Learning to Teach: The Construction of Teacher Identity in the Context of Schools

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In this paper the question of teacher identity is at issue. Central to the analysis is the preservice teacher and the part which the teaching practicum plays in the 'making' of a teacher. Within the context of educational changes, the interest is in the meanings which the beginning teacher gives to the engagement of pedagogical work. Meanings of practice, both conflicting of, and affirming with, the preservice teacher's own personal theories, are revealed. The tensions recorded have implications not only for teacher education programmes but also for professional development programme development.

In her influential text "Practice Makes Practice: A Critical Study of Learning to Teach", Deborah Britzman asks: 'What does learning to teach do and mean to student teachers?" The question is centred on the experiences of pre-service teachers and the construction of teacher identity. Britzman's curiosity is directed towards that specific time during the pre-service programme when the intellectually rich course offered within the tertiary institution is given a context in schools. Contextualising course work by means of the teaching practicum provides an occasion for student teachers to practice in meaningful ways. It is an important component of the programme precisely because it is in schools where possibilities and constraints of the teacher's identity in the classroom are first confronted by the student teacher - where relationships are implicated and where multiple meanings are created.

There has never been a consensus about how one becomes a teacher. This is principally because opinions differ over the constitution of good pedagogy and how the student teacher might demonstrate competence in the classroom. What there is common agreement over, however, is a recognition of the overwhelming complexity of the teacher's work which prevents any straightforward correspondence between theory and practice, and ideas about what should happen during teaching practice and what does actually happen. The complex and constantly shifting situation of the teaching experience places the student teacher in a vulnerable and dependent position, receptive to advice, support and guidance. These others in schools offer persuasive ways of doing things, and to that extent, the creation of teacher identity is derived in part and negotiated from the identity and discursive practices of others.

We wonder what aspects of classroom practice contribute to the creation of teacher identity. We know from a study by Mousley and Herbert (2000) that, on the basis of preservice teachers' observations during the practicum in Australian schools, changes in classroom practice have taken place during the last decade. These changes, in turn, signal changes in the structures which constitute the pre-service teacher's desire for the pedagogical. We were searching for insight about teacher identity in our own country. Theorising about these questions requires an understanding of the construction of one's identity as a teacher which is not static and taken for granted. It also demands an acknowledgment of the tentative and shifting balance between theory and classroom

experience, and the recurring tension between curriculum and the emergent personal relationships and meanings.

Thinking about learning to teach in this way shifts our preoccupation as mathematics educators with teaching other people to teach towards a consideration of the *conditions* for the making of a teacher. This then is a report of an exploration of the 'making' of pre-service teachers in the context of work in New Zealand schools. We focus on one question about the experiences our students had in schools: What does it mean to engage in pedagogical work during the teaching practicum? In the first section we look at the types of practice in schools which have been identified by preservice teachers for a large Australian city. We then provide a theoretical basis for our investigation. In the third section we note the methodological implications and give a brief description of our research methods. Finally we present data and offer a reflection on these data as a way of revealing the discursive practices (cf. Fairclough, 1992) at play. Our analysis has led us to argue that, as educators, we need to look closely at how embodied relations, which exhibit a power differential, shape and are shaped in the teacher/student relations during the teaching practicum.

Guiding Theories

Our interpretation of pre-service teachers' practice in school is informed by a theory of identity which is not based on role or function. This theoretical framework, we believe, addresses concrete teaching experiences for the interpretation of the acquisition of teacher identity. It shows where those experiences come from and the meanings which teachers assign to them. 'We learn by experience' and 'experience is the best teacher', as the familiar rhetoric suggests. Social legitimating forms couched in such slogans perpetuate the idea that experience maps meaning by organising perceptions. Experience, however, is a "difficult, ambiguous and often oversimplified term" (deLauretis, 1994, p81), and does not map neatly onto matters of teaching practice in the classroom. It is too simplistic to characterise it as unproblematic:

Numerous theories (for example Greeno 1997, Kirshner & Whitson, 1997) have been proposed to account for experience and the place of "the person-acting-in-social-practice" (Lerman, 2000, p25). Lave's (1997) sociocultural work in mathematics education presents a sophisticated theory of situated knowing. This approach draws on the dialectical tradition of social thought to assert that knowledge of oneself is to be understood in relation to evolving relationships between people and the settings in which activities are conducted. Experience, for Lave, is a self-organising engagement revealing reciprocity between persons and settings, practices and social interests. These ideas, together with the conceptual tools developed for analysing experience, have gained much currency in recent years. Indeed Mousley and Herbert draw on Lave's analysis of the subject in practices

In both Walkerdine's (1997) and Lerman's (2000) estimation, what Lave fails to account for, however, are different degrees of coherence between subject positions and practices. It is our contention that in overlooking how individuals are differentially positioned within specific practices, Lave's work leads one to surmise that individuals would take up their identity and their knowledge of the world in an identical manner, if they were to be placed in an identical context. This suggests that given the same classroom, the same children, any two student teachers would share the same experiences. Recognising and in order to account for contradictory realities of teaching practice, we draw on recent developments in the theory of subjectivity and power for knowledge production. This perspective recognises the importance of the subjective in constituting the

meaning of student teacher experience. It reveals this by showing where that experience comes from and how it relates to concrete social practices. Moreover, and what is of particular interest to us, it is able to unpack competing student teacher definitions of subjective realities – of success and failure, and of vulnerability and credibility.

Methods

We invited all students enrolled in the second year compulsory mathematics course at our university to participate in our study. The 67 students who responded answered both open and closed questions from a questionnaire concerning their recent teaching practice experience. During the three weeks in which they were out in schools during the third school term, they worked closely with one classroom teacher (the associate), endeavouring to build a professional partnership with this teacher within a supportive environment formed by links with the university and the school.

Students provided information about their school. They noted the year level with which they worked, the ways in which, and times when, mathematics was scheduled, during the school day. Records were also made of the total number of mathematics lessons which occurred, and those in which the student teacher had some or all involvement. We asked how teachers planned their lessons and what material was sourced in order to assist with this planning. Because we were interested in finding out the pedagogical strategies which teachers use we asked questions relating to teaching approaches and the forms of assessment carried out. Our particular interest here was in finding out what the teacher *and* the children do for the duration of a lesson.

Our theoretical orientation had framed teacher identity as a process constantly on the move, constituted in part by the overfamiliarity of the teaching profession in which students have played an opposite role for many years. Those learning to teach draw on these understandings to some extent, and inevitably tensions between the 'known' and the 'being' of teaching will arise. A concern with compliance and dissonance is largely unmarked territory in mathematics education. Given that the theoretical resources were at our disposal to account for these aspects of practice, it seemed timely to include this issue in the questionnaire. Accordingly, we asked students to reflect upon and articulate these affirmations and tensions. The intent was to draw attention to how the making of the teacher is socially structured, historically inflected and open to change.

Macropractices

The largest proportion of the students (44%) were placed in schools with rolls between 100 and 400 students. Smaller schools accounted for 30%. Mathematics was normally taught prior to lunch; before morning recess for 39% of the classes and after morning recess but before lunch for 43%. Thirty percent of the students saw mathematics taught each of the 15 days they were on the placement. The minimum number of mathematics lessons seen was 2 and 15% of the students reported that less than 10 lessons were taught over the 3 weeks.

duration of the mathematics lessons also varied considerably. One student reported that mathematics lessons usually lasted only 10 minutes! The longest duration reported was 75 minutes. When combined with the data describing how many times mathematics was taught, the average time spent on mathematics each week ranged from 6 minutes to 5 hours. The median was 3 hours and 12 minutes. The student reporting the lowest time (just 10 minutes per day for two of the 15 days of the placement) added the explanation that the

school was practicing for a concert in time that was normally scheduled for mathematics. In 20% of the classes mathematics was taught for less than 2 hours per week.

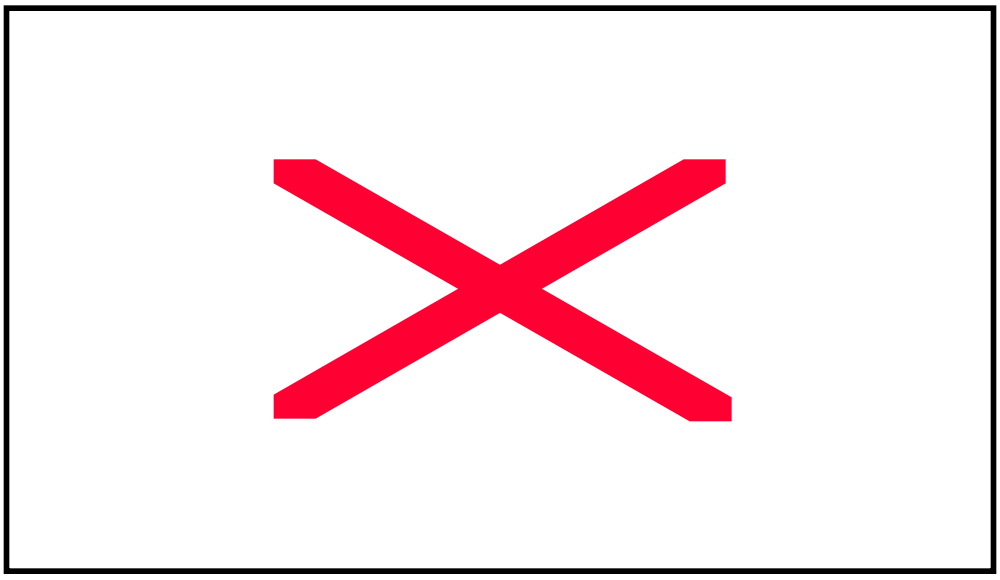

Figure 1. Cumulative frequency for average time spent on mathematics per week.

The most commonly mentioned resource that the students believed the teachers used for planning was "Mathematics in the New Zealand Curriculum" (78%). The next most commonly mentioned resource were commercially produced teachers guides that support the New Zealand curriculum (60%), worksheets and notes from previous years (55%) and textbooks (50%). The resource which the students felt the teachers used the least was the Internet (6%).

Most classes were grouped by ability during mathematics lessons (65%) with streaming across different classes taking place in 7% of these classes. Whole class teaching was the norm in 26% of the classes.

Students chose from a list of classroom activities what teaching of mathematics involved in the class they were in. The three most commonly identified activities (seen by 82% of the respondents) were; teacher talk and exposition; children listening; and children doing worksheets. Students were also asked to estimate what percentage of the lesson was taken up by each of the activities they had seen. Co-operative and group activities appear to have taken the greatest amount of class time, with the mean of student estimate being 50% of class time. Children using equipment also took up a high proportion of class time in the classes where it was seen.

There was wide variation in the feedback that teachers gave their pupil. 25% of the students reported that they never saw the teacher give any formal feedback to the children. Most commonly seen was an oral assessment or correction of an individual (seen by 58% of the students), followed by an oral assessment or correction given to the whole class (seen by 50% of the students). Teachers written comments were the next most commonly observed feedback (43%). Ticks and crosses from the teacher were almost as frequently used (41%). Peer assessment or correction was seen in 28% of the classes. Children marked and corrected their own work from written answers in 32% of the classes.

Micropractices

In the previous section we explored the question of what it means to engage in pedagogical work by providing specifics of mathematical macropractices in primary and intermediate schools belonging to the catchment area of our university. From this it is possible to see how the identity of the teacher grows out of a history of response to changing social, political, and educational determinations. Teacher identity in 2001 is an educational reality, constructed with an eye towards current wider educational discourses and practices, all of which signal changes in the structures which constitute the preservice teacher's desire for the pedagogical. Insight into this reality requires that we attend to the specific contexts from which the category of teacher identity emerges and helps shape. This calls for an understanding of teacher identity as itself being continually reshaped by the changing designations student teachers employ to understand themselves, significant others, and the spaces they share. In this section we look at those designations through the micropractices of the practicum.

Personal meanings are contingent upon context and upon the perspective of others, and are always shifting. The university, through its philosophies of mathematics teaching and learning - its promotion of the use of apparatus and technology, its recognition of difference, its validation of problem solving, group activities, integrated learning, and the facilitating teacher - is a powerful institution in shaping what preservice teachers expect from the practicum. Both the associate and the student are committed to personal understandings of practice. Observing the associate's teaching practice then becomes a strategy in which the students' own invested interests and theories shape what is seen. We wanted to make connections between their impressions of how the teaching practice met their expectations so that we could connect these observations with larger theories. To avoid repetition we have not included all responses.

> Maths was integrated over all curriculum areas. The maths area that was focussed on was geometry and for geometry we looked at position. PE was included in this. Art and English were also included. Covering all curriculum areas is a good way for children to learn because they can gain relevance and understanding from it.
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> I enjoyed maths on posting. We were doing 'mass' and it was very hands-on and fun for the children. I could actually see the children learning.
>
> I liked the way that the children were broken up into year group/activity groups. This meant that it was easier to plan for and not so demanding on time. It ensured the teacher was able to focus on teaching one level instead of three.
>
> The way the teacher used so many little whole class activities to reinforce learning and as maintenance. Children's attitude to maths – they called it 'marvellous maths'. They loved it!
>
> I was really impressed with the way my AT [associate teacher] taught a maths lesson. He spent a lot of time on the mat with the children teaching them, backing up the teaching with worksheets.

The same practice is both validated and delegitimated as different investments in the key term 'worksheet' compete for attention. Is there something masking agreement in affiliatory relationships? Are there other agendas at play? Smooth partnerships within the context of the practicum are the ideal. We are all taught that it is undesirable (at times, even unacceptable) to disrupt a close work relationship. The preservice teacher's affiliation is to the college which designates him or her as a 'novice' in the classroom, whereas the associate teacher's affiliation is to the school, as an classroom 'expert', bringing to the relationship the power of authority, knowledge, and status over and above the teacher-in-training. In the teaching practicum, each move that both make in the relationship is situated

within institutional arrangements that in many ways push them to engage in particular discursive practices. This has the effect of reproducing prevailing relations of dominance and subordination. We wondered to what extent this affiliatory power (Said, 1993) might influence the meanings which the preservice teacher gave to the partnership. We tried to discern this information from what they said about expectations being met in the practicum. Twenty-eight students responded positively. On the other hand, twenty felt that their expectations had not been met.

Personal understandings of teacher identity emerge from specific contexts and become a site of give and take. In this context it is difficult for the teacher to work through opposing understandings unless alliances are made around shared goals. Compromise is inevitable. Here we engage with the observations of students in the process of trying to construct their teacher identity when those observations are at odds with their own personal theories:

> [The way maths was taught] differed greatly from what we are learning. No hands-on. Frustrating.
>
> Seemed to be a lot of maintenance before getting on with the group activities. The lower ability group couldn't do this and seemed to waste their valuable time just sitting there.
>
> Very surprised at the routine of text books and not surprised that the children were not inspired very much at maths – even the most capable.
>
> The whole class method did not cater for the children's individual needs. I felt there were too many children who did not understand and needed to be taken back a step or two. One 7year-old could not count past 12 and was totally left behind (the teacher did not even know until I picked it up).
>
> I didn't agree with the unit. It was calculators – some of the children had problems doing basic addition and subtraction by hand.

Teaching practice is a strategic and interested activity. It is impossible for students to practice disinterestedly, since their practice in schools always works through vested interests, through both their own and others' rhetorics of opinions and arguments. The point here is to understand how the dynamics of teaching intersect with a whole host of other determinations. From this we propose a concept of teacher identity which is insistent on its plural, changeable and ultimately compromised character. This proposal stands itself up against the more familiar forms of teacher identity which tend to bracket out dissonance and contradictory practice. In our theorising the concept of teacher identity is best thought of as complex and multiple, developed in response to other identities which are sometimes held in opposition.

We argue that the practicum partnership is produced by social interaction, is subject to negotiation, consent and circumstance, and is inscribed with power and desire. These relations determine the very texture of teaching and its possibilities - possibilities which to the vulnerable students, might seem remote. We record here the tentative voices of students who seek clarification from the associate, who, they regard as knowledge bearer and embodiment of reassurance.

> At one point things got bogged down. My associate offered wonderful support, gave feedback and got me going again.
>
> The teacher never observed me during maths. I hope I was doing the correct thing.
>
> I would have liked my associate to talk to be more about questioning and extending children with activities and ways to adapt for children with lower ability so all can be involved.
>
> No-one came round to make sure I was teaching correctly.

> My associate was excellent in giving support. He gave resources to use to complete my activities and gave my positive feedback.

In this section we have investigated the 'making' of pre-service teachers in the context of work in New Zealand schools, by looking closely into concrete situations of teaching and learning. We did this by attending to, not only the broad historical context of their teaching experiences, but also those moments of classroom practice which inform, constrain and implicate the theoretical and their practical work in schools. What the teachers have revealed through their interpretations has been at times a clash of invested meanings and a resultant comprised practice. This has forced us to rethink the notion of the preservice teacher who has teaching experience and to think instead of the student as constituted through experience. Teaching experience then becomes more than technical skills; it is, above all, a source of (micro)political engagement.

Conclusion

In this research the question of teacher identity was explored, focusing on the preservice teacher's work and perceptions in the classroom. We provided an overview of the mathematical practices in primary and intermediate classrooms for the catchment area of our university. From this it was possible to see how the concept of teacher identity develops in response to wider determinations in the educational arena. We investigated the meanings which student teachers give to the engagement of pedagogical work through the terms of their definitions of the practices of formalised course work and the practices within the classroom. Tensions between the 'known' and the 'being' of teaching were revealed, and we record these in order to alert programme developers of teacher education courses and of professional development in schools. The student teachers concerned have found that while it is relatively easy to imagine the possibilities for creative pedagogical work in mathematics, it is sometimes more difficult to enact these possibilities.

We argue that overviews of classroom practice are important but they do not tell the full story. To the extent that they cast the process of becoming a teacher as linear and unproblematic, they provide an overly simplistic view of the 'making' of the teacher precisely because they cannot give expression to the meanings created by all student teachers. Nor can they reveal how these meanings were produced through a process of continual give and take. An epistemology, grounded in a concept of essential teacher identity, is up for questioning in our analysis.

Theorising which concerns itself with mapping preservice teacher realities must attend to the particular social structures and processes which create the very conditions of experience. We see the students as contextualised and in relation to a variety of significant others: their associate, college staff, school administration, the children they teach, people from their past and the more recent present. And we think of the 'making' of the teacher as a site of negotiation - as consenting to, of refashioning, and of dismissing the identifications of those significant others. When identity is approached as always multiple and as a site of particular and local affirmation and struggles, then we can imagine a broader project, a cultural politics of knowledge, a strategy for imagining an educational theory for our times.

References

Britzman, D. (1991). *Practice makes practice: A critical study of learning to teach*. Albany, NY: State University of New York Press.

de Lauretis, T. (1994). Upping the anti [sic] in feminist theory. In S. During (Ed.), *Cultural Studies Reader*. London: Routledge.

Fairclough, N. (1992). *Discourse and social change*. Cambridge, UK: Polity Press.

Greeno, J.G. (1997). On claims that answer the wrong question. *Educational Researcher, 26* (1), 5-17.

Kirshner, D., & Whitson, J.A. (1997). *Situated cognition: Social, semiotic and psychological perspectives*. Mahwah, NJ: Lawrence Erlbaum.

Lave, J. (1997). The culture of acquisition and the practice of understanding. In D. Kirshner & J.A. Whitson (Eds.), *Situated cognition: Social, semiotic and psychological perspectives* (pp.17-35) Mahwah, NJ: Lawrence Erlbaum.

Lerman, S. (2000). The social turn in mathematics education research. In J. Boaler (Ed.), *Multiple perspectives on mathematics teaching and learning*. Westport, CT: Ablex.

Mousley, J. and Herbert, G. (2000). The practicum as context: Two snapshots. In J. Bana & A. Chapman (Eds.) *Mathematics Education Beyond 2000* (Proceedings of the 23rd annual conference of the Mathematics Education Research Group of Australasia, Fremantle, pp.456-464). Sydney: MERGA.

Said, E. (1993.) *Culture and imperialism*. New York, NY: Knopf.

Walkerdine, V. (1997). Redefining the subject in situated cognition theory. In D. Kirshner & J. A. Whitson (Eds), *Situated cognition: Social, semiotic and psychological perspectives*. Mahwah, NJ: Lawrence Erlbaum.