Practice based research and critical pedagogy – rethinking teacher education for vocational educators

Abstract

This paper considers the unique features and contexts of vocational teaching and how these influence and shape vocational teacher education. A study of the use of videoing as a learning and practice based strategy is presented as a prompt to rethinking the roles of the vocational educator. A conceptualisation of the work of the vocational educator which reframes the role and counters a view of vocational education as a transmission of skills within a fixed curriculum is considered. An investigation into the use of video in a teacher education course is described to demonstrate the tensions between a critical and a technicist view of vocational education and the results of the investigation are explored in terms of the roles of vocational educators.

Introduction

Teacher education for New Zealand educators engaged in tertiary vocational education almost inevitably occurs after educators have begun practicing as teachers. Unlike the compulsory sector, teacher education occurs in and around their employment rather than prior to taking up their roles. This is both a problem, in terms of preparedness and time to study, and an advantage in terms of the
immediacy of learning against their daily practice. While some of the teacher education for vocational educators seems ad hoc and hurried because of their employment context it can also mean that their education is ideally placed to be shaped directly to their context. If this teacher education, therefore, is to take advantage of the critical realities of vocational education practice then the place of practice based research using video has much to offer.

The Research Project

Vocational educators enrolled in a level 5 teacher education course were required to use assessment data to identify student strengths and areas to focus on in teaching, plan a lesson using a teaching strategy that is new to them, video the teaching of the strategy and discuss it and finally to gather post test data to reflect on their work.

The research project focuses on the educator’s reflections on this activity and an analysis of their responses to help conceptualise a model of the role of the vocational educator.

The Methodology

Following completion of the course requirements educators were asked to complete an anonymous course evaluation survey that evidenced educator’s responses to the task in terms of their perceptions of their roles.

Current Themes in Teacher Education

Three current themes in teacher education inform this discussion namely, theory building, identity development and reflection on practice. Each of these areas has
received considerable attention both within the compulsory sector and the university sector. However there is very little scholarship in the area of theorising the roles, identities and practices of the vocational educator.

The importance of theory building and the difficulty of creating effective contexts where this can occur have been highlighted by Leach (2011), for example in her work as a tertiary teacher educator at Massey University and also by Haycock & Kelly (2009) in their role as professional developers.

Embedded in theory building is the conceptualising of the role of the educator and the development of a collective identity as educators. There has been considerable recent work in this area in the university sector where academics have considered the nature and purpose of their role as educators (see for example Jesson, Carpenter, McLean, Stephenson, & Airini, 2010). This kind of work builds on a tradition of scholarship in teaching as seen in the work of Boyer (1990) and others in the Scholarship of Teaching and Learning (SoTL). There is much less scholarship in the area of vocational education and the roles and identities of educators (Figgis, 2009).

Theory building and role defining are closely linked to the provision of opportunities for educators to reflect on their practice (Boud, 1993). Guided and collaborative reflection provides the opportunity to build a common discourse, to challenge, question, to try out ideas and think about practices (Boud, 1993). The on-going challenge in the area of teacher education of how to ensure teachers’ practice evolves thoughtfully has shown significant progress in research on reflection and
the thinking around trialling new strategies (Beaty, 1998; Boud & Walker, 1988; Timperley, Wilson, Barrar, & Fung, 2007).

One of the challenges of working with new tutors in vocational education is counteracting the tendency of educators to teach as they were taught (Viskovic, 2005) especially if such practices work against the goals of contemporary adult learning environments. The rationale for encouraging the trialing of new teaching strategies is influenced by the idea put forward by Michael Fullan and the dichotomy between teacher actions and teacher beliefs. Fullan (2006) suggests that people will behave themselves into new ways of thinking more easily than they will think themselves into new ways of behaving. This suggests that if there is experimentation with teaching actions then beliefs about how to teach may change. Fullan highlights the importance of providing new experiences for educators by encouraging the trialling of new and unfamiliar pedagogical strategies. The altered experience thus promotes shifts in thinking about what they are doing and how they are doing it which can challenge and alter belief systems.

Similarly Boud (1993) suggests that learning comes from experience and the reflection that follows the experience. Boud outlines that this is particularly relevant to vocational teachers. He states that new experiences are made sense of in relation to old experiences “no matter what theoretical frameworks are introduced”; and it is through reflection on the new experiences that learning occurs.

**The Use of Video as a Teaching and Research Methodology**
The use of video has been a strategy applied to achieving the goals of trialling new strategies, engaging with theory, linking theory to practice and effecting change (Hennessy & Deaney, 2009) and draws on understandings within video ethnography concerned with eliciting insights and understandings relating to teaching practice (Pink, 2007). With regard to vocational education, this activity may also assist in building a new way of thinking about the role of the vocational educator beyond the technicist transmission of individual skills linked to future limiting, individual standards and outcomes (Holland, 2001).

How to provide authentic, timely opportunities for educators to reflect on their practice, link practice to theory and engage critically in the development of curriculum and pedagogy while building vocational educator identity has been the goal of the vocational teacher education programme described below.

Working alongside educators and discussing teaching practices provided an insight into the ways educators conceptualise what they do. Analysing educators’ responses to an evaluation survey regarding the videoing experience led us to consider a new way of conceptualizing the role of the vocational educator.

**Background**

The Certificate in Tertiary Teaching at Manukau Institute of Technology is a level 5 sixty credit programme. Tutors employed by the Institute are required to gain the Certificate within two years of beginning their teaching careers as a minimum teaching standard. As a result, course participants come from a wide range of
disciplines including nursing and health, refrigeration trade, mechanical engineering, distribution and warehousing and business services.

The graduate profile for the programme is premised on a definition of teaching as follows:-

“Teaching is making a series of decisions, implementing those decisions and evaluating those decisions in the context of a formally approved programme. Responsible teaching/decision making is principled when the focus is on optimizing effective learning opportunities for the student” (Manukau Institute of Technology, 2010, pg. 4).

Goals of the programme include the fostering of skills and knowledge that contribute to effective teaching practice. These include the ability to observe and gather information, to inquire and ask questions, to analyse, to identify theory, to plan and act and to critique, reflect and improve. (Manukau Institute of Technology, 2010)

The particular course upon which this paper reports is designed to heighten awareness and practices around literacy and numeracy within discipline based courses at tertiary level. It follows an inquiry model of teaching practice exemplified by a number of key documents for teaching and learning in New Zealand including the New Zealand Curriculum, Teaching as Inquiry (Ministry of Education, 2007, pg.35); Teacher inquiry and knowledge-building cycle to promote valued student outcomes (Timperley, Wilson, Barrar and Fung, 2007, inside front cover) and Teaching adults to read: using the learning progressions (Tertiary Education Commission, 2008, p.4)
In tertiary education there has been much emphasis in recent years on ‘embedded literacy and numeracy’ and the development of literacy and numeracy within discipline based courses (Maurice-Takerei & Anderson, 2011). Pre and post testing using the Literacy and Numeracy for Adults Assessment Tool is required for all students enrolled in level 1-3 courses nationally. Hence this course that is being reported on is practice based and requires participants to engage in a cycle of inquiry. Participants are asked to identify whether their emphasis is on numeracy or literacy, use data to identify student strengths and areas to focus on in teaching, plan a lesson using a teaching strategy that is new to them, video the teaching of the strategy and discuss it and finally gather post test data to reflect on their work.

Assessment for the course is by portfolio and presentation. Participants collect evidence of their engagement with the inquiry process. This may be taken from online discussions, journal entries, course notes, video, lesson plans. All participants engage in a presentation that demonstrates the inquiry process within their own practice. This includes presenting data gathered from a number of possible sources, the identification of teaching strategies that may address an identified area within the data that the teacher has decided to work on, a teaching strategy that is linked to the identified data, which is videoed and then a series of reflections on a) the process and b) the teaching strategy.

One of the key goals of the course is to encourage educators to trial new teaching strategies that meet an identified aspect highlighted by assessment information or data and to encourage reflection on how that went.
A group of 27 vocational educators were enrolled in the course offered over the period of one year. Eleven educators agreed to complete an evaluation of the video aspect of the course and a number were involved in informal discussions about the process.

One of the researchers is also the lecturer on the course so the surveys were analysed by the other researcher.

Findings and discussion

What we did

At the end of the course, participants filled in an evaluation survey that asked them to write about their experiences of the videoing strategy. The survey was structured to provide teachers’ thoughts on their experience of the strategy.

What we found

“What do you think are the advantages and disadvantages of using video of your own practice as part of the assessment for this paper?”

Educators were generally positive about their experience of using video. They saw it as a way to view themselves and reflect on what they saw as well as showing how students are responding.

“It’s good to see yourself in action – plus it is a very honest tool”

“You get to NOTICE what you do – really observe yourself.”

“[you] see how you are seen by learners”.
The disadvantages were identified by respondents as relating to the initial
distraction of the videoing process. This made the lecturer and students self-
conscious. Several commented on the technical issues of set up and editing.

“Nerve wracking”

“Just need some training”

Reaction to the video content

“What did you notice about your teaching practice video when you viewed
it?”

Is there anything, large or small, that you have changed as a result of viewing
the video?”

The educators identified what they had noticed and wrote about what
changes they would make. Responses were a mix of style critique on
themselves and new awareness of student’s responsiveness.

‘I always talk too quickly”

“I didn’t realize how lost some of the students really are”

“Yes, I check in more with the students afterwards.”

“To simplify my language more. I will do the exercise in small bits
[next time]”

Practice effects
Educators were asked a series of questions that asked them to consider whether video was a useful way to promote: a) practice informed by student information; b) the trialling of new teaching methods; c) reflecting on practice; d) changing practice.

**Students**

The respondents were divided into those who saw videoing as mainly about observing themselves and being confused about the student aspect, and those who valued videoing as providing insights into students’ responses to the teaching.

“'Yes – watching the students reactions was interesting’”

“I can see that they are engaging [by reflecting on my strategies]”

“I can see how students respond to my teaching…. The results are immediately obvious”

**Trialing new teaching methods**

The educators generally valued videoing as a way to gather visual data/information on strategies they were trialing although one respondent identified that s/he preferred “written results”.

“'it shows the classroom from a different angle – a different perspective to what you remember’”

**Teacher reflection**
There was general support for the notion of videoing and a growing sense of its usefulness to allow reflection, noting that reflection itself was unchallenged as valuable. The feedback suggests that educators wanted to ensure their students had the best possible learning experience.

“[this was useful as] a part of reflection, yes, but reflection for me also involves what I feel/sense, and I like to mull over things in my mind.”

“Finding out the ..... different levels of students”

*Change in Practice*

The educators tended to list the changes they had made to their practice or outline the changes they wanted to make in future practice rather than reflect on whether the change was promoted by the use of video.

“More repetition. More clarification. Slower pace”

*General Comments – ‘the most useful part’*

The survey ended with educators making statements about what they found most useful and anything else they wanted to comment on. In these comments the educators’ concepts of their roles/identities became most evident. The role of the discipline expert is seen, the designer of learning is evident as is the teacher wanting to transform the lives of their students.

“Emphasised the (content/skill) problem with students. I need to find this out earlier in the course.”

“[It] get[s] you thinking more about what to do for your students.”
“Probably the video … was the best way to achieve self-awareness.”

“[It] reminded me of the importance of ‘knowing the student’”.

**A new way to think about vocational teaching**

The group participating in professional development and teacher education responded to the survey as outlined above. All respondents have been trained in the first instance within their discipline. They are identified and identify as ‘experts’ within that context. They have come to teaching from a range of skilled trades where they operated in a number of different capacities. They are employed as teachers with a range of experiences and backgrounds in terms of teacher training, professional development or teaching experience. In general their knowledge and skills in terms of pedagogical expertise is more novice than the skills and knowledge within their discipline. Their identity as ‘expert’ is linked to their discipline rather than their role as teacher/educator/tutor. In many cases they had not had the opportunity to conceptualise their teaching identity.

However, the engagement with notions of educator identity formed an integral part of discussions within the programme and was reflected in the surveys both overtly and by implication. This generated some thinking around the different aspects of expertise within the tutor/educator role from which emerged a three-pronged representation of the work of vocational educators.

The three dimensions of the work of Vocational Educators: Discussion

1. Firstly, as vocational or trade educators new tutors arrive as vocational or discipline experts having acquired the necessary content knowledge to teach in the
discipline. This is a given, from employment requirements driven by the requirements of regulators (Industry Training Organisations, New Zealand Qualifications Authority and The Tertiary Education Commission).

2. In terms of their role within a polytechnic how being a “discipline expert” relates to being a contributor to, developer of and deliverer of curriculum is more complex. The “lumpy” teaching knowledge/skills profile of educators along with the knowledge and experience of what it is to be expert in another discipline produces a desire to deliver effectively. Being a novice is uncomfortable. In general, vocational tutors have a great interest in pedagogies when understanding and skill development is available within the context of the day to day job.

3. The third aspect of the vocational educator role is more frequently found in every day actions and minimalist expressions than in fully developed and articulated philosophies, not for lack of ability but for lack of opportunity. This is the transformational aspect of the vocational teacher’s role - the desire to provide opportunity, to have under achievers become achievers and to ensure that students become expert in their vocations.

These three parts to the vocational educator’s role meld to provide a new and more comprehensive picture of the work of a vocational and trade educator. This conceptualisation offers the opportunity to rethink what professional development could look like and to take a “critical” view of how vocational educators are enabled to participate in and be active drivers in the development of curriculum and pedagogy as opposed to passive recipients of “cookie cutter” directions for their
teaching and the students’ learning. Thus, to the benefit of all, that the curriculum and its delivery becomes alive and evolving.

**Signature Pedagogies**

This backgrounds the notion that the work of a vocational educator is more than can be summarized in a list of skills and dispositions but is a series of actions that require an extensive knowledge base linked explicitly to practice. This is linked to Shulman’s (1987, 2005) concept of signature pedagogies where the learning of a discipline is theorized as a threefold apprenticeship that helps form the habits of the hand, mind and heart specific to a given discipline.

A model of the work of the vocational educator which is underpinned by what the teacher thinks, believes and knows how to do (Shulman, 1987, 2005) provides a starting point for on-going participatory study, with educators, to theorise and explain their work. Since, as suggested by Shulman (1987), expert teaching that can be defined and described can be reproduced.

For vocational educators to become teaching agents, active, capable and effective in skill building, knowledge transfer and the transformation of students, the teaching role itself has need of acknowledgement as a complex and multi-dimensional undertaking, worthy of scholarship and able to be theorised.

**Conclusion**

This paper has described the background to a reflexive video exercise within a tertiary teacher education programme as a vehicle to engage tutors in the analysis and theorising of their own work and pedagogical identity. Considered as a tool to
support educators, the experience and feedback prompted the theorising of the tertiary vocational educator role in a way that challenges technicist and neo-liberal notions of the work of vocational educators as solely the transmitters of industry linked and employment driven skills.

At least three prongs or aspects of educators work which emerged from the data has been described; namely, content, pedagogical and transformational knowledge and actions. These three prongs have been linked to the notion of signature pedagogies.

Consideration of the place and purpose of teacher education in the vocational, trade and technical education sector is implicit. It is suggested that a model of teaching that invokes the work of Shulman and represents the complexity of the role can initiate on-going scholarship and the advancement of teaching in this area.


