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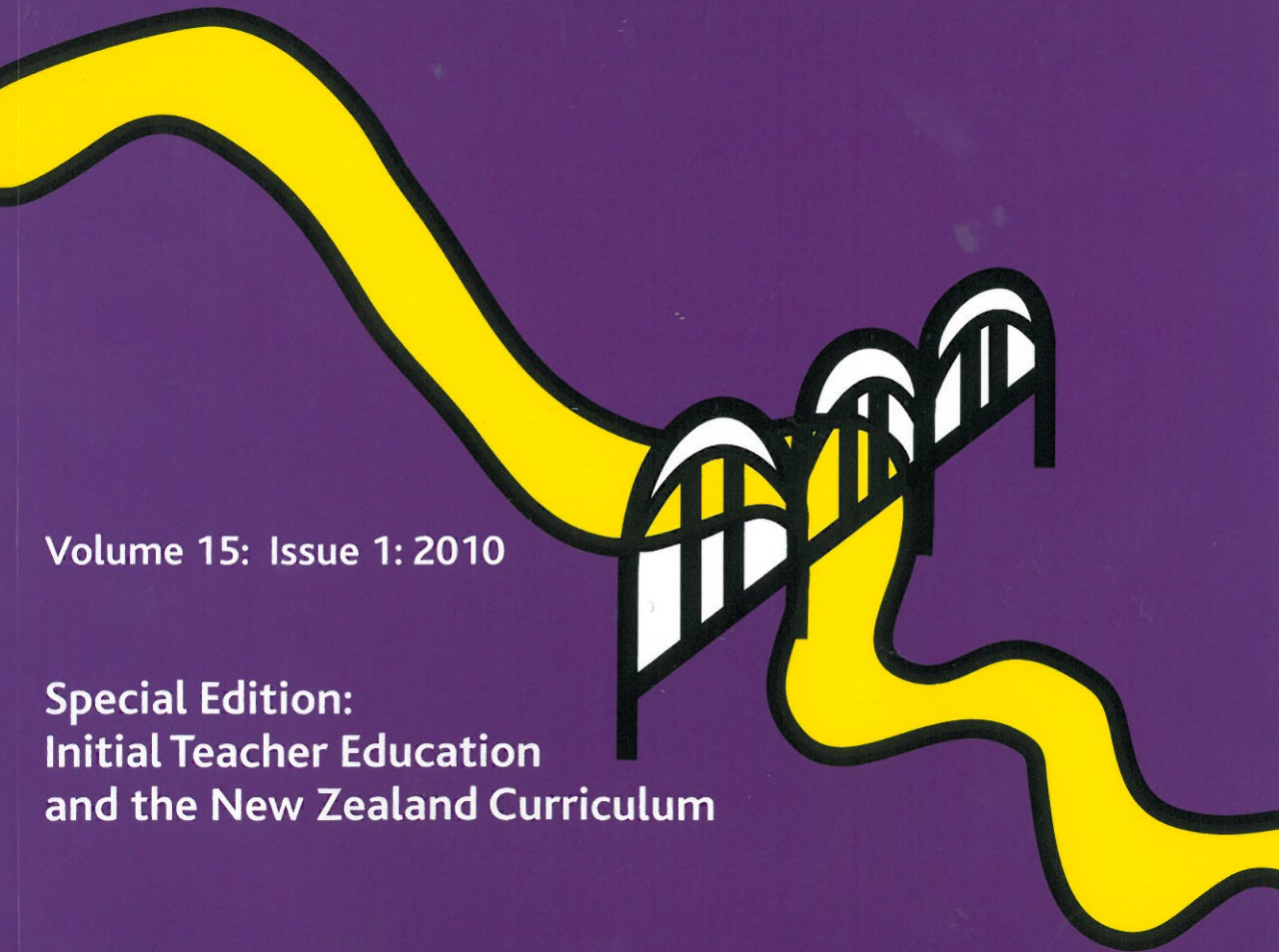
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DECOMPOSITION AND APPROXIMATION: FINDING A LANGUAGE FOR ITE PRACTICES IN NEW ZEALAND

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ABSTRACT *This paper explores the discourses that relate to the beliefs and roles of teacher educators and the search for language to describe and understand ITE pedagogy. In particular, two concepts are explored. First, decomposition of practices, that is, breaking down practice into pieces that become the focus of attention in analysing teaching. Second, approximation, that is, bringing practice into coursework, where novices enact parts of practice to learn to teach. Decompositions and approximations, it is argued, provide a conceptual tool for describing some of the practices in professional education courses in ITC.*

KEYWORDS

Professional education, pedagogy, initial teacher education

INTRODUCTION

Professional education is the main focus of New Zealand primary and secondary Initial Teacher Education (ITE) programmes. Professional education includes professional and curriculum studies courses, as well as practicum or teaching practice courses, yet there is little reported about professional courses, the course curricula or associated pedagogical practices. When teacher educators meet together, we talk about our courses in particular ways, whether discussing issues of general concern or of specific interest. We tend to discuss our courses in terms of teaching time, such as how many hours do you have for (insert name of curriculum subject)? when and how often do you have classes? and how big are your classes? This kind of course information is about surface features but I think it serves as a subtext relating to a historical pedagogical approach based on one teacher educator with a class of around 25 student teachers. This is a shared discourse of teacher educators about a preferred organization for ITE and I suggest it is linked to pedagogical descriptions of our courses. The official curricula of ITE professional education courses might be documented within conceptual statements and course outlines, but enacted curricula is largely unreported and little understood. Being immersed in a merger for the second time, I am aware of how managers and other university staff mostly do not understand this teacher education discourse and we are often talking past each other with frustrating and serious consequences.

When listening to other teacher educators, I recognize the many similarities in our courses and appreciate the differences related to localized contexts. When pressed, we often describe our pedagogical rationale in global or generalized terms

such as “modeling best practice” or “practice-based”. These terms also have shared meanings within a community of teachers and teacher educators but do not connect with those outside the teaching community. The metaphor of modeling can be problematic for our work with adults and masks an extensive knowledge base of teacher education in New Zealand. Teacher educators’ knowledge is like an iceberg, where our articulated knowledge is represented by the visible iceberg, but is a mere fraction of the extensive knowing that lies beneath the surface. The tacit knowledge of teacher educators is an untapped reservoir of expertise, not unique to New Zealand, but often perceived as an indicator of theoretical and evidential weakness, or that the work of teacher education is easy (Labaree, 2000). What might be other ways to discuss the pedagogical practices of our courses? In this paper I describe a framework drawn from studies of education for the professions, and outline two conceptual terms relevant to professional education courses; “decomposition of practice” and “approximation of practice”. I use these terms to identify aspects of ITE within courses in professional studies and curriculum studies (mathematics education). This framework offers a useful tool for teacher educators in New Zealand because it provides a language to describe ITE pedagogy, bridges an old chestnut of the “theory-practice divide”, and may be useful for responding to current pressures on ITE.

BACKGROUND

In 2005 I attended a conference presentation titled “Unpacking practice: decompositions and approximations” (Grossman, Compton, Igra, Ronfeldt, Shahan, & Williamson, 2005). The research was part of a larger study of practices for the professional education of clergy, teachers, and clinical psychologists. These three professions were chosen because all were similar in that “practice depends heavily on the quality of human relationships between practitioners and their clients.” (p. 110) Teaching, however, is different to the profession of clergy and clinical psychologists in a number of ways. Teachers and students have less opportunity to choose who they interact with and teachers spend a great deal of effort in “developing educative relationships with students, they must accept all students who enter the classroom and figure out how to connect with them.” (Grossman et al., 2007, p. 112) In addition, teachers tend to have more regular and sustained contact with a greater number of individuals than other professions. Not only do teachers engage with the students in the classroom, they have also planned and prepared the daily classroom curriculum or programme.

Nevertheless the conference presentation incorporated conceptual ideas that I recognized as significant for professional education. Engaging in a professional narrative to understand practice is a crucial ongoing priority for teachers entering the profession. Professional narrative highlights the ways that language is a tool for naming qualities of practice. In other words, a professional language describes and represents practice and affords a tool for analysing, re-organising and transforming practice. Teacher educators are key resources for student teachers because professional values and meanings are explicit and implicit in our interactions within professional education courses and practicum supervision. A teacher educator needs to understand not only the local contexts of the settings where beginning teachers

will teach, but have understandings and language to make aspects of practice visible.

Decomposition and approximation of practice are concepts that resonated with my experience in New Zealand ITE courses. Decomposition of practice is breaking down practice into pieces that become the focus of attention. This provides opportunities for naming parts of practice and for breaking down and analysing the tasks of teaching. Approximation of practice involves bringing practice into course work, where novices enact parts of practice in order to rehearse, practice and refine. Approximation of practice is a more useful term than others I have come across, for example, surrogate situations (Perks & Prestage, 2008) or “vicarious encounters” (Putnam & Borko, 2000, p. 8). For New Zealand and international contexts an obvious example of approximation in teacher preparation programmes is the practicum where student teachers are in classroom situations, although not with the same roles and responsibilities as the classroom teacher. Over the last three years, I have used this framework to identify decompositions and approximations of practice within secondary ITE courses. In a recent in-depth report from the three professions, this framework was clarified and expanded (Grossman, Compton, Igra, Ronfeldt, Shahan, & Williamson, 2009). It therefore seems timely to revisit these two concepts of decomposition and approximation, and to use these to understand aspects of course design in ITE professional education.

DECOMPOSITIONS OF PRACTICE

The practice of teaching can be decomposed into constituent parts, and these elements are readily identified in our courses. For example, we include constituent parts of the process of planning for teaching, as well as specific elements of classroom teaching. The decomposition of the planning process leads to a focus on such things as lesson plans and curriculum units. This appears to be the case in the United States, where

Teacher educators often target lesson planning during professional education. However, the lesson plan, as practiced in teacher education, both captures and misrepresents the practice of experienced teachers. Although experienced teachers clearly have well-developed plans for class, they would seldom plan a lesson out of the context of a larger unit of instruction, nor would they plan for hypothetical learners which we often ask novices to do. Yet these practice lesson plans also reduce the complexity of the task in important ways, focusing students’ attention on particular aspects of teaching while ignoring others. (Grossman et al., 2009, p. 2075)

Student teachers may raise this question of authenticity but also recognize that being able to plan individual lessons in a supported environment is a useful step for the practicum. Lesson planning can itself be broken into constituent elements or objects of focus such as lesson episodes, the beginnings and endings of lessons, and transitions between episodes. This illustrates an important aspect of decomposition; it “makes facets of practice visible to novices” and, in the process, student teachers are “learning how to name qualities of the practice” (Grossman et al., 2009, p.

2072). A disciplinary focus may foreground different elements of lessons, such as in mathematics education where the form and function of student mathematical tasks is a significant component of lessons (Watson & Sullivan, 2008). Practice within other curriculum contexts is often decomposed into particular strategies for teaching, where these strategies are named, modeled, analysed and reviewed.

Aspects of the classroom role of the teacher are often decomposed for examination within professional courses. For example teacher talk comprises organisational and instructional talk, and instructional talk can be decomposed further into smaller elements of explanations, elicitation and feedback. These elements may be planned and practiced which “allows students to begin to enact practice, to practice a relatively narrow skill in a safe space.” without the multiple pressures of the classroom context (Grossman et al., 2009, p. 2072). The importance of questions and questioning strategies is another common feature of ITE. The planning, rehearsing and reviewing of these composite elements provide opportunities to explore features of classroom social practices and other normative influences on teachers and learners.

While it is relatively straightforward to identify examples of decomposition of practice within our course curricula, I have found that a focus on the features of the composite elements have highlighted important pedagogical points for my work as a teacher educator. In particular, I have recognised the importance of “the naming of parts” of practice (Grossman et al., 2009, p. 2068) and focusing on the language we use to describe practice. Technical terms (episode, transition, starter, review etc) are important tools for student teachers as are terms that describe teacher responses such as paraphrasing, summarizing, or reflecting. Student teachers have access to a common vocabulary with which to talk among themselves, within our courses, and in schools with other teachers. They are participating in “a common professional understanding” (Grossman et al., 2009, p. 2072). My role as a teacher educator becomes more specified in terms of providing feedback about key aspects of constituent parts of practice. “Feedback is significant because it allows students to improve on the targeted skill ... focused on areas that are the most fundamental” (Grossman et al., 2009, p. 2072). This is more than simply being explicit about what we are doing in our courses and explaining our reasons. Decomposition and examination of parts of practice involves expert and often tacit knowledge of teacher educators that includes expert knowledge of both the curriculum context and of teacher education. Our knowledge of student teachers also means that we can anticipate difficulties for student teachers, understand their shifts in focus of concern, and recognize the key skills that they need while backgrounding some of the less significant aspects. As teacher educators, we step into classroom and subject contexts when we model and then we step out again when we deconstruct the task for analysis. I also recognise that while it is important to break down practice, it can be challenging for student teachers to put the pieces back together, to overlay or to integrate the building blocks of practice.

APPROXIMATIONS OF PRACTICE

Approximations of practice within professional courses range from the practicum courses in school settings through to simulations of practice within university settings. Microteaching is an example of an approximation of authentic practice (Putnam & Borko, 2000) and is found in some ITE courses in New Zealand. Microteaching can take various forms either within school settings or with children coming to the university, as a sequence with the same children or at specific times during a course. Approximations to practice within university are usually simulations or role-plays, and usually involve student teacher peers in the role of learner. Simulations are useful because a task or student experience is identified for rehearsal of a specific skill, often carried out in real time, and involves feedback and revision. Approximations of practice provide opportunities for failure, opportunities for feedback, and opportunities for review.

Although these activities are not entirely authentic in terms of their audience or execution, they can provide opportunities for students to experiment with new skills, roles, and ways of thinking with more support and feedback than actual practice in the field allows. Such elaborations also make more of the novice's thinking visible by requiring them to provide more detailed plans and recordings than is typical of everyday practice in these fields. (Grossman et al., 2009, p. 2007)

We already incorporate key tasks within our courses that could be described as approximations of practice such as student teacher role plays of introductions and instructions for a classroom activity, demonstrations of a teaching strategy, or generating a discussion of a key concept or misconception. The planning aspect of practice is approximated with our inclusion of the planning and preparation of teaching documents such as lesson plans, unit plans, worksheets, and assessment tasks. Approximations of practice may be simplified or shortened, and provide lower stakes than in the "real world" of the school classroom, whether on practicum or in the first years of teaching. Approximations are considered more supported and safer for novices and consequently allow "novices greater freedom to experiment, falter, regroup, and reflect." (Grossman et al., 2009, p. 2076) Within the professional education courses there are opportunities for verbal or written feedback from peers and teacher educators. In order to provide this focused feedback, teacher educators

are deeply immersed in authentic practice and have a wealth of experience from which to draw. They know how to prioritise the acquisition of specific professional skills, and they can readily anticipate where students will stumble. They are able to decompose complex practices into their constituent parts in designing these approximations. (Grossman et al., 2009, p. 2091)

Our values and knowledge as teacher educators are enacted by the choices we make in designing approximations of practice and how we shape professional conversations about practice.

CONCEPTUALISING PROFESSIONAL EDUCATION COURSEWORK IN NEW ZEALAND ITE

I have been in the fortunate position of working in New Zealand ITE over a number of years, in different institutional settings, in primary and secondary, in curriculum and professional studies, and within large and smaller teams of teacher educators. In each of these situations, I have observed teacher education knowledge-building-in-action, mostly articulated in our meetings or enacted in our courses. Often our intended curriculum is expressed when we explain to our student teachers about what we have planned for them and why, when planning and teaching our courses, and in how we respond to difficulties and challenges as teacher educators. The metaphor of the iceberg seems pertinent. Teacher education internationally has long lamented the lack of a base of scholarship about the preparation of teachers (Ben-Peretz, 2001; Grossman, 2008; Labaree, 2000). Paradoxically a study examining the practices of other professional groups, alongside teacher education, has generated a conceptual map for our work with a vocabulary of signifier terms that I have found particularly helpful in understanding the curricula of my courses and how student teachers engage with this curricula. Decompositions and approximations provide a shared language about practice for student teachers and teacher educators, and the terms themselves communicate important messages to those outside this community. These terms are useful conceptual tools for describing some of the practices we currently value in our professional education courses.

There are further aspects of the conceptual framework that are also significant; the importance of representations of practice, the further development of a professional vocabulary, and the importance of novice teachers' responses to difficulty or to resistance (Grossman et al., 2007). This was a feature of a recent presentation in a mathematics education context (Kazemi, 2009), investigating rehearsals of key components of teaching. How might this language of representations, decompositions and approximations of practice be useful and how might we adapt or extend our work in developing the professional education of student teachers. "If teaching is indeed to define itself as a profession, then university-based teacher educators are responsible both for the production of academic knowledge that supports professional practice and for preparing future professionals." (Grossman, 2008, p. 12) This is an ongoing challenge for teacher educators: how might we conceptualise the work that we do as teacher educators?

In New Zealand most of the teacher education research has been based around student teachers and beginning teachers; their experiences, identities and concerns. Teacher educators from outside New Zealand often comment about how lucky we are to have practice-based ITE programmes and close links with school communities. There are tensions in ITE due to new pressures from PBRF and years of underfunding of universities. The pressures to find more time for research has often resulted in a reduction in contact time with student teachers such as fewer course teaching hours, fewer courses, and more whole cohort lectures at the expense of class teaching. These jeopardize the representations of practice for student teachers and affect the curricula of the professional education courses. Decompositions and approximations of practice are ways of *naming the parts of our*

practice as teacher educators and they provide a language we can use to navigate our local and national educational environments.

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