, can lead to confrontation with other teachers, which was mentioned in most interviews. Some interviewees were critical of the cynicism of more experienced teachers, with one commenting that ‘they shouldn’t be teaching because they’ve lost the spark’. This leads to a very rich vein of potential exploration, of interest in its own right, while the researcher is attempting to avoid emphasis on direct comparison or value judgments. “I believe my past experience allows me to see beyond school. Unlike many teachers I had at school, (and still appear to be around), I am not interested in educating the students only to pass exams. I want them to learn things that will help them all their life, if they pass an exam it's a bonus. It is a bit like a driving instructor. They can teach you to drive, or they can teach you to pass the driving test. My aim is to instill in the students a work & social ethic that regardless of what career path they follow, they will be useful members of society” (Industrial arts teacher, former electrician). Another aspect of their industry background which many trade on is their knowledge of the world of work, including ‘horror stories’ from the field, which appeal to many adolescents, as well as more

daily aspects of work life. As a female former chef said – “they want to know what it’s like out there”.

### *Literacy issues*

One male industrial arts (IA) teacher, a former electrician, despite being in a school with only indigenous students and one of the lowest literacy levels in NSW, still maintains his underlying philosophy is ‘if they didn’t learn, I didn’t teach them’. When I spent a day at this very isolated school, I watched him teach a maths class. By the time he was through, not one student of the fifteen present from two different year levels, was unable to understand and perform the reasonably basic maths tasks. To achieve this, the teacher had different strategies and approaches for almost every individual student, and the lesson involved drawing on the floor, leaping of tables and many contextual stories by the determined teacher. In two isolated schools, including this one, the interviewees spoke about whole school literacy and numeracy programs where all staff members across all disciplines spend significant amounts of time each day teaching individuals and small groups of students in basic literacy and numeracy areas. Although it may take time out from other discipline areas, both IA teachers asserted the difference was very noticeable, and it had also had a positive effect on the absenteeism rate. Many also clearly saw the link between literacy and behaviour management. Interestingly, none of the interview subjects have found managing classroom behaviour as a major issue, something which may well be predicted with beginning teachers, and they mainly attribute this to factors such as the commonly held belief that the relationship between students and teachers need to be firmly and

clearly established. Many also emphasised making the processes explicit so that “the kids know the expectations of what I want them to achieve” (Former builder, male).

### *Planning and programming*

Rather than discussing their discipline areas specifically, in most cases the interviews have been characterized by examining the whole student and their engagement with the teaching and learning process, which one participant saw as “more important than fulfilling the needs of the syllabus” at times. Practicality, relevance, authenticity and encouraging positive attitudes have been mentioned many times as the most important aspects of planning and programming to meet student needs. One interviewee said, in discussing what he called the “intricacies of programming” that he “develops programs in a reverse manner”, starting from the individual students, moving up to class groups and then working back to the curriculum document. Through reflection, these programs are constantly evolving and changing, although he is worried that they may not be as officially acceptable as those written more traditionally.

### *Teacher preparation*

Another commentary which has recurred through the interviews is the teacher preparation they experienced during their accelerated program. Many had experienced teaching through working with apprentices and one, a former chef, had taught at TAFE. However all perceive secondary school teaching as having virtually nothing in common with these earlier experiences as the intensity, the level of control over

classrooms and curriculum and the professional responsibilities of teachers are far more demanding and challenging. Interestingly, it was experiences with on the job training with apprentices and other workers which sparked the initial decision to change careers for many of those interviewed. One of the main criticisms of the University course was that it lacked information on the “practical...realistic side of teaching” (IA teacher, former metal worker). Most would have liked more work on curriculum areas, particularly on how to read and interpret the syllabi and very pragmatic assistance with realistic and relevant programming. Despite having spent over twenty-three weeks in two different schools during their eighteen month program, some would have liked further work in schools. One interviewee, another former chef, who is working in a larger school in a regional town, felt that this problem was alleviated by the fact that during both of his first two years of teaching he has had an official mentor who has really developed this professional aspect with him. Unlike those in the more remote schools, who typically have no other teachers in their discipline area, he was also in a well established and collaborative faculty with four teachers working in food and hospitality with him. His comments were the most positive in terms of the support given which enabled his confidence and practice to develop very rapidly.

### *Teacher culture*

Many commented on ‘teacher culture’, a complex area which is difficult to discuss without veering close to prejudice and negative commentary through difficult comparisons, are exemplified by the following comment: “I fear I am being programmed into the ‘school way’ of doing things and as my confidence grows as a

teacher, I am rejecting it. I get bored just watching the kids do the same projects I did twenty-seven plus years ago. They were boring then and still are. I thought it safer to change the world slowly, for the time being anyway. Although new to teaching, I think my past experience and age gives me the confidence to question the system, and hopefully the skills and diplomacy required to actually do something about it” (Industrial arts and Construction teacher, former builder). Others clearly relate, in their comments, to their own experiences at school. To exemplify, one of the participants who moved to Australia during his primary school years commented that “Teachers failed to see the problems that I experienced. In high school a couple of teachers understood and concentrated on my problems with English (thankfully) and developed some self confidence and belief in my ability” (Former telephone technician, male). Further investigation is required in future data gathering to see how the context of their lives, including past school and learning experiences, influence the decisions and reflections these teachers are making about their practice. “Reflective teaching entails a recognition, examination, and rumination over the implications of ones’ beliefs, experiences, attitudes, knowledge, and values as well as the opportunities and constraints provided by the social conditions in which the teacher works” (Zeichner & Liston, 1996, p.33).

### *Teacher satisfaction*

Some of the comments show appreciation for the opportunity to engage in a new career, and all indicate an enthusiasm and belief in the beginning teacher’s ability to really achieve positive outcomes with students, as this final quote illustrates: “But for me, a bloke who had to leave school at 14 and 11 months because of financial

restraints following the death of my father, who has tried throughout his life to learn and get ahead to be allowed the opportunity to be on this adventure through the six plus years I had been doing UNI and now to be involved in youth in such a positive way is great” (Computing teacher, former Telstra technician).” For the researcher, the rewarding aspect of these interviews is the excitement, even during the exhausting end of year requirements as the end of their second year of teaching draws to a close, that all of these teachers express about the decision they made to change careers, re-engage with on-going learning, and try to inculcate their students with confidence in themselves and the desire to keep re-engaging with learning.

## **Conclusion**

Learning to teach is a difficult and challenging journey for any education student. However, for the traditional education student, school is immediately behind them and the models and images they have of what a teacher is or should be is based on immediate and recent experiences. However, these students come to the learning from a very different place. School was at least a decade in the past, and was not necessarily a valuable experience for many of the participants in the study. They have also taken a giant leap of faith in moving from one world to another. 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. ‘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).

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. All data has basically been collected, but the analysis of that data and the conversations are far from over.

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