

Practitioners as professionals: revealing the artistry of expert educators.

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Abstract

In this paper I explore the nature of practitioner knowledge, skills and expertise with particular reference to educators. I discuss different paradigms of and views on professional knowledge and trace their impact on the wider discourse of teaching and learning. Using video stimulated reflection to help teachers unlock their own knowledge in action I expose the complexity of teaching and highlight some possible implications for the pedagogy of Vocational Education and Training.

Introduction

The pedagogy of Vocational Education and Training (VET) is highly complex. Embedded in the pedagogy are the same understandings about how individuals learn which underpin any pedagogy of teaching. However, understandings about how individuals learn to **apply** their knowledge takes greater prominence in VET, which must focus on how individuals learn “to do”, and this involves focusing on how individuals distinguish between and utilise the various aspects of their content knowledge to frame and address the problems of practice that they routinely encounter in their work. The problem framing that practitioners do in their decision making is often tacit, so that a ship’s engineer may not be able to articulate how s/he knows that a piston liner needs changing; a nurse may not be able to articulate how s/he knows as soon as she enters the critical care unit that a patient’s condition has worsened; and a teacher may not be able to articulate how s/he knows the difference between on and off task noise in the classroom, but they **do** know, and make decisions of practice accordingly.

The salient point here is that unless we discover the intra individual and contextual features at work in practitioner decision making we may perpetuate a rhetoric reality gap between VET theory and practice. Accessing, identifying and analysing procedural knowledge is essential if a pedagogy of VET is to truly reflect the nature of practice. This paper therefore looks at the effectiveness of video stimulated recall (Meade and McMeniman 1992; Ethell and McMeniman, 2000) and video stimulated reflection (Grainger, 2003) in accessing and analysing practitioner knowledge.

Literature Review

In this brief literature review of a very extensive topic, two paradigms of teaching and learning are examined, professional artistry (Schon, 1983, 1987, 1995) and technical competency (Fish, 1995, 1999). These two paradigms have been chosen as they are particularly relevant to the pedagogy of VET, which is an area of teaching and learning which is particularly vulnerable to interpretation in the narrow, technicist paradigm because so often it is technical skills which are being

taught, and they are often assessed in terms of technical competency based on achievements against “unit standards”.

Schon (1987) outlined two sorts of problems faced by professional practitioners. Firstly, the manageable, predictable problems which can be solved through a process of “technical rationality” (p.3) by the application of theory and technique and secondly the indeterminate, unique problems which fall outside existing theory and technique and cannot be solved by applying the usual “rules” of practice.

Schon (1987) argues that the problems of practice are not well formed, recurrent and predictable structures, they are often “messy and indeterminate situations” (p.4). To problematise practice in ways which match their theories and beliefs practitioners must use the presenting data to construct the problems to be solved. In constructing problems practitioners choose what they will pay attention to and what they will ignore, creating a frame for action which they will apply to the problem. Problem framing involves making judgements about contextual factors and is influenced by intra individual factors as well as the individual’s interpretation of the conflicting debates and theories.

From the conflicting debates spring conflicting frames for action which lead to the same data being interpreted differently by different practitioners, and by the same practitioners at different times depending on what other data is also present. Problem situations are therefore converted into frameworks for action through the naming and framing of the presenting data, by individual practitioners.

When practitioners experience unique cases which fall outside of existing theory they must improvise, invent and test strategies of their own, as the situation, or “indeterminate zone(s) of practice” (Schon, 1987, p.6 my parenthesis) is characterised by uniqueness, uncertainty and value conflict, thus escaping the “canons of technical rationality” (p.6). Schon conceptualises the ability of professionals to deal with the indeterminate zones of practice as “artistry” (p.13). Through the use of video stimulated recall/reflection, practitioners in this study were asked to identify and talk about their own artistry, so that the factors impacting on their decision making could be accessed and discussed.

In education, the technical-rational paradigm, tends to locate the problems of practice in the students and their actions and seeks techniques to fix the deviant behaviour, or convey the relevant topic content rather than exploring the holistic context in which both the students’ behaviour and the teacher’s response to it are taking place (Zeichner and Liston, 1996). The paradigm tends to suggest that there are a finite number of practical situations which arise in education, all of which may be “fixed” by the application of predetermined strategies which the educator has been trained to apply.

Practices which flow from the *technical rational* paradigm of practitioner knowledge, focus on measurable skills which can be observed, mastered and monitored, and which reduce as far as possible human fallibility (Fish 1991) with

accountability measures accentuating the technical aspects of the job, and assuming that professionals

are not to be trusted with more than the technical aspects of the job, that professional judgement and traditional skills, knowledge and experience are not reliable in ensuring the efficient running and quality end product which is demanded by today's consumerist aware customer (Fish, 1991, p31).

Schon, on the other hand, accepts human agency as part of the holistic frame of the problem, and the means to its solution. Instead of reducing the professional's input to a set of routinised technical capabilities, he refers instead to the wider concepts of wisdom, talent, intuition or artistry, concepts which the science based research traditions tend to ridicule and/or ignore. This study demonstrates how video stimulated reflection can help practitioners to identify their artistry and access their knowledge base.

Method

Findings from Meade and McMeniman's (1992) study highlighted the efficacy of video stimulated recall in helping practitioners to make explicit their implicit knowledge base. The technique was therefore used with teachers and student teachers with the aim of capturing real examples of practice, and accessing teachers' professional knowledge in action.

Video stimulated recall was selected because it allows the teaching event to be captured as completely as possible, and arguably more completely than any other method. This means that the participants may be confronted with a representation of their practice which is situated in context and as accurate as possible. This minimises the tendency for superficial self-presentation (Parsons et al., 1983, cited in Meade and McMeniman, 1992) by participants when they talk about their teaching in the interviews. Additionally, using video allows the physical artefacts of face to face interaction, such as bodily comportment, facial expression and gesture (Heath, 1997), which are significant features of classroom interaction, to be studied, and minimises the tendency for researcher and participants to focus only on remembered actions.

Considerations of how video representations of events have a tendency to flatten interactions and how the presence of a video team and researcher impacted on the classroom, were not overlooked. However given the results of a small pilot study carried out in 1999 this was not seen as a problem. While very much aware of the video, the teacher in the pilot study treated it as a minor intrusion and was able to continue with his planned lesson. The benefits of capturing the naturally occurring teaching event as holistically as possible were seen to far outweigh the disadvantages of the intrusion of a video team into the classroom. Steps were taken to minimise the disruption, for example timing filming to allow set up of equipment while children were out of the room, positioning the team as discreetly as possible, and placing the equipment so that the team did not need to move around during the lesson.

Immediately after the lesson, the video was played back to participants, who, in a recorded interview, were asked to stop and comment on the decisions they were making.

This paper uses data from my doctoral thesis, which, due to length limitations cannot be fully explicated here. While the research method described above is very simple, the method by which the resulting data was analysed is more difficult to explain, and beyond the scope of this paper. For a full account of how Discourse Analysis and Critical Discourse Analysis were used with participants' interview transcripts and educational policy documents see Grainger(2003). The purpose of this paper is to explore practitioner knowledge with a view to revealing the professional artistry of educators. To do this, excerpts from participants' talk about their teaching are presented and discussed as "cases".. Features which demonstrate the unpredictable, intra-individual, context bound nature of participants' decision making in action are used to highlight how this lifts their teaching from technical competence to professional artistry.

Discussion

Participants accounts of their practice were analysed using the ethnomethodological tools of Membership Categorisation Analysis (Baker, 1997; Sacks, 1996) on the transcripts of the video stimulated recall interviews. Throughout this analysis I demonstrate how individual agency is pivotal to decision-making-in-action and that practice is therefore more closely aligned to artistry than it is to technical competence.

The people that populate practitioner accounts, the activities in which they engage, and the way these activities are ordered or assigned moral relevance by each participant in the local context allows insight into how participants assemble and categorise the presenting factors in the classroom to frame up problems of practice that can then be attended to.

There is no *one to one* correspondence between presenting factors such as students' inattention to task or students' talking in class; the issues they represent; and the way teachers deal with them, which is why a technical competence paradigm of practice is an inadequate representation of teaching. Membership Categorisation Analysis (Baker, 1997) is used here to allow glimpses of the categories and relationships which teachers formulate in order to make sense of presenting factors, as a basis from which to make their decisions. In determining how "a vast amount of stuff is handled by Members" (Sacks, 1996, p.41) the complexity of those decisions, and therefore teachers' work, may be explicated. By way of an example we can look at one participant's categorisation of the children she is teaching. The talk proceeds as follows, in which ST = Student Teacher and R = Researcher.

389 ST (throat clearance) OK and there was one child I was aware of (:)

390 Rupert a one child (throat clearance) that would be it (unclear)

391 who was totally off task but he had **complete** completed

392 everything. He's quite a high ability child very much into reading
393 and (:) writing um he's in an extension group and he's (:) um I'm
394 always giving him extra work to finish with and he is (:) he has
395 completed everything but unfortunately with this lesson I
396 didn't have anything for him to go on to

397 R OK.

398 ST which I possibly should have anticipated happening but um I
399 didn't want to race onto the next part of the lesson until
400 everyone else had was at at that stage and he was just way
401 ahead (:) of everybody he had some quite good answers too. I
402 was aware of him

403 R You were aware of him and you were choosing to
404 to just (:) I had a (:) had a talk to him and I um he was reading
405 quietly and that was fine so I I sorted that out and he knew that
406 that he could sit there and do that and I was just choosing to
407 carry on with the lesson

In the next excerpt the participant accounts differently for another child's off task behaviour.

537 ST This is interesting to observe the child that's um the extension
538 child that's working hard there wanting to get it all finished really
539 quickly(?) and the other child in his group is just completely off
540 task (:) totally.

541 R Who's that? Who's the other child?

542 ST The one in the red with dark hair just there.

543 R Over there I see.

544 ST Yeh sitting up there on the desk there.

545 R Oh right.

546 ST Yeh she's just not um (::) yeh she's a low lower achiever and
547 um she's just not quite sure I don't think of what what she
548 should be doing.

549 R Ah hm.

550 ST Whereas these two are really discussing it quite well and they
551 totally finished everything and did some really good work there
552 too.
553 R So how can you what are you tu-uning into you say these two
554 are obviously really discussing it quite well (:) what (:) tells you
555 that?
556 ST Um one's writing one's leaning over and talking they're close by
557 they're looking at each other interacting looking really
558 engrossed in what they're doing. And I know they're on task
559 because of um that boy is writing the whole time. See him
560 writing.

In the above accounting we see how the participant has different reactions to the same presenting factor of being off task. She uses the membership categorisation device (henceforth MCD) *intellectual ability* to describe and distinguish between children.

Of particular significance is the way the children are assigned to two different categories within the MCD, as a "lower achiever" and as a "high ability child" without reference to any "mathematicalizable" (Sacks, 1996, p.59) basis for measurement. There are no units of measurement referred to as these are taken for granted. This is important, for as Sacks (1996, p.58) explains "(s)o normal is a standardised category, where whatever it refers to for any given person doesn't have to be specified to control its use" and yet "a range of decisions are made in terms of 'odd events' versus 'normal events'" (1996, p.62). This categorisation leads to the same action, activity or attribute, such as off task behaviour, being viewed and treated differently by the teacher, that is as having already finished the work for the high ability child, and not knowing what to do for the low achiever.

This categorisation enables two different problems of practice and two different reactions to them, to be crafted from the same presenting factors. It also establishes some covert rules about whose and which off task behaviour is acceptable. It appears to be acceptable classroom behaviour if you're a high ability child and you're reading a book but not acceptable if you're a low achiever and you're sitting up on the desk. The complexity of the decision-making-in-action is apparent when one considers all the other categories and selections and the non mathematicalizable relationships between them, which have been considered and rejected prior to decision making. If there are high ability children, there must necessarily be low ability children and possibly lots of other ability levels in between; if there is off task behaviour, there must be on task behaviour and the participant must be able to distinguish between, not just

whether the behaviour is on or off task, but whether a particular behaviour is acceptable for a particular category of children.

A second case of complexity is outlined below:

104 ST I was thinking on my feet there I guess because originally I
105 thought I'd get them all to bring their letterboxes down to the
106 sharing circle and then I realised that they were all far too big so
107 that was why I um asked the girls to bring theirs down first and
108 then the boys and I was trying to get them to focus on things we
109 talked about the other day when the rural delivery lady came
110 and spoke and she pointed out that a letterbox in the country
111 has to have a flag and it has to have a front opening lid that
112 goes down so I was trying to ask open-ended questions to get
113 them to think about that and at the same time I was giving them
114 an opportunity to share their letterboxes because they brought
115 them to school this morning and they're all so proud of them
116 when they walked in the classroom and we yeh we decided now
117 was the time to share them so um and also modelling what
118 they're having to do on the sheet because I'm asking some of
119 them to see if the parcel fits in or the milk bottle fits in or the
120 letters fit in which is what we do later on that self assessment
121 sheet.

The routine action, or technical competence of “asking open ended questions” is described as having five purposes: getting the children to think (113), giving them an opportunity to share (114), affirming their efforts (114), modelling the next task (118), and signalling the assessment activity (120).

Asking open ended questions is a technical skill, but being able to identify five different purposes for using them in a single interaction goes beyond technical competence as it demonstrates the individual agency of the teacher in using that competency. By allowing the practitioner to link practice to purpose it is possible to see how teaching is more closely aligned to artistry than technical competence.

A third case unpacks the technical skill of teaching often referred to as using “wait time”.

88 ST And there just by giving a bit of **wait** time to (:) to see if the

89 child noticed what everybody else was doing and followed and
90 therefore when he didn't give him just (:) give him a little gentle
91 reminder that we are doing something else at the moment.

92

When the practitioner's recall is stimulated by the video of her practice, she is able to talk about her different reasons for using wait time. In connecting the skill with the decision making processes which have led to its application, she allows us insights into what for her are 'odd events' versus 'normal events'. As Sacks (p.58) explains "(s)o normal is a standardised category, where whatever it refers to for any given person doesn't have to be specified to control its use". Using the MCD *teaching skills*, she categorises one skill as using *wait time*. The attributes of wait time as described in the above extract are that it is quantifiable, she uses "a bit" (88) not a lot of it and she decides on these measures based on the cues and clues available in the context; it is used for a specific purpose, to check on a single child; although called *wait time* it is an active rather than a passive skill with the teacher using the time to observe (88-9); it is a child centred skill as it allows an opportunity for the child to correct his/her own behaviour (89); in applying the skill the teacher needs to be aware of the individual and the rest of the class; it is not a stand alone skill but networked to other practices such as giving "gentle little" reminders. When the level of individual teacher agency required to sort all this "stuff" is realised, it is clear that professional artistry rather than technical competence underpins even this specific and commonly used skill.

Conclusions

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n this paper I set out to do two things:

1. To demonstrate the efficacy of video stimulated recall/reflection in revealing practitioner knowledge.
2. To demonstrate how, once revealed, practitioner knowledge can be recognised as being more closely aligned with professional artistry than the depersonalised notion of technical competence.

This paper suggests that:

- professional artistry is routinely present in teaching
- that the hallmark of professional artistry in teaching is individual agency in framing and solving the problems of practice which are routinely complex and laden with value conflicts requiring teachers to make ethical decisions
- that *knowledge of own purpose* which is a multi-dimensional, ever changing, locally generated, highly contextualised construct is an aspect of teacher professional knowledge which is critical to the explication of teaching in a discourse of professional artistry
- that viewing and talking about one's own teaching is the best way to access this knowledge
- that these findings may be as relevant for other professions as they are in teaching

Finally, this study concludes that the analysis of accurate representations of practice is essential to researchers' and practitioners' sound understandings of professional knowledge in action, and therefore essential to any pedagogy of VET.

References

- Baker, C. D. (1997). Membership categorisation and interview accounts. In D. Silverman (Ed.), *Qualitative research: Theory, method and practice* (pp. 130-143). London: Sage.
- Fish, D. (1991). But can you prove it? Quality assurance and the reflective practitioner. *Assessment and Evaluation in Higher Education*, 16(1), 22-37.
- Fish, D. (1995). *Mentoring for student teachers: A principled approach to practice*. London: David Fulton.
- Grainger, S. (2003). *Accessing the Professional Artistry of Teaching*. Unpublished thesis, Griffith University, Queensland.
- Heath, C. (1997). The analysis of activities in face to face interaction using video. In D. Silverman (Ed.), *Qualitative research: Theory, method and practice* (pp. 183-200). London: Sage.
- Meade, P., and McMeniman, M. (1992). Stimulated recall--An effective methodology for examining successful teaching in science. *Australian Educational Researcher*, 19(3), 1-18.
- Parsons, J. M., Graham, N., and Honess, T. (1983). Cited in P. Meade and M. McMeniman (1992). Stimulated recall: An effective methodology for examining successful teaching in science. *Australian Educational Researcher*, 19(3), 1-18.
- Sacks, H. (1996). *Lectures in Conversation*. (Vols 1 and 2). (G. Jefferson, Ed.).Oxford. Blackwell.
- Schon, D. A. (1983). *The reflective practitioner*. New York: Basic Books.
- Schon, D. A. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.
- Schon, D. A. (1995). The new scholarship requires a new epistemology. *Change*, 27(6), 26-35.
- Zeichner, K. M. (1994). Research on teacher thinking and different views of reflective practice in teaching and teacher education. In I. Carlgren, G. Handal, and S. Vaage (Eds.), *Teachers' minds and actions: Research on teachers' thinking and practice* (pp. 9-27). London: The Falmer Press.