

A Case Study of Academics' Epistemic-Pedagogic Identity in the Context of Higher Education

Melanie Miller

New Zealand

melanie-
miller@hotmail.com

ABSTRACT

The paper explores a PhD study, conducted recently about academics' epistemic-pedagogic identity. Specifically, the paper explores three research questions. (1) How does theoretical and empirical research link the epistemological and pedagogical constructs of academic identity? (2) How do different academics experience neoliberalism in relation to their epistemic-pedagogic identities? (3) How can epistemic-pedagogic identities critically develop and engage with epistemic climates? The research engaged these questions using a single case study of academics (n = 70) in a higher education institution in Auckland New Zealand. Data collection involved documentation collection, surveys, semi-structured interviews and artefact collection.

The purpose of the research was to represent and interpret diverse academics' responses to the epistemic drift in higher education. The researchers' study offers a small but potentially significant contribution to academics' professional development to now share with the global environment.

Keywords:

RESEARCH AIMS AND OVERVIEW

Beliefs about learning and teaching are related to how knowledge is acquired, and in terms of the psychological reality of the network of individuals' beliefs, beliefs about learning, teaching and knowledge are probably intertwined (Hofer & Pintrich, 1997, p. 116)

In the neo-liberal academy, under the spotlight of audit and the exigencies of bureaucracy, there is a sense that academic identity is ruined, that the sort of work academics want to do and feel committed to doing is becoming harder to undertake with any real ownership, joy or pleasure (AIC, para. 1. <http://aic.education.auckland.ac.nz/call-for-papers/>)

This paper outlines the research explored by a PhD research student who is also a senior academic who explored academic identity in higher education. Conceptually, the PhD research focused on the relationship between (a) academics' ways of knowing and beliefs about knowledge (i.e., personal epistemology), (b) academics' ways of teaching and beliefs about teaching (i.e., personal pedagogies), and (c) the 'epistemic drift' represented by in higher education. Specifically, the research utilised an ethnographic case study to explore the relationship between these three constructs (i.e., epistemology, pedagogy and higher education). The purpose of the research was to represent and interpret diverse academics' responses to the epistemic drift represented by higher education, often called neoliberalism. As Boote and Beile (2005) note, 'neoliberalism and education researched collectively will advance the importance of educational issues' (p.11). The research offered a small but potentially significant contribution to academics' professional development in the author's institution and the broader dialogue on the role of academics and higher education in the modern world.

Until recently, academics' personal epistemology received very little theoretical or empirical attention (Chan & Elliot, 2010). Recent research (e.g., Brownlee, Purdie, & Boulton-Lewis, 2001; Schraw & Olafson, 2008; Tsai, 2002) highlights a relationship between ways of knowing and beliefs about knowledge (epistemology) on the one hand and ways of teaching (pedagogies). A theoretical assumption that is increasingly borne out by empirical research is that academics' ways of knowing and beliefs about knowledge are intricately related to their ways of teaching. Researchers in epistemology (e.g., Brownlee, 2001: 2004; Fang, 1996; Richardson, Anders, Tidwell, & Lloyd, 1991) argue that a focus on academics' beliefs about knowledge can inform more effective teaching and learning in higher education. Thus, an exploration of the relationship between epistemology and pedagogy can inform the debate over such

pedagogies as guided instruction, direct instruction, discovery learning, critical thinking, constructivism, and authentic pedagogy. However, this exploration could not be undertaken without consideration of individual academics' identities in the context of the ever-changing role of the institutions within which they work within the broader socio-cultural milieu. Therefore, this ethnographic case study was contextualised within a well-recognised movement in higher education – neoliberalism.

While a necessarily ill-defined concept in the social sciences (Mudge, 2008), *neoliberalism* is essentially an ideology of increased productivity through government deregulation, privatisation, managerialism and marketisation. It is a set of economic policies that have become widespread in western countries, well beyond its economic origins (Martinez & Garcia, 1998). As any ideology, it represents a way of knowing and has an 'epistemic identity' that is present in its ways of doing. For example, Berry (2008) identifies neoliberalism with 'knowledge structures of empiricism, rationalist scientism and productivity' (p. 8), 'hard-and-fast quantification' and 'rubrics of efficiency and standardization' (p. 6) and argues that 'the dominant knowledge system is indissociable from the neoliberal agenda that facilitates it' (p. 3). Hunter (2002) associates neoliberalism with a positivist epistemology. Caffentzis (2004) identifies neoliberalism with the 'commodification, privatisation and marketisation' of knowledge. Elzinga (1985) and Henkl (2005) identify the 'epistemic drift' towards neoliberalism in academia with 'externally defined rules and evaluative criteria, utility and value for money, as well as scientific excellence (p. 167). Some researchers have noted that academics are experiencing 'distress and disillusionment' (Davies & Petersen, 2005) and 'alienation and anomie' (Beck & Young, 2005; Archer, 2008) as a result of epistemic change in a period of neoliberalism. Such claims warrant further empirical and contextualised exploration of individual academic's ways of knowing and teaching within the broader 'epistemic climate' (Haerle & Bendixen, 2008) of higher education.

RESEARCH QUESTIONS

The research engaged three primary questions in the context of a case study:

1. How does theoretical and empirical research link epistemological and pedagogical constructs of academic identity?
2. How do different academics experience neoliberalism in relation to their epistemic-pedagogic identities?
3. How can epistemic-pedagogic identities develop to engage more adaptively but critically with epistemic climates in the changing academy?

BACKGROUND AND RELEVANCE OF STUDY

Beliefs about knowledge are related to effective pedagogy and learning. Hofer (2008) states, 'in our mundane encounters with new information and in our sophisticated pursuits of knowledge, we are influenced by the beliefs we hold about knowledge and knowing . . . we need better understanding of personal epistemology and its relation to learning' (pp. 3-4). This statement offers a general rationale for the research, which addressed the epistemic dimension of academic identities during a period of rapid change in higher education.

The international discourse on higher education notes the sweeping changes affecting the sector. These changes are often associated with a broader ideological movement known as 'neoliberalism' (Peters, 1996). For example, a conference on Academic Identities (University of Auckland, June 2012) offered the following summary:

Research/scholarship about the changes and challenges to academic work and identities is everywhere now. In the neo-liberal academy, under the spotlight of audit and exigencies of bureaucracy, there is a sense that academic identity is ruined, that the sort of work academics want to do and feel committed to doing is becoming harder to undertake with any real ownership, joy, or pleasure. (<http://www.aic.education.auckland.ac.nz/assets/Call-for-Papers-AI-2012.pdf>)

What epistemic-pedagogic identities does this characterisation represent and how, if this representation is accurate, can affected academics construct meaningful, 'positive', academic identities? How did this study impact the student researching academics' identities?

Understanding different academics' epistemic-pedagogic identities can inform teaching and practice in higher education contexts. For example, curriculum content in tertiary teaching training programmes (e.g., Post Graduate Certificate in Tertiary Teaching; Graduate Diploma in Higher Education) can help new academics to explore their own epistemic-pedagogic identities in relation to their teaching, their interactions with academics from different fields and their institutional identity. A place for open and informed reflection on academic identity seems especially important in the current context of higher education, which some (e.g., Archer, 2008; Bleiklie, Hostaker, & Vabo 2000; Elzinga, 1985; Henkel, 2005) have characterised with labels such as 'neoliberalism' and 'epistemic drift'. Failure to address the epistemic construct (dimension) of academic identity and its relationship with the pedagogical dimension can exacerbate epistemic conflict among academics and between academics and their broader institutions (Bleiklie,

Hostaker, & Vabo 2000). The research represented an ethnographic case study between epistemology and pedagogy in the construction of academic identity in one tertiary institution in New Zealand.

OVERVIEW OF KEY LITERATURE

This section contains a brief summary and analysis of key literature related to academic epistemic-pedagogic identity and neoliberalism. A growing body of literature (e.g., Elzinga, 1985; Archer, 2008) acknowledges an 'epistemic drift' (Elzinga, 1997) towards neoliberalism in higher education that has a significant impact on academics' identities (Henkel, 2005). Much commentary (e.g., Bleiklie et al., 2000) depicts this drift pejoratively in terms of bureaucratisation, economic rationalism and micro-managerialism. The research conducted explored the epistemic-pedagogic constructs of academic identity within the neoliberal milieu of higher education. It represented a case study and conceptualisation of the relationship between 'epistemic drifts' (e.g., neoliberalism) and individual academic identities.

EPISTEMIC IDENTITY

Educational researchers have long been interested in the role of epistemic beliefs in learning and academic achievement. Epistemic beliefs refer to beliefs about knowledge (including its structure and certainty) and knowing (including sources and justification of knowledge) (e.g., Buehl & Alexander, 2001; Duell & Schommer-Aikins, 2001; Hofer, 2000; Hofer & Pintrich, 1997; 2002). Epistemic beliefs include beliefs about 'the definition of knowledge, how knowledge is constructed, how knowledge is evaluated, where knowledge resides, and how knowing occurs' (Hofer, 2001, p. 355). There are several conceptualisations of epistemic beliefs. Early research tended to see epistemic beliefs as domain-general (e.g., Baxter Magolda, 1992; Belensky, Clinchy, Goldberger, & Tarule, 1986; Kitchener & King, 1981, 1990; Kuhn, 1991; Kuhn & Weinstock, 2002; Perry, 1970). Thus, epistemic beliefs were thought to influence the treatment of knowledge across contexts or domains in a fairly uniform fashion, although researchers working within these frameworks conducted studies largely in academic settings and in regard to academic knowledge. Most theorists (e.g., Buehl & Alexander, 2005; DeBacker & Crowson, 2006) described developmental changes in epistemic beliefs with stage-like descriptions. Although there is a general consensus on the content, sequence and direction of 'epistemological development' these descriptions demonstrated some differences and variance in (1) the number of stages (e.g., as few as four [Baxter Magolda] or five [Belenky et al.] to as many as nine [Perry]), and (2) the characterisation of stages (e.g., as intellectual and ethical development [Perry], epistemological reflection [Baxter Magolda], reflective judgment [Kitchener & King, 1981], or as argumentative reasoning [Kuhn]). Researchers used interviews and laboratory tasks to reveal the nature of epistemic beliefs and their development. Such studies focused on students' learning and beliefs and tended to use quantitative analytical techniques.

Perry's (1970) work (derived from a developmental perspective) with Harvard male students is most often cited as the beginning of the study of personal epistemology. His findings can be linked to subsequent major studies that show that personal epistemological beliefs can develop along two lines: (1) sources of knowledge and (2) nature of knowledge. Persons who are new to studying a subject are deemed to be less mature in the field and therefore situate themselves as having beliefs that rely on expert knowledge, which is viewed as simple and black and white. But this outlook changes as the person develops and matures. The person comes to acknowledge that the source of knowledge is within the self and therefore is relatively uncertain and evolving (Hofer & Pintrich, 1997; Schommer, 1990; Belensky, Clinchy, Goldberger, & Tarule, 1986; King & Kitchener, 1994). A final stage or phase tends to appreciate the relation and contextual nature of knowledge and knowing and is characterised by a sort of 'commitment in relativism' (Perry, 1970). This development is often described in terms of Kuhn and Weinstock's (2002) research on the subjective/objective distinction. As summarised by Leah et al (2010):

The absolutist sees knowledge from an objective perspective, the multiplist takes a subjective view, and finally, the evaluativist achieves a mature balance of the two, coordinating a personal and subject frame of knowing with an awareness of how knowledge can be verified (p. 222-223).

More recent theorists have conceptualised epistemic beliefs as a set of beliefs about knowledge and knowing. Each of these beliefs has its own developmental trajectory, and the trajectory may vary across the range of individual epistemic beliefs (Schommer, 1990; Schraw, Bendixen, & Dunkle 2002; Wood & Kardash, 2002). In addition, some researchers suggest that epistemic beliefs may be domain- or discipline-specific rather than general (e.g., Buehl, Alexander, & Murphy, 2002; Hofer, 2000; Jehng, Johnson, & Anderson, 1993; Paulsen & Wells, 1998; Schommer & Walker, 1995). Theorists working from this multidimensional understanding of epistemic beliefs have developed paper and pencil self-report measures that assess a variety of epistemic beliefs.

There is growing consensus that some of the beliefs originally included in measures of epistemic beliefs are not, themselves, epistemic in nature (Bendixen & Rule, 2004; Hofer, 2000; Hofer & Pintrich, 1997). Hofer (2000) and Pintrich (2002) have suggested that epistemic beliefs include beliefs about knowledge (the simplicity and certainty of knowledge) and beliefs about knowing (source and justification of knowledge) but not beliefs about learning or the

nature of ability. Schommer-Aikins (2004) recently made a similar distinction, separating beliefs about knowing (e.g., fixed ability, quick learning) from beliefs about knowledge (e.g., knowledge is simple and certain). The research drew on general constructs from the consensus of theory on epistemological development (e.g., subjective/objective; universal/relative; interpretivist/positivist distinctions) to explore academics' personal and professional domains of knowledge and knowing, whilst the researcher examined her own position. .

PEDAGOGICAL IDENTITY

Pedagogical identity and style are well-researched constructs in educational literature. For example, the Teaching Practice inventory used by Mosston represents a typical inventory of styles, which are more often cast in broad epistemic-pedagogic oppositions between construction and transmission (e.g., Teo, Chai, Hung, & Lee, 2008; Wong, Chan, & Lai, 2009) of knowledge and learning.

Research in the area of pedagogical beliefs tends to focus on school teachers and pre-service teachers' beliefs. For example, pre-service teachers' relativistic epistemic beliefs have been connected with constructivist pedagogical beliefs. Schraw and Olafson's (2008) study found that 23 of 24 practicing teachers held constructivist-oriented pedagogical beliefs and relativistic epistemic beliefs. Chan and Elliot's (2004) research showed that pre-service teachers in Hong Kong were epistemically relativistic, but did not demonstrate an inclination towards constructivist pedagogies. However, Richardson (2003) suggested that although pre-service teachers might express a relativistic epistemic belief, they might also view teaching as knowledge transmission. The evolving field reveals the complex relationships and dynamics between ways of knowing and ways of teaching that influence practice.

While much early research focuses on either students' epistemic identity or teachers' pedagogical identity, more recent research has begun to draw attention to the relationship between teachers' ways of knowing and ways of teaching, arguing that the two constructs relate to each other (e.g., Pajeres, 1992; Brownlee, 2004; Sinatra & Kardash, 2004). However, the relationship between epistemic and pedagogical identity needs more attention. Furthermore, it needs attention in relation to academic identities, as distinct from (though possibly very similar to) teacher and pre-service teacher identities. This research focused on academic identity in a higher education context in New Zealand. This paper overviews the research conducted and the conference paper intends to highlight the student experience, whilst this research was carried out. This would include supervisory roles, contact arrangements and an overview of the student experience.

GAP IN THE RESEARCH

The premise of the research was that individual identities are iteratively constructed, deconstructed and reconstructed in relation to each other and to more general epistemic climates. The nexus between epistemology and pedagogy was yet to be explored directly in relation to academic identity in a neoliberal context. More empirical investigations and conceptual models that represent these intersections and relationships were needed. Such a model can be used to conceptualise (a) the existence and nature of interaction between personal epistemology and pedagogical praxis, (b) the existence and nature of epistemic-pedagogic conflicts and cooperations between different academics, and (c) the existence of epistemic-pedagogic conflicts and cooperation between individual academics and their institutions. As stated previously, an understanding of these relationships are important in the light of current neoliberal changes in higher education that influence academic identities.

RESEARCH DESIGN

The case study used a qualitative ethnographic approach (Cresswell, 2012) framed within the research paradigm of critical realism to explore academics' epistemic-pedagogic identities. Previously, much epistemological research has been conducted through quantitative studies using numerical data. However, as Hofer (2008) notes, simplified quantitative measures based solely on questionnaires may risk trivialising the complexity of individuals' beliefs and 'assessment has been most reliable and valid with interviews' (p.7). Figure 1 represents main elements of the research design within the research paradigm of critical realism. Figure 2 shows the data collection phases connected to the main themes.

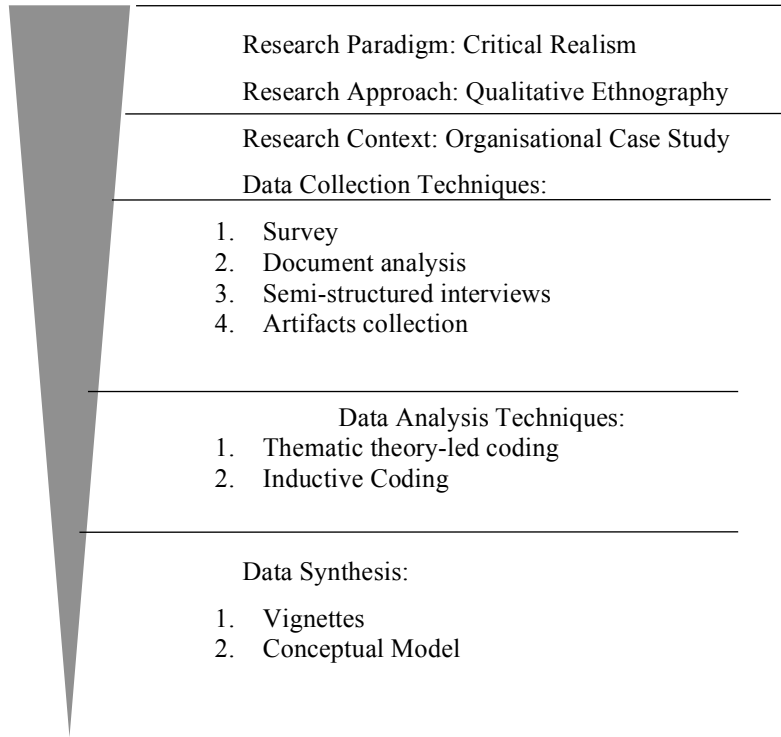


Figure 1. Overview of Research Design

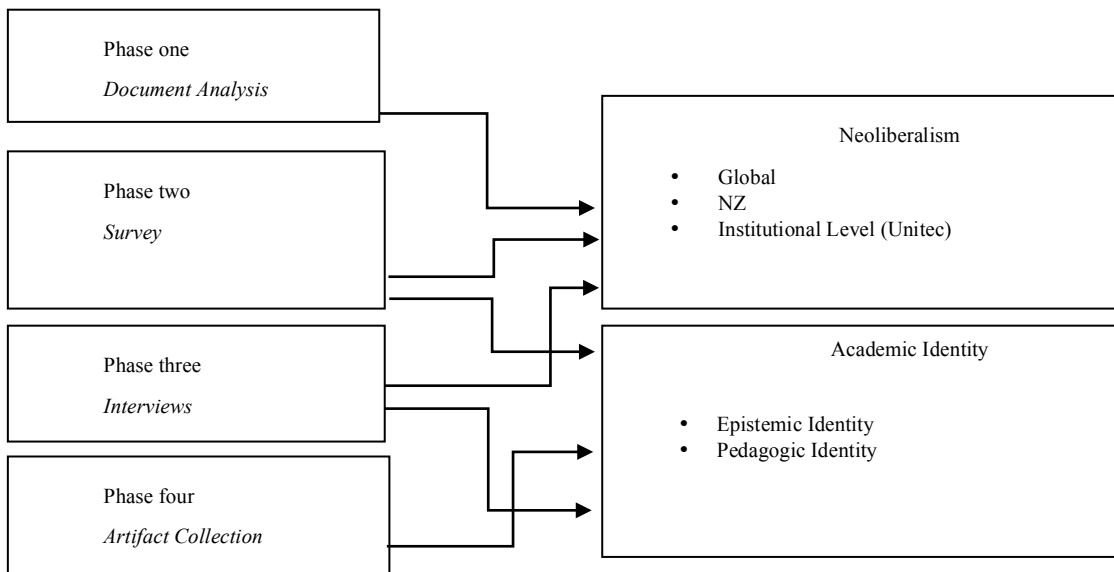


Figure 2. Triangulation and Data Connection.

CONCLUSION

There were some ironies and paradoxes for the researcher in carrying out this research within the institution she worked and whilst being an academic herself. Alongside this many binaries became exposed, for example, student/academic; known/unknown; subjectivity/objectivity. Terms used in epistemology, and connections to her own teaching were written about in her journal as her student experience progressed. Her ability to practice reflexivity became paramount. Revealing her own academic identity has been a satisfying but at times an interesting and also moving journey, as both a student and an academic within the higher education sector. The *neoliberal effect* was the biggest part of the data arising from discussions with participants. The impact of epistemic drift has been described as mainly pejorative, the researcher coining what is happening in higher education as a **LOUD** *disquiet*.

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