CASE STUDY

Dancing on the edge: Exploring shifting conceptualisations of knowledge and learning through self-study

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Abstract

This case study is an investigation into shifting epistemological and ontological conceptualisations of knowledge and learning using a self-study approach. The case study is part of a Teaching and Learning Research Initiative project that examined shifting conceptualisations of knowledge and learning in the integration of the New Zealand Curriculum in teacher education. As a critical pedagogue and researcher, I explored over a 10 month period, using a variety of tools and approaches, postcritical possibilities as a response to 21st century shifts in knowledge and learning. Within an initial teacher education setting in which I work, two pedagogical contexts were used as a site of investigation: service-learning and socio-cultural orientations of physical education. The self-study process resulted in knowledge conception shifts – both ontological and epistemological. Regarding ontology, this case study captures the challenges of the shifting experience, and the factors that contributed to this. Regarding epistemology, implications for service-learning and for socio-cultural orientations of physical education are discussed. These implications draw upon structural-functionalist, critical, and postcritical perspectives as a way of understanding and illustrating pedagogical possibilities, challenges and limitations.

Introduction

This particular case study is a self-study exploring shifts in conceptualisations of knowledge and learning. The case study is part of a Teaching and Learning Research Initiative (TLRI) project that examined shifting conceptualisations of knowledge and learning in the integration of the New Zealand Curriculum in teacher education. This report seeks to capture much of my journey of shifting throughout 2009. After outlining briefly the context in which I began this project, I explore some of the significant events and observations relating directly to the epistemological and ontological shifting process. Two contexts are then explored where I engaged with varying conceptualisations and possibilities: that of service-learning[1] and that of the socio-cultural orientations of physical education. Finally this report concludes with considerations and future practice implications.

Background

My interest in this project has developed primarily out of earlier research relating to recent physical education (PE) curriculum change in New Zealand. As a physical education teacher trained within a technocratic paradigm, I quickly became disillusioned with what I perceived to be a disconnect between content, meaning and relevance for young people. However, *The New Zealand Health and Physical Education Curriculum* (Ministry of Education, 1999) presented a significant philosophical shift that drew upon critical humanistic traditions and this shift sparked new possibilities for me as a teacher and as an emerging teacher educator and researcher. The corresponding epistemological shift that occurred in my thinking strongly influenced my teaching practice. Through an exploration of physical education as a socio-critical discipline, and through an easy synergy that this generated with my own beliefs about education, I developed practices that were centred primarily on critical pedagogical thought.

As a physical education and alternative education teacher in New Zealand secondary schools, and also as a youth worker (for a Māori youth organisation), almost all of my teaching experiences, before working at the University of Canterbury College of Education (UCCoEd) in Christchurch, New Zealand, involved working with the 'Other'— that is, in this context, I am referring to young people on the margins of society (Levinas, 1987; Todd, 2003). Many of the young people I worked with had been excluded from mainstream school and were labelled as failures, although it was the system, I would say, that had failed them. I mention this because, as I have reflected upon the *New Zealand Curriculum* (NZC) (Ministry of Education, 2007), I have dared to hope that the vision, values and principles espoused present a window of opportunity for teacher educators to construct

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1 Service-learning is a pedagogical approach that combines community service with classroom-based preparation and reflection.

learning opportunities that would enable teachers to view the world through different lenses and to consider new possibilities. This process may enable them to broaden their capabilities in relationship to the 'Other'.

On entering the Teaching and Learning Research Initiative (TLRI) project, the following general curriculum questions interested me:

1. To what extent are teachers able to create meaningful learning opportunities that explore values such as diversity, equity (including fairness and justice), sustainability and respect and principles such as inclusion and cultural diversity, if these values and principles are not first enacted and authenticated through the teachers' lived experiences?

2. To what extent do schools and initial teacher education institutions model and reflect the values and principles of the NZC?

For example, (regarding question 2) Shallcross, Robinson, Pace, and Wals (2006) challenge schools to take actions that reflect the value of sustainability, rather than just encouraging critical thinking. If action is not taken at a school-wide level, is it possible that students will 'come to accept that expressing concern about the environment while failing to introduce sustainable practices is normal adult action'? (p. 36).

Wrestling with, and exploring, NZC values and principles from within a post-structural framework is likely to require critical teacher educators to facilitate learning opportunities that will enable teachers (and student teachers) to shift from twentieth to twenty-first century ways of knowing and learning. This epistemological shift will enable teachers to prepare students for an increasingly complex, diverse and rapidly changing global society. My goal in participating in this project has been two-fold. Firstly, I have sought to determine, through a self-study project, how my current thinking relates to the NZC and to what extent a shift in my own conceptions of knowledge might enable me to create meaningful learning opportunities for initial teacher education students in physical education (ITE-PE) in preparing them for teaching in schools. Secondly, as an extension of TLRI beyond 2010, I would like to implement and critique a pedagogical process to determine the extent to which it may enable ITE-PE students to grapple with twenty-first century knowledge concepts relevant to the physical education learning area of the NZC.

A shift in conceptualisations of knowledge and learning is desirable for twenty-first century education so students may be equipped with the skills, knowledge and attitudes necessary for them to engage successfully in the 'knowledge society'. Shifts that include concepts of knowledge that are performative, concerned with process, are generative, fluid and contextual, are all now well documented (Gilbert, 2005). Of concern here is that these concepts may continue to reproduce existing and known dominant, neoliberal ideologies based on systems of inequality, exploitation of others and of the environment, and concerned primarily with competition and individualism rather than the collective. However, through initial teacher education, student teachers may become aware of the way in which political and economic macro systems operate and the ways in which these factors affect, knowingly or unknowingly, schooling and the politics of knowledge production.

What the NZC does do, is to provide a mandate for the exploration of related issues by outlining values and principles such as equity (concerned with fairness and justice), cultural diversity, inclusion, participation and respect. Such values and principles, outlined in the 'front end' of the curriculum, in many ways reflect *The New Zealand Health and Physical Education Curriculum* (Ministry of Education, 1999). This physical education document was critical and humanistic in its theoretical positioning and has provided a platform for critique, drawing on critical theory to explore learning in, through and about movement (Arnold, 1979). Responding to this change in direction, ITE-PE at the university where I work has focused significantly on the use of a critical pedagogy to consider ways of 'being relationally', using sport as a context for this exploration.

I have been involved in this case study as a practitioner researcher. I teach the course EDPE326: Socio-cultural Aspects of Physical Education and Sport to Bachelor of Education (PE) students in their final year of initial teacher education study. During 2009, there were 37 students enrolled in this course and the course was divided into three components: social issues and culture in physical education and sport; social context in physical education and sport; and adapted physical education. This context was deemed appropriate for this research project as, during the course, I facilitated learning opportunities designed to create epistemological

shifts by viewing the world through different lenses and challenging different possibilities for 'knowing' and 'being' as teachers. The purpose of this course historically has been to provide students with the opportunity to consider, through different theoretical frameworks, differing ways of perceiving and understanding the movement context. It has been hoped that, through this 'difference in perceiving', students may enact 'differences in beliefs and actions'. For example, a particular social issue in sport or physical education may be explored through functionalist, Marxist and critical perspectives, thus enabling students to deconstruct existing ways of knowing, and to consider an issue through other (theoretical) lenses. The challenge for ITE-PE students in this course has been not just to think socio-critically about a particular issue, but also to see this reflected through the taking of social action. Primarily critical pedagogy was adopted as a pedagogical approach for teaching this course. As a practitioner researcher undertaking this self-study, I used my teaching in this course to reflect upon my own conceptualisations of knowledge, to consider epistemological and ontological shifts in my role as teacher educator and to explore the implications of these shifts for physical education and for ITE-PE.

As I entered this project and began to talk with my mentor and other researchers and participants, I was confronted head-on with challenges to my firmly grounded and established ways of 'knowing' and 'being'. Through engagement with postparadigmatic[2] thought as interrogation ideologies (Andreotti, 2010), I was presented with tensions and challenges regarding the limitations of critical humanistic paradigms. Today as I write this, I am conscious of the opportunities that these paradigms present in particular contexts; however it is their limitations that prompted my epistemological and ontological shifts. The journey toward engaging with postparadigmatic traditions was in answer to questions that were just beneath the surface of my practice as a critical pedagogue. Concepts such as universal, fixed and certain notions of truth clashed with knowledge as partial, context-dependent and constantly changing. When teaching, at times, I was aware of students' resistances to dialogue where ideas differed from my own, and this led me to question the problems of engaging in a form of critical pedagogy that seemed at times to be dogmatic and closed to difference (Duncum, 2008; Ellsworth, 1989). The answers that I gave to critical issues were usually predetermined and 'scripted' and this seemed to discount other possibilities (Todd, 2009). The conflicts that arose and the resultant varying conceptualisations are explored in depth later in this case study.

Through participating in this project, I was primarily concerned with exploring the following questions:

1. What factors contributed to epistemological and ontological shifts in my own thinking?

2. How are shifts in conceptualisations of knowledge and learning interpreted within service-learning and within the physical education learning area?

3. What are the implications of these conceptual shifts for ITE-PE?

Understanding epistemological shifts

This section addresses the first research question through the shifting process I experienced, and to explore the factors that facilitated these epistemological and ontological shifts. Participating in this study provided me with the opportunity to engage in discussions relating to epistemological shifts in understandings of concepts such as the 'knowledge society', post-modernity and knowledge and learning in twenty-first century education contexts. I began to explore both the ways that I 'know' (an epistemological shift) and the ways that I 'see' (an ontological shift). These explorations led to both an unsettling and a welcoming awareness of the process of becoming. Experiencing the shifting process through conscious reflection, led me to an understanding that this is a holistic process of engagement; the emotional, cognitive and spiritual are all affected in varying ways.

Methodology

I selected self-study as a methodological approach for this project as it provided an appropriate framework through which to capture the journey of epistemological and ontological shifting, and examine the implications of these shifts for my own teaching practice. Self-study has been described as 'a look at self in action, usually

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2 Postparadigmatic ideas in this context stem from postmodern rejections of epistemological and ontological positions as fixed and certain; post-paradigmatic ideas may draw on a range of theoretical positions e.g. postcolonial and poststructural.

within educational contexts' (Hamilton, Smith, & Worthington, 2008, p. 17). Of particular relevance to this project is Pinar's work on understanding curriculum as an (auto)biographical text (Pinar, Reynolds, Slattery, & Taubman, 1995). That is to say, that a social, cultural and political critique of curriculum may have a transformative function for practitioners undertaking such a critique. Given that teachers' attitudes and values shape the nature of curriculum (official, hidden and null) selected and delivered (McGee, 1997), it is important to understand what occurs when teachers are confronted by ontological shifts. It is hoped that this self-study project may contribute to this understanding.

Hamilton et al. (2008) provide a useful distinction between narrative, auto-ethnography and self-study as methodological approaches in qualitative research. They define narrative as 'a look at a story of self, auto-ethnography [as] a look at self within larger context, and self-study [as] a look at self in action, usually within educational contexts' (p.17). They further suggest, along with Pinnegar (1998) and Kleinsasser (2000), that self-study is a methodological approach concerned with understanding, reflecting upon and improving practice through interaction and reflexivity. While I do focus upon the cultural context of twenty-first century physical education in this study, the primary concern is on improving my own teaching practice, and exploring my shifting conceptualisations of knowledge and learning through interactive, reflective processes. This self-study has sought to incorporate the five key elements LaBoskey (2004) suggests when using this approach to research. That is, that self-study is self-initiated and focused; improvement aimed (and transformational); interactive; includes multiple, mainly qualitative methods; and defines validity as a process based on trustworthiness. I have sought here to create a self-study report that is consistent with Loughran and Northfield's (1998) guidelines for trustworthiness. They suggest that a report

> includes sufficient detail of the complexity and context of the situation for it to 'ring true' for the reader; provides and demonstrates some triangulation of data and a range of different perspectives around an issue; and makes explicit links to relevant educational literature…. (p. 13)

The range of data—or what self-study literature names interactive elements—that contributed to this self-study included journeying with a mentor and with a team of participant researchers, journal writing, taped interviews and writing for academic publication. Trustworthiness, variation and depth in the self-study were created by collecting data through these multiple, interactive processes (LaBoskey, 2004). The interactive elements are framed as factors contributing to the shifts I experienced and these are explored in more depth in 'the shifting experience' section below.

The shifting experience

My core beliefs were challenged in ways that I found to be profoundly difficult, uncomfortable and unsettling. Berger (2004) calls this transformational reflection the 'edge of knowing'—the space where our limits are stretched. People 'respond differently when confronted with the edge of knowing—either we embrace, question, engage or retreat to comfort' (Berger, 2004, p. 342). For the most part, my experiences seemed to reflect the former; I sought to embrace, question and engage. I do also, however, recall times when I retreated to comfort, to habitual ways of thinking and knowing.

On the edge there is a sense of both excitement and fear. Exploring new possibilities and considering the possibility of developing new understandings was exciting. I felt energised by the opportunities that were opening up. By nature I am curious and adventurous and so dancing on the edge was exciting and I welcomed the opportunity to experience new ways of knowing and becoming. Yet at the same time there were feelings of fear and uncertainty. What had been for me a very certain way of being and knowing was now being challenged and this was unsettling too.

On the edge there is a lack of confidence. As my previously held knowledge about pedagogical concepts such as power, democracy, indoctrination, justice, morality, agency and ethics were challenged I began to lose confidence in my own teaching philosophy and practice. I no longer had 'the answers'. I was concerned about my inability to make changes and experiment with new ways of knowing and being that could be reflected in my pedagogical practice. I felt, and do still feel, much less sure of myself and my abilities; much less certain.

On the edge of knowing there is a sense of loss. Berger (2004, p. 338) writes that 'to begin a transformative journey is to give up an old perspective, to actually lose a sense of the former world before the new world is fully articulated'. Keegan (1994) refers to the middle zone as the place of sometimes using one hand and sometimes using another. One could say this is a place of oscillation and of internal conflict; a place of living in two worlds. This is the place where I am at now—in the middle zone. I can see and I do understand the other, but I am also partly the same.

On the edge there is confusion. Placing one foot in a new world view while still having a strong sense of understanding of my 'home' world view, meant that I was very confused. In a journal entry I noted:

> To be honest most of the time I am confused. When people ask me how the research is going, or what the project is about, I actually don't know what to say. I stumble and trip over words. On one level I know, but it's intuitive knowing. If [my mentor] explains things from a 'post' perspective, I'm like, yes that's it. But I don't know how to explain things myself.

A part of me was seeking to understand new ways of being which contradicted previous ways of knowing. I could see that this called into question most of my current teaching practice and also my own epistemological and ontological self. Keegan (1994) writes that this change of perspective comes with a loss—a loss of satisfaction with earlier perspectives. A change in perspective is marked by confusion at first. This is called the *liminal* space—'no place'—the edge of knowing or the edge of meaning. Berger (2004) notes that 'the hardest piece of transformation is the "neutral zone" when the past is untenable and the future is unidentifiable' (p. 344).

On the edge there is the need for support. Transformational teachers help students to find and recognise the edge, are company at the edge and build firm ground to a new place (Berger, 2004). Once they come to the edge, students 'need help to sustain the courage to stand at the edge and work to grow' (p. 347). This most definitely reflected my journey. Without the mentoring support from the researchers throughout this process it is unlikely that shifts would have occurred. In particular, my mentor did all the things mentioned above. She helped me to find and recognise the edge. With her company at the edge, I was supported to explore without feeling pressure to shift. Dialogue at the edge was open-minded and non-judgemental. A lot of questioning and storytelling were used and the pace of the journey was determined by where I was at (with the occasional gentle prod). Most importantly I never felt pushed or pressured to shift. This last point created for me a space on the edge that was actually safe—while at the same time challenging. Reflection that deconstructs without considering new possibilities does not lead to different actions (Berger, 2004). For me this also speaks to my own journey alongside my mentor. While deconstructing critical paradigmatic thought, different possibilities and ways of 'knowing' and 'seeing' were explored. This process provided me with a way forward. The pace was, and still is, slow as new possibilities and ways of thinking and knowing require time.

Part of the reason for slow shifts, I think, is the depth of movement that occurs at an ontological level. For me this speaks to the subconscious. While aware of being stretched by new ways of thinking and of knowing, I experienced so much confusion that I found it very difficult to articulate what it was that I was trying to say. In interviews with researchers in this project, I recall moments of brain fog; a glazing over, a tripping over words and forgetfulness about the question and about the responses. As my mentor and I explored new possibilities and challenged previously held beliefs, she would talk on and I would be lost in the previous train of thought. At times I recall feeling overwhelmed and very slow to process ideas. When colleagues asked me to explain the project and my journey, at times I was unable to articulate what I was learning. This resonates with Berger's (2004) findings as she notes that 'we struggle with words when we reach the edges of understanding. We ramble and apologise and forget what the questions are' (p. 342). This inability to express that which is known intuitively is articulated by Polanyi (1967) through his expression, 'We know more than we can tell' (p. 4). Regarding knowledge, Polanyi provides a useful distinction between explicit and tacit ways of knowing when he observes that 'one often reaches a … conclusion and only later constructs an argument that leads up to it' (Polanyi cited in Scott & Moleski, 2005, p. 208). This inability to at first explicitly articulate an idea ought not to discount that there is a knowing.

Factors contributing to shifts

There were a number of factors (range of data) that contributed to the epistemological and ontological shifts that I experienced regarding conceptualisations of knowledge. The set of data included discussions with the researchers in the project (and in particular my mentor), participation in the TLRI workshops throughout 2009, use of conceptual tools and journal writing, and reading and writing as part of the research process.

Support provided by my mentor during this process was the pivotal factor in this shifting journey, and this is discussed in depth above. Additionally I was shaped by, encouraged, supported and challenged through participating in the TLRI workshops and writing days. Journeying with others provided the opportunity to engage critically around research-related issues.

There were a number of useful conceptual tools that contributed to an understanding of epistemological shifts in my own thinking, in particular Baxter Magolda's model of epistemological development (Baxter Magolda, 1992) and the multiple meanings tool (Andreotti & Souza, 2008). Through the application of 'theory to practice' concepts, and in dialogue with the research team, I began to perceive of the possibility of 'knowing' in other ways. Traditional notions of knowledge as fixed, certain, stable and universal became problematic for me as I shifted toward understandings of knowledge as contextual, contingent and provisional.

Reading and writing as part of the research process facilitated epistemological and ontological shifts. Reading helped to give me a new language. I found that reading helped to make the tacit explicit; the unconscious conscious. Reading helped to legitimise my epistemological and ontological shifts and increase my confidence.

As part of the research process I, along with another colleague, wrote a journal article on service-learning (Bruce & Brown, 2010). I chose to do this as a way of wrestling with previously held views of service-learning that had become unsettled by this journey. Service-learning had been a context that I had previously explored through a critical paradigm as a useful, action-oriented approach to implementing a critical pedagogy in physical education. At the end of 2008 I wrote, with two other colleagues, a book chapter that explored the limitations of traditional views of service-learning thinking and proposed a critical service-learning possibility in ITE-PE (Bruce, Martin, & Brown, 2010). However, as part of this TLRI research project, I began to shift toward an understanding of epistemological pluralism and so I decided to explore these ideas by conceptualising service-learning within a post-critical paradigm as part of a journal article. We structured the article by critiquing and deconstructing both traditional and critical models of service-learning and then proposing a post-critical approach as perhaps a 'better' way forward.

After submitting this draft to my project mentor, it became clear that I had, in structuring the article in this way, presented ideas that were contradictory in nature. The article argued that a post-critical conceptualisation was the preferred model for implementing service-learning. However, within an epistemologically pluralist perspective, there is an understanding that any decisions are context dependent. Furthermore, in presenting varied conceptualisations and acknowledging that each has possibilities and limitations, people may choose how they may respond in ways that are situated, provisional and contextually based. In the first draft, what I had sought to do was to try and take an idea and place it in the 'old' world view. Wrestling with new ideas and varying conceptualisations demonstrates for me the importance of the reading and writing process in contributing to the shifting journey. Through engaging with other researchers' ideas, I was challenged to think about ideas in ways previously unexplored.

Findings: Shifts in practice

In this section I address the second research question: how are shifts in conceptualisations of knowledge and learning interpreted within service-learning and within the physical education learning area? I focus here on two conceptualisations of knowledge and learning relating to my teaching practice: that of service-learning as an action-oriented, critical pedagogical concept, and that of varying conceptualisations of socio-cultural orientations in physical education. The conceptualisations have been constructed for the purpose of this project and reflect a particular orientation toward an exploration and interrogation of the 'post' (Andreotti, 2010). Andreotti provides a useful conceptual analysis of understandings of 'post' possibilities and consequent implications for education. Within 'post' traditions (postmodernist, poststructuralist, postcolonialist and

postcritical orientations) there is a re-conceptualisation of understandings of the nature of knowledge, language and learning and these are reflected in knowledge society discourses (Andreotti & Souza, 2008; Claxton, 2008; Gilbert, 2005; Richard & Usher, 1994).

However, an understanding of 'post as after' or an understanding of 'post as interrogation' signifies a difference in purpose, particularly relating to the political economy of knowledge production and socio-cultural contexts constructing understandings of (for example) power/privilege/identity (Andreotti, 2010). A reading of 'post as after' suggests the need for shifting conceptualisations of knowledge and learning in order that people may adjust to rapid changes occurring through neoliberal agendas and constructions of a new world order (Claxton, 2008). A reading of 'post as interrogation' calls for a rearrangement of systems and structures that will challenge existing violences. Post-colonialist and post-critical perspectives call for a 'difference focus' inherent within epistemological pluralism (Andreotti, 2010). These perspectives present monumental challenges and possibilities within the education system. The conceptualisations outlined below are a small, yet perhaps important, attempt at engaging with the post-critical perspectives. It is important to note here that I intentionally draw 'hard', distinctive lines between varying theoretical perspectives and orientations for the purpose of understanding and illustrating the possibilities and limitations of theory to practice. I acknowledge that in many instances the lines are less absolute than the text below describes.

Conceptualisations of service-learning

As indicated in the footnote earlier, service-learning is defined here as a pedagogical approach that combines community service with classroom-based preparation and reflection. Service-learning as a movement is growing rapidly, partly in response to globalisation, particularly in North America. Service-learning as a pedagogical approach has particular relevance to the NZC as it provides the potential for community–school partnership links and for the exploration of values and principles such as diversity, equity, community engagement and ecological sustainability. Furthermore, service-learning may provide an ideal opportunity to develop key competencies from the NZC such as participating and contributing, and relating to others.

As previously mentioned, the physical education curriculum was socio-critical in nature and drew upon critical-humanistic traditions in order to conceptualise and provide meaning to the movement context. In seeking to contextualise the movement culture from a critical perspective, many physical education teachers within New Zealand adopted a critical pedagogical approach that primarily centred on developing critical thinking skills among students (Culpan & Bruce, 2007). However, instances of moving students beyond critical thinking toward social action have been limited and so I, along with a number of other ITE-PE teacher educators began to explore service-learning, and in particular a critical service-learning approach, as a pedagogical tool that was primarily action-oriented (Bruce, Martin, & Brown, 2010).

However, participating in this TLRI study has challenged my thinking further to consider the limitations of operating within a critical paradigm and the possibilities (and also limitations) of a post-critical approach to service-learning. Through the application of 'theory to practice' tools and concepts, and in dialogue with the research team, I have begun to perceive of the possibility of 'knowing' in other ways. This was facilitated through engagement in discussions relating to epistemological shifts in understandings of concepts such as the 'knowledge society', post-modernity, and knowledge and learning in twenty-first century education contexts. The following excerpt from an interview that I participated in illustrates some shifts in thinking:

> MG: Do you want to tell me some of the, some of your thoughts around how your conceptualisations of knowledge, and how those sorts of things, have shifted?
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> JB: Sure. Um…
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> MG: Or, do you think they have, first of all?
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> JB: Yeah, yeah. Yes, I do, somewhat, you know? I was, I think I am more likely to consider different conceptualisations of knowledge and learning, but I still step between two sort of worldviews, in a way? So, um, for example, if you took the idea of knowledge as fixed, which is probably something that I would have, um, considered, prior to starting the study, and now I see it as more fluid and partial, and context dependent, but I think there's times when I still go between two different conceptualisations. So, it's a shift, it's definitely a shift has occurred, ontologically. But, it's, yeah, I use the words kind of more likely, you know? Um, to consider things differently.

MG: Yeah. And do you see those two views of knowledge as opposing? Or do you think they can both exist? Because, obviously they do kind of come together….

JB: Um, it's kind of a utility, it's its usefulness. So, I think now more in terms of varying conceptualisations of something, for example physical education, which is my learning area, or varying conceptualisations of service learning. And, I can see now that you can have kind of different approaches, and I wouldn't say that one is better. But, that is, that one has its usefulness, and it also has its limitations. That you might, so you can, it kind of gives more freedom, because you can pick and choose what conceptualisations you draw upon, for a particular purpose, you know? But, you're aware of its partiality, and aware of its usefulness at a particular point in time, but at another point in time you might use a different conceptualisation, and that's okay. Acknowledging that that has strengths in that context, but it also has limitations.

As this excerpt indicates, traditional notions of knowledge as fixed, certain, stable and universal have become problematic for me as I move toward understandings of knowledge as contextual, contingent and provisional. Exploring varying conceptualisations of service-learning by considering the possibilities of knowledge and learning constructed through epistemological plurality provided me with a useful context for engaging with shifts. Table 1 represents the variations within the three approaches to service-learning I explored, and considers the possibilities and limitations of each approach.

Table 1 Conceptualisations of service-learning

Service-learning approach	Traditional service-learning	Critical service-learning	Post-critical service-learning/ relational service-learning
Core belief	There are privileged and underprivileged people. Those who 'have' ought to give charity and help to those in need.	There are inequities in society that need to be redressed towards a shared ideal of justice.	Ideals need to be constantly re-negotiated in context in un-coercive ways.
Understandings of privilege	Acknowledgement of privilege as an entitlement. Privilege is a reward for hard work and natural ability.	Privilege comes from systems of exploitation that prevent equality and justice. Acknowledgement of materialism as a source of guilt. Acknowledgement of privilege as a problem.	Privilege comes from systems of exploitation that impose ideals of normativity. Acknowledgment of material and epistemic privilege as a problem. Acknowledgment of complicity within systems of exploitation.
Unacknowledged desire	To justify material and epistemic privilege and reinforce notions of superiority. To feel useful.	To lead change. To have a sense of achievement in changing the lives of others.	Not to reproduce violences of systems in terms of normalisation.
Nature of the knowledge	Knowledge is fixed and certain. E.g. the need to help and to be charitable.	Knowledge is fixed and certain. E.g. universal ideals of justice and equity.	Knowledge is socially constructed and negotiated in context. e.g. ideas of justice and equity are context dependent.
Pedagogical aim of the project	To develop charitable notions among the privileged. To provide assistance to those in need.	To develop critical thinkers and activists who can advance issues of justice.	To develop an ethical framework for an unconditional regard for the Other. Awareness of the need for responsibility toward each other.
Nature of the project	Is predetermined and highly programmed; involves a 'privileged' group giving to an 'underprivileged' group.	Based on critical thinking and socio-critical action.	Relationally focused on understanding others through open dialogue and authentic ethical relationship; may lead to collective action or may be dialogically focused.

Concepts of thinking and action	Emotional and moral appeal to sympathise and to act quickly. Action needs to be verifiable within a time frame.	Rational and moral appeal to think critically and to act justly. Action needs to be verifiable within a time frame.	Ethical appeal to shift thinking toward relational ways of knowing the Other. Acknowledgement of problem of verifiability and time frames.
Relationship with the Other	A server–served dichotomy.	A server–served dichotomy.	Interdependent relationships based on equity; the understanding that all people have legitimate ways of knowing and being.
Role of the teacher	Technocratic and charismatic leader, organises, has determined all aspects of the project; an 'expert'.	Co-facilitator of the project; may have a predetermined project idea; concerned with shared ownership.	Enabler of the project; open to complexity and uncertainty; outcomes are negotiated.
Role of the learner	'Knower' and 'helper'.	Co-facilitators of the project with the teacher and possibly the Other.	Exploring possibilities of different ways of seeing, listening, and being (and of creating together?).
Examples	Soup kitchen; food bank collections; child sponsorship.	A project advocating for systemic policy change; campaign for use of fair trade products; start a campaign or join a campaign.	Spending significant time in developing relationships with young people in an 'excluded' school programme.
Limitations	Doesn't challenge root causes of poverty; complicit in reproducing existing inequities.	Is less concerned with developing authentic relationships through open dialogue and listening; believes there is a right way to proceed; has a dichotomous view of themselves and the Other.	May be difficult to implement fully within curriculum time limitations; Romanticism; the possible adoption of absolute rather than contextual relativism.

Contradictory service-learning approaches are conceptualised here, each with varying contributions and limitations. Each approach has distinct variations in epistemological positionings and consequent practical outworkings. I suggest that service-learning may be advanced through a critical reading of the varying approaches and through an understanding of contextuality. For example, through a brief analysis, it could be argued that the establishment of service-learning as a modernist construct may be problematic as it is embedded in epistemological and ontological ideas of fixed truth and knowledge. Furthermore, understanding globalisation through post-colonial and post-critical paradigms may signal the need to continually re-imagine service-learning and to exercise hyper-reflexivity, as educators are potentially complicit in the reproduction of oppressive systems. An example of this is in the use of the term *service*-learning which could be problematic as it implies a dichotomy of a server and a served and reinforces notions of privilege, hierarchy and Eurocentrism/universalism.

A discursive turn toward a post-critical/relational approach may serve to disrupt practices that reproduce notions of privilege and rightness as one way of being, and in so doing sideline the idea of difference as valid or legitimate. It is proposed, instead, that relationship with the Other, through dialogue and embedded within a carefully constructed, ethically-oriented pedagogical process, be explored. However, it is also acknowledged that such an approach, while worthy of consideration, presents difficulties for service-learning educators in a tertiary context, as traditional practices of teaching within a semester and pre-determining project outcomes become problematic.[3]

Through participation in this study, I began to perceive of post-critical possibilities in service-learning contexts, and this represented an epistemological shift. However, the following interview excerpt indicates that ontological shifting toward post-traditional thought was also an outcome.

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3 For a further discussion of the varying conceptualisations, see Bruce, J. & Brown, S. (2010). Conceptualising service-learning in global times. *Critical Literacy: Theories and Practices, 4*(1), 6-15.

JB: Because what it does, I think, for me, um, it stretches me to think of other possibilities. So, okay, so I've got these three conceptualisations, however, it's not even limited within that, it's like, there's a realisation that there's new ones, multiple other conceptualisations, that haven't actually been conceptualised yet!

And, so, I'm also thinking beyond the three, you know? Whereas prior to this engagement in the study, I would have just critiqued the traditional, um, looked at the critical as providing quite a fixed approach, and I would have stayed there. But, participating in the study led me to conceptualise of the possibility of a post-critical approach. Um, and also to consider Other, that there are Other. So, it actually is, opens up a whole lot of possibilities, and a whole lot of ways of thinking beyond what I would have normally otherwise done.

Socio-cultural conceptualisations of physical education

As physical education developed and became increasingly popular in New Zealand schools throughout the twentieth century, we saw two significant shifts occurring. Physical education in the mid- and late-twentieth century began to move away from solely learning the physical skills of movement in order to embrace humanistic ideals that placed importance upon learning cultural norms and values and social skills through participation in the physical (Ministry of Education, 1999). Challenging the limitations of this, the physical education curriculum released in the latter part of the twentieth century boldly suggested an embracing of the critical. Physical education would encapsulate learning in, through and about movement (Arnold, 1979) and display a socio-critical orientation drawing on critical pedagogical approaches to learning. Responding to twenty-first century shifts in conceptualisations of knowledge and learning requires the exploration of other possibilities and one such possibility, that of a post-critical approach, is suggested here. The three varying conceptualisations are presented below as a way of seeking to understand both the opportunities and limitations inherent within each.

1. Liberal humanistic physical education

Physical education programmes began to emerge during the mid twentieth century that focused on learning not just the physical skills of movement, but learning *through* the physical. Learning through the physical valued the educative role of movement and was concerned with intellectual, social and emotional development rather than the purely physical. Such an approach to physical education gathered popularity throughout the twentieth century, although the ideas were not particularly new. Ancient Athenians have been credited with applying learning through the physical and these ideas re-emerged during the Renaissance. Furthermore, public schools in England during the mid-nineteenth century accredited modern sport to the development of muscular Christianity and to the learning of British, colonialist values and dominant cultural ideals. The common thread, of a humanistic orientation toward physical education running through these varying periods, was the promotion of, and concern for, the transmission of valued cultural practices.

A humanistic physical education curriculum is learner-centred and relevant to student needs, interests and capabilities (Kalakian & Goldman, 1976). These scholars suggested that the following five lessons of life could be taught through movement: fair play, dedication, cooperation, loyalty and competitiveness. Hellison (1973) proposed four goals for a humanistic physical education curriculum that included the development of self-esteem, self-understanding toward self-actualisation and interpersonal relations. The physical education learning area of the NZC (Ministry of Education, 2007) reflects some of these humanistic aspirations. For example, there is a key emphasis on learning through movement including the development of social skills, the development of hau ora (holistic well-being) and an understanding of the inter-relatedness of individuals, others and society.

Teaching methods appropriate for a humanistic approach to physical education tended to be more student-centred. In a shift away from the technical teaching of movement, Van Dalen and Bennett (1971) suggested that humanistic physical educators considered 'how to teach as much as what to teach' (p. 131). Useful examples of humanistic pedagogies within physical education include the sport education model (Siedentop, 1984) and the social responsibility model (Hellison, 2003).

Humanistic physical education described here promotes harmony, consensus and the transmission of dominant cultural norms and ideals. Advocates argue that through participation in physical education and in sport, students are prepared to participate in society as they develop highly desirable characteristics including cooperation, competitiveness, loyalty and respect for themselves and others. It could be argued that developing the aforementioned characteristics and values will enable students to contribute more fully to a democratic, capitalist society. Critics of this orientation are concerned with the contribution that this approach may make to advancing neo-liberal ideals (see for example, Culpan & Bruce, 2007). Furthermore, a humanistic approach subscribing to universal, fixed and Eurocentric ideals does not create space for diversity, difference and other ways of knowing and being. The nature of knowledge within a humanistic framework tends to be certain, is based on Western reason and has utility within a neo-liberal agenda. A critical physical education orientation has developed in recent years, responding to these criticisms.

2. Critical physical education

Whereas humanistic physical education is perceived as learning through movement (Arnold, 1979), critical physical education is perceived as both learning through and learning about movement. A critical orientation to physical education is concerned with questioning taken-for-granted assumptions relating to power imbalances and injustices within physical education, schools and the wider movement context. In particular, drawing on critical theory, a critical approach to physical education questions the role of physical education and of the movement culture in contributing to injustices that exist in schools and in society, and in contributing to a neo-liberal agenda. Culpan and Bruce (2007) suggest that a critical approach to physical education may contribute to challenging a previously dominant, scientised view of physical education that essentially sees 'man as machine' to be fine-tuned for economic productivity. A critical approach to physical education may also contribute to challenging the 'alarming exploitative nature of many of the industries associated with the [movement] culture' (Culpan & Bruce, p. 2). Furthermore, a critical approach may challenge the traditionally hegemonic nature of physical education and the movement culture through the adoption of critical thinking regarding injustices reproduced through issues such as sexism, racism, able-ism and homophobia.

Sparkes (1996) summarised critical physical education as an approach that contributed to the following understandings:

1. The physical education culture comprises groups with power and privilege and groups without power and privilege.

2. Social structures within the culture of physical education perpetuate this power imbalance.

3. The power and privilege people have in physical education is a vested interest in maintaining the status quo.

4. The powerless and under-privileged in physical education have a vested interest in social change.

5. The competing interests within physical education create an inherent tension that lies just beneath the surface of harmony and contentment.

6. The critical position in physical education asks questions that will lead to change. These questions are designed not for mere description but for raising consciousness.

7. Critical theorists believe that in changing individual and group consciousness towards physical education, change will occur. (Sparkes, 1996, p. 40)

The physical education learning area of the NZC (Ministry of Education, 2007) was amended slightly from the original curriculum document (Ministry of Education, 1999) which was socio-critical in nature (Culpan & Bruce, 2007). Reflecting this socio-critical orientation, the physical education learning area within the NZC is concerned with developing within students, 'a sense of social justice' (p. 22); creating spaces 'in which students [may] contribute to healthy communities and environments by taking responsible and critical action' (p. 22); and facilitating learning that 'fosters critical thinking and action and enables students to understand the role and significance of physical activity' (p. 23). Critical pedagogy provides a pedagogical approach to implementing a critical orientation to physical education. The teacher aims to develop within students

critical thinking skills that challenge existing power imbalances (see, for example, Gillespie & Culpan, 2000). Additionally the critical pedagogue seeks to establish learning environments that are accepting of difference and are inclusive in orientation.

While a critical orientation toward physical education presents the opportunity to challenge previously held hegemonic practices within the movement culture, I have begun to consider some of the limitations of a critical view. The following section presents some of these limitations and offers the possibility of a post-critical contribution to the field of physical education.

3. Post-critical physical education

Exploring a post-critical orientation toward physical education may be understood primarily through an interrogation of the critical. The purpose of this section, therefore, will be to deconstruct a critical orientation to physical education through an exploration of the limitations therein, and to suggest aspects of a post-critical approach to teaching and learning. There is not the scope here to explore this approach fully so selected issues are discussed.

Regarding an interrogation of the critical, and of particular relevance to this project, is the exploration of varying conceptualisations of knowledge. From a critical pedagogical perspective, some have argued that knowledge has been conceptualised as fixed and certain. Additionally there is an understanding that there is a single truth and a right response (Biesta, 1998; Duncum, 2008; Ellsworth, 1989; Kohli, 1998). There are, for example, universal ideals of justice and equity and there are fixed and certain truths relating to concepts such as oppression and power. These notions and understandings of knowledge lead to an often predetermined and right response. Critical pedagogues then tend to know where they are heading and the end is a given. This approach, Todd (2009) argues, is heavily 'scripted'. Furthermore, it is generally understood that there are binaries that exist relating, for example, to right and wrong, to those who have power and those who do not, and to justices and injustices that occur. Conversely, a post-critical perspective proposes that knowledge is uncertain, fluid, contextual, complex and situated. Within a post-critical paradigm, Duncum (2008) notes that 'knowledge is partial, values are ambiguous, dilemmas are profound and resolutions are rare' (p. 254). Rather than holding a world view as fixed and certain, a post-critical approach does not have a predetermined solution. Primarily through open dialogue, varying contradictions, problems and possibilities are explored and solutions negotiated.

These significant differences, regarding conceptualisations of knowledge, have a direct affect on my own teaching practice. I have had, in the past, a very strong agenda about right ways of thinking and being, and during my teaching I have facilitated discussions with a critical orientation to physical education as a foundation. Such an orientation significantly affects pedagogical practices; in particular the role, place and nature of dialogue in the classroom (see, for further critique, Ellsworth, 1989). Freire (1998) explored the possibility of the importance of open dialogue and the partiality of knowledge when he wrote that to safeguard himself against the pitfalls of fixed ideology it was important to:

> … allow myself to be open to differences and to refuse the entrenched dogmatism that makes me incapable of learning anything new. In essence, the correct posture of one who does not consider him- or herself to be the sole possessor of the truth or the passive object of ideology or gossip is the attitude of permanent openness. Openness to approaching and being approached, to questioning and being questioned, to agreeing and disagreeing … knowing that I am learning to be who I am by relating to what is my opposite. (p. 119)

This openness, the ability to be open to possibilities, is at the heart of post-critical perspectives. This place of openness is a place of humility where students and teachers learn together through conversations that are created in open, honest spaces. These ideas directly confront and challenge my own teaching practice. I have noted that there is reluctance within classes that I teach for open and honest dialogue. If a student's views are in opposition to my own, I would readily debate. Given the power dynamics implicit within a traditional student–teacher relationship, few students have continued to openly oppose views that I have expressed. At the heart of post-critical discussions, from my perspective as a teacher, is the need to make meaning from what a student says and believes. For example, if a student holds views that are racist or sexist, my response could

be to explore the reasons for this, rather than to present arguments refuting their claims. Furthermore, my role could be to ask questions, framed in a way that invites the student to consider other possibilities and other ways of viewing a particular perspective. Exploring the possibilities inherent in this post-critical shift, I recently wrote the following journal entry, after a critical session with ITE-PE students:

> Rather than seeking to represent myself as knower and 'expert', I allowed the student voices to speak through the redirection of questioning. For example, when a student asked me for a 'right' response, I redirected this question to another student, who had raised the scenario. He was at first silent and I wanted to jump in, but I held back and he eventually spoke with insight and wisdom offering rich dialogue to the discussion—richer than anything I had to offer.

A possible limitation of the post-critical space could be the illusion of a democratic space. Given student–teacher power relationships, including the administering of assessment practices, I am not sure that it is entirely possible to create dialogical spaces that are authentically honest and open. However, post-critical conceptualisations of knowledge and learning are likely to take teachers further toward this ideal than perhaps the critical. Drawing on the work of Bakhtin, Duncum (2008) notes that dialogical pedagogy as a post-critical approach acknowledges a multiplicity of views and the constant interaction of meanings. Spaces are sought that enable an exploration of conflicting opinions and beliefs without judgement or 'higher ground moralising'.

Andreotti and Souza (2008), drawing upon post-structuralist and post-colonialist theoretical positions, developed a pedagogical approach that could be significant in constructing a post-critical dialogue. The pedagogical approach (*Through Other Eyes*)[4] draws upon four inter-linked processes. Of particular relevance to this discussion, both for teacher and students, are the notions of *learning to listen* and *learning to learn*. *Learning to listen* requires that students and teachers develop hyper self-reflexivity through keeping 'perceptions constantly under scrutiny, tracing the origins and implications of our assumptions' (Andreotti & Souza, 2008, p. 28). *Learning to listen* means being truly open to other epistemological and ontological thought, understanding that these are social constructs and as such are historically and contextually variable. *Learning to learn*, through a state of humility, allows students and teachers to imagine other possibilities and to begin to expand their comfort zones through the taking in of different thoughts, beliefs, attitudes and understandings.

A further critique of the critical is concerned with an exploration of the notion of morals as fixed and ethics as contextually dependent. Where the critical tradition offers a moral compass that is largely fixed, defined and certain, the post-critical engages with possibilities of ethics as ethical responsibility toward the Other. Andreotti and Dowling (2004) drawing on the work of Spivak, Foucault and Levinas, convey ethics as 'an ideal of relationship—a way of defining ourselves in relation to others' (p. 606). They go on to distinguish the difference thus: 'Ethics, then, deals with what type of human relations we envisage as desirable or possible. From this perspective, it is not the same as morality, which describes universalisable principles of normative behaviour' (p. 606).

This distinction has significant implications for my own practice when considering shifts from critical to post-critical pedagogies. It is useful for me to consider this notion of ethical responsibility toward the Other as conditional upon context and situatedly dependent. Furthermore, it opens the door to pedagogical considerations, regarding a move away from seeking regulation of others, toward an exploration of possibilities, developed out of an awareness of Other. While exploring this idea a discussion took place in a critical physical education teacher education class about an ethical dilemma presented to a physical education teacher. I wrote the following journal entry:

When the ethical dilemma presented the class was divided and discussion became heated. Again I held back. I didn't have to be the knower, the expert; I allowed the discussion to close without having to 'tie up loose ends'. Instead we sat with the messiness, the complexities and the contradictions. I didn't feel the need to give the 'right answer'.

There are times when inviting students to consider, explore and wrestle, creates critical learning incidents. The pedagogical goal is not in giving and receiving a right response, but in opening up a critical thinking space that stretches, challenges and unsettles.

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4 The website for this teaching resource is www.throughothereyes.org.uk

Considerations and implications for future practice

The purpose of exploring varying conceptualisations of socio-cultural approaches to physical education and to service-learning is to consider how I may, as a teacher educator, respond to global shifts in an increasingly cosmopolitan world. Engaging with the front end of the NZC (including values such as diversity, equity, sustainability and respect and principles such as inclusion and cultural diversity) requires shifts beyond current practices. For myself, journeying toward an understanding of knowledge and learning through contrasting cognitive adaptation and epistemological pluralism has contributed to such shifts (Andreotti, 2010). Developing, for example, an understanding of knowledge as changing, contextually dependent, situated and partial has enabled me to begin to perceive of different possibilities and varying conceptualisations as presented above.

While the conceptualisations I have explored regarding service-learning and socio-cultural orientations of physical education are useful, it is necessary to consider both the limitations and the constraints that are inherent within. Todd (2009), when writing of a cosmopolitan ethic, cautions against the use of scripts as a pedagogical tool. If we are to, for example, subscribe to a particular approach, we may risk uncritical engagement, and thus limit possibilities for other conceptualisations. While the conceptualisations that I have discussed here, have served a useful purpose in helping me to engage with epistemological and ontological shifts, following a particular script risks being unresponsive to varying contexts.

Future practice

This research project has coincided with the restructuring of the ITE-PE programme that I teach in. This has provided a unique and timely opportunity to consider adjustments both to papers in the course and to pedagogical approaches that I may choose to employ. In 2011, these programme changes will begin to be implemented and throughout this year I will continue to develop ideas further and to engage with my team through conversations about the learning that has taken place for me through participation in this project. An example of future practice changes is the development of a paper entitled 'Physical Education Futures'. This paper will essentially explore global citizenship implications for physical education teachers in secondary schools. It explores how, by drawing on post-critical and post-colonial 'theory to practice' processes, students will explore concepts of epistemological pluralism and will engage in relationally-based service-learning experiences with the Other in schools, alternative education and special education settings.

Throughout 2009, I was able to discuss my own learnings with staff and, for the most part, these were very well received. I am fortunate to be working in a team that is progressive, critical and keen to engage with different ideas. My challenge is to be able to articulate my own thoughts clearly and in a way that is useful to others. I am reminded now of my journey on the edge; particularly relating to times of confusion. When I am engaged in literature and in conversations with the project mentor, I am clear for the most part about these shifts and implications for teaching; however, when speaking with others, I can still trip over my words and stumble through attempts at articulation. This is essential, I know, to shifts and to journeys in 'learning loops' and I both welcome and am frustrated by the ontological state.

I am reminded at this point of a quotation I read recently by James Donald (1992) referring to Freud's observation of the impossibility of education. Freud noted that it is a profession in which 'one can be sure beforehand of achieving unsatisfying results' (Donald, 1992, p. 1). Todd (2009) writes of the imperfect education and, among other authors, Biesta (1998) reflects upon the impossibility of education. He explains this idea thus: 'impossibility does not denote what is not possible, but that which does not appear possible. Impossibility therefore is not the opposite of possible: impossibility releases the possible' (p. 510). The impossibility of education, then, is not an idea to be lamented, to result in paralysis, or more of the same, but rather an idea of possibility and of hopeful change. As a teacher and student of education I sit at the table with constant challenges, contradictions, paradoxes, and imperfections. I am grateful for the opportunity to have participated in this project and to have worked alongside inspiring and hopeful others. I look forward to learning new dances on the edge likely to emerge through openness and humility.

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