Tertiary Teachers and Theory Avoidance

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ABSTRACT

While many tertiary teachers engage willingly with theories to inform their understanding and practice, some seem fearful of theory and avoid engagement. This article analyses theory in tertiary teacher education programmes in one university. It considers the place of theory in the programmes and the selection of theories included; it explores students' avoidance of theory and outlines some practices used to invite engagement with theory; and it suggests some possible future practices. It concludes that theory has a continuing role in the programmes, albeit one that warrants ongoing discussion and debate.

INTRODUCTION

I teach in undergraduate and postgraduate programmes designed to educate tertiary teachers who work in a wide variety of formal and non-formal learning contexts; for example, universities, polytechnics, wānanga, private training enterprises, community organisations and companies. My views on theory are influenced by an experience I had years ago in a course on teaching children to read. We were asked to state our theory of the teaching of reading. I understood theory as a fully developed explanation that was well tested, proven even. I sat quietly, my mind an absolute blank. Clearly I did not have a theory of the teaching of reading. We then watched a video about reading being taught. I was horrified at some of the things I saw and was very critical of some of the teachers' practices. My theory was suddenly very apparent to me! What I learned that evening was: that there is a set of beliefs, ideas and assumptions that underpin our teaching practice; that we may not be aware of these ideas let alone be able to articulate them; but, they exist, shaping what we do.

In this article I explore the place of theory in tertiary teacher education programmes in one university. I begin by outlining different views on what theory is then describe how theory is used in the programme, including some practices used to invite students to engage with theory. A series of vignettes illustrates how some students avoid engaging with theory. I analyse the vignettes using the framework on theory developed by Thomas (2007), before suggesting other practices that might be used by the staff in this and other similar programmes.

UNDERSTANDINGS OF THEORY

Modern conceptions of theory are traced to Western enlightenment of the 17th and 18th centuries (Edwards, 2005); educational theory to the end of the 19th century (Carr, 2006). One of the difficulties is that the word is used to mean different things: 'There is no bond between 'theory' and the constellation of meanings it has acquired' (Thomas, 2007, p.21). Merriam, Caffarella and Baumgartner (2007, p. 79) describe theory simply as 'a set of interrelated concepts that explain some aspect of the field in a parsimonious manner'. O'Connor (1954, cited in Carr, 2006, p. 140) outlined standards and criteria for what can count as theory in science. He argued that the way theory is used in education is generally a courtesy title and that it should be used only 'when we are applying well established experimental findings in psychology and sociology to the practice of education'. Thomas (2007) discusses the complexity of the ways it is used, collapsing nine meanings identified by Chambers into seven: theory contrasted with fact; theory as the opposite of practice; practical theory or personal theory; theory as presupposition from a set of orienting principles; normative theory – a clearly developed argument; empiricist theory (or craft knowledge); and, scientific theory (p. 51). He reduces these to four broad uses of the term: 1) theory as the obverse of practice is thinking and reflecting as opposed to doing and includes personal theory; 2) theory as a generalising/ explanatory model concerns ideas 'that may be followed up, embracing looser or tighter hypothesizing, modelling, heuristics and thought experiments' (p. 27); 3) theory as developing bodies of explanation concerns bodies of knowledge in particular fields; and finally, scientific theory is about 'ideas formally expressed in a series of statements' (p. 27). Thomas argues that all these forms are important but that 'theory' should not apply to them all. He proposed a 'verbal hygiene' in thinking about theory: to call theory contrasted with fact – 'conjecture'; theory as thinking – 'thinking'; personal or practical theory – 'reflection' or 'reflective practice'; theory as a body of knowledge – 'a body of knowledge'; theory as a clearly developed argument – 'a clearly developed argument'; and, theory as craft knowledge – 'craft knowledge' (p. 147).

Not only is there confusion in how 'theory' is used, there is debate about its role in education. For example: the Laboratory for Educational Research was established as 'a space for the exploration of the roles of theory in educational research and educational practice' (The Stirling Institute of Education, 2009); Thomas (2007, p. 30) argues that 'theory is harmful because it structures and thus constrains thought'; and, Carr (2006, p. 136) concludes that 'educational theory has run its course and should now be brought to a dignified end'. It is not the purpose of this article to debate these meanings and roles of theory. But it is important to acknowledge that it is situated within these debates. In the article I use Thomas' (2007) four broad uses of the term as a framework for analysing students' avoidance of theory. At times, I collapse these into two notions – 'formal' theory and 'informal' theory. 'Formal' theory refers to three of Thomas' broad meanings: scientific theory, bodies of explanation, and generalising/ explanatory models. 'Informal' theory refers to thinking, reflecting and personal theory. Some tertiary teachers try to avoid engagement with formal theory and do not seem to be aware of their personal theories. In the next sections of the article I explore this avoidance in tertiary teacher education programmes in one university.

THEORY IN THE PROGRAMMES

The choice of theories included in the programmes is important. These theories will inform, justify, challenge and shape teachers' personal theories and practice. Analysis of the Massey University adult education/ tertiary teaching programme documents (developed initially by Wellington Polytechnic before its merger with the University in 1999) shows that both knowledge of formal theories and the development of informal, personal theories is embedded. For example:

> ... the degree is built around the concept of the critically reflective practitioner, described here as a teacher who relates his/her practice to a sound theoretical base, who checks for consistency between his/her espoused theory and theory-in-practice, who is critically self-aware of his/her own actions, thoughts, values, assumptions and feelings ...
>
> Wellington Polytechnic (1997, pp. 12-13)

There is also evidence that links between theory and practice are emphasised through 'praxis', which is defined as 'reflective practice and active reflection' (Wellington Polytechnic, 1999, p. 16). Learning is designed to develop across the three years of the undergraduate degree. Because most students are practising teachers, the first year builds on experience and existing knowledge enabling them to make links to some formal theories. In the second year more emphasis is placed on 'developing theoretical understanding as well as extending applied teaching skills' and at third year 'extending theoretical understandings and developing problem solving, critical thinking and reflection' is the focus (Wellington Polytechnic, 1999, p. 17). At postgraduate level the aim is to 'extend theoretical learning ... in order to enhance the practice of a professional teacher of adults' (Wellington Polytechnic, 1997, p. 10). Formal and informal theories are also addressed within individual courses. Programme documentation states: 'It is not tied to a single educational theory but reflects a range of approaches to educational thinking' (Wellington Polytechnic, 1997, p. 12).

Educators use power when we choose to include or exclude specific theories in course content; we impose on students our views of what is relevant and important. For example, in a course on educational leadership, learning outcomes require students to: 'develop and review an 'espoused theory' of educational leadership for own context and compare this to own 'theory in practice''; and, 'critically evaluate the notion of leadership in adult education contexts'. The formal theories students are introduced to include behavioural, contingency, cultural, the symbolic, distributive, and power and influence theories viewed through critical and postmodern theory lenses. Students are invited to develop their own espoused leadership practice using such theoretical frameworks. Theory is important in the course. Embedded in it is the lecturer's view that 'there is nothing as practical as a good theory'. A course on power and knowledge is based in a study of critical theory and requires students to 'develop a working theory about power and knowledge from observation and a critical review of selected readings'. A cultural diversity course is based in

Mills' (1959) sociology and his views on the intersection of the individual and society. It requires students to 'construct a personal vision about cultural diversity' and 'compare personal visions with perspectives informed by Tino Rangatiratanga, selected feminist theories and selected learning theories'. The lecturer theorises with students, using the Kipling questions – what, where, who, how, when and why – to explore each topic in depth. A course on adult learning requires students to: 'critically evaluate adult learning 'theories''; 'construct a personal view of adult learning'; and, 'propose ways of ensuring their personal view is implemented in practice'. Selected formal theories include experiential learning, constructivism, transformative learning, andragogy, self-directed learning, critical pedagogy, postmodernism, and non-Western theories of learning, particularly Māori perspectives – the 'standard' fare of many tertiary teacher education courses.

Each course incorporates a selection of relevant formal theories. To appreciate the degree of selection we only have to consider the sixteen chapters in Illeris' (2009) book on contemporary theories and Palmer, Bresler and Cooper's (2001a, 2001b) books on fifty major and fifty modern thinkers on education. The selection is influenced by programme staff's shared and individual values and beliefs. Most of the theories reflect centre-left political views; 'New Right' or neo-liberal theories are questioned, as are attacks on biculturalism and multi-culturalism. Social constructivism underpins courses; some psychological theories are questioned, and views from sociology promoted. While critique is encouraged, required even, it would take a confident student to challenge the values embedded in the programme. We are socialising students into our ways of thinking by selecting the theories they are introduced to.

PRACTICES TO ENCOURAGE STUDENTS TO ENGAGE WITH THEORY

As the programmes emphasise the creation of strong links between theory and practice, the learning outcomes, learning and teaching activities and the assessment tasks are designed to draw on and reinforce connections between theory and practice. A practice used at both undergraduate and postgraduate level asks students to identify and/or construct personal theories relevant to the topic, to link these to formal theories they have learned about, to critically reflect on how well their practice matches their developing personal theory, and to suggest and justify changes to future practice.

In one postgraduate course formal theory is used as a lens through which concepts are introduced and practical situations are analysed. Theory is used to develop ideas about their personal practice as leaders. Questioning is used to help students explore theories in depth, to find answers to the question 'what does this mean?'. Challenging learning activities are used – students are required to comment thoughtfully on others' ideas, and to respond to students' critique of their own work – in their assessments as well as in online activities. In another postgraduate course students are required to read at least one primary text written by a classical theorist rather than rely on secondary sources. They may negotiate to study theorists whose work is not included in the course materials – an invitation offered in all the courses. Such invitations reduce theory avoidance. Another course begins with an exploration of students' personal culture. This is based on the premises that 'we teach who we

are' (Palmer, 1998) and that collisions with other people's horizons make us aware of our own (Gadamer, 2008). In one learning activity the lecturer hands out mirrors and invites students to look at themselves, consider who they are and where they have come from, and to theorise about their lives and themselves.

In an undergraduate course collaborative groups are used to discuss theoretical approaches and to enable students to construct knowledge. Formative assessment is used to enable students to try out new ideas without risk of penalty in the assessment process. The assignments are designed so each builds on the previous ones, enabling students to learn from feedback and to engage more deeply with theory as the course progresses. There are no due dates apart from the final one. This enables students to work to their own thinking rhythm, in the belief that this will foster deeper engagement with formal theory. In another undergraduate course learning psychologies are introduced through an exploration of scenarios using students' experience and current teaching practices. As teachers' stories are told, key ideas are recorded on the whiteboard, clustered under as yet unlabelled concepts from learning pyschologies. Once students are comfortable with the concepts, as they use and understand them, they are introduced to the theories and language used by the theorists. This approach reduces fear of theories.

In another course a group of Māori students were invited to replace selected Western theorists with Māori learning theorists from their Iwi. When some students took up the invitation a Māori assessor joined the course lecturer to jointly assess the work presented. When Western theories were chosen students were encouraged to critique their relevance to Māori. This strategy encouraged students to engage with theories that were most relevant to them. It gave them choice over which theories to learn about and reduced avoidance. In another course students are required to develop a personal 'view' of adult learning. Course materials explore a variety of formal theories before students articulate their own emerging, tentative views. It is stressed that the view is a personal theory 'for the moment' and that it will continue to change over time. This helps students overcome the fear of articulating personal views and feeling they are committed to them for life.

Most students respond to these practices, engage willingly with formal theories and produce insights into their experiences and practice. However, some either explicitly state their resistance or demonstrate resistance by avoiding engagement with formal theories in discussions and/or in the work they present for assessment. Some also avoid articulating personal or practical theories.

Below are five vignettes, based on actual experiences, which illustrate students avoiding theory in their education as tertiary teachers.

VIGNETTES FROM PRACTICE

Dale

Dale teaches in vocational education, has been a dedicated tertiary teacher for about five years, and is committed to enabling students to be successful in their chosen vocations.

> *I don't like theory. I learn best when I do things. Theory classes were really difficult for me when I was young. I struggled to pass the theory papers. I couldn't wait to get into the practical classes. The students we have are like me too. Their eyes glaze over in the theory classes and a lot of them fail. But when we get to the practicals many of them do good work. I don't see why theory is so important. Practice is what really matters.*

Lindsay

Lindsay is a new computing teacher, excited by the opportunity to help others learn to use computers and find employment. Lindsay heard about learning styles from others in the institution.

> *I am a kinaesthetic learner. I only learn by doing things. Reading is no good for me. I can't sit still long enough to get through readings. I need to move around. I like it best when I am shown how to do things. Then I learn. A lot of the students are kinaesthetic learners too. They learn best when they can do things on the computers.*

Group of Māori students

One tutorial group is comprised predominantly of Māori students. They bring their study materials but some have not yet taken them out of their plastic wrapping! They resist Pakeha theory.

> *Learning about Pakeha theory is a form of colonisation. Why should we learn about and use Pakeha ideas? Māori have theories and bodies of knowledge too. Why can't our theories be recognised and valued? Why can't we use them in our teaching?*

Chris

Chris is a tertiary teacher completing an undergraduate degree. One assessment task, aligned with a learning outcome, requires Chris to identify key personal development milestones and to relate those milestones to some of the theories of adult development – confirming and/or contesting them. Chris submits a very open, honest, heart-breaking description of personal development milestones. Chris tells a powerful story, but makes no links to any theories of adult development.

Francis

Francis is a postgraduate student also working in vocational education. Francis is keen to do research that will inform practice within his vocational context. He has begun the research design for a project investigating aspects of practice and needs to locate his project within a theoretical framework. His supervisor notices that whenever an email exchange or conversation draws Francis' attention to the need to develop this theoretical framework he avoids theory and returns to ideas and issues related to practice.

An analysis of these five vignettes, through the framework of meanings of theory identified by Thomas (2007), reveals some interesting insights (see Table 1). Dale's vignette illustrates the meaning of theory as the obverse of practice; theory is thinking and reflecting, rather than doing. Dale favours practice, avoiding theory if possible, as does Francis. Lindsay is developing a personal theory that learning styles exist, are fixed and must be catered for when people are learning. Lindsay wants to limit learning to 'learning by doing'. As Thomas includes personal theory, structured reflection, rational action and practical theorising within this broad use of theory, Lindsay's vignette also reveals theory opposing practice.

Chris is different. While there is not enough information to be able to judge what meaning Chris may give to theory, theory – understood as developing bodies of explanation – has been avoided in the work submitted. No personal theory is evident either. The vignette of the Māori students is different again, with an overt political stance evident. They are avoiding specific theories; they contest the privileging of Pakeha theories. They seem to understand theory as developing bodies of explanation, possibly as a generalising/explanatory model. Their personal theory may be that Māori bodies of knowledge are not only valuable but are more valuable to Māori than Pakeha bodies of knowledge. This personal theory justifies avoiding engagement with Pakeha colonisers' theories.

	Theory understood as:			
	Obverse of practice	*Generalising/ explanatory model*	*Developing bodies of explanation*	*Scientific theory*
Dale	❖			
Lindsay	❖			
Māori group		❖	❖	
Chris			❖	
Francis	❖			

Table 1: Meanings for theory evident in the vignettes

Three of the four uses of theory distilled by Thomas (2007) are evident in the vignettes. Theory understood as the obverse of practice and/or as personal theory underpins students' avoidance of theory in three vignettes: Dale, Lindsay and Francis. Theory as presuppositions or as a generalising/ explanatory model is avoided by the group of Māori students while theory as a developing body of explanation is avoided in two vignettes: the Māori group and Chris. Missing, or avoided altogether, is theory understood as scientific theory. However, in spite of this avoidance, each tertiary teacher is, arguably, developing a personal theory of tertiary learning and teaching. This personal theory, presuppositions or beliefs will inform, shape and constrain their practice in ways they may not be aware of let alone be able to articulate. Given that such avoidance does occur

what can staff do to identify and critically evaluate their own positions and invite tertiary teachers to engage with theory?

SUGGESTIONS FOR FUTURE PRACTICE

It seems that those tertiary teachers who avoid engagement with theory may understand it as something disconnected from practice, as thinking and reflecting rather than doing (Thomas, 2007) and therefore irrelevant and to be avoided. They understand it as generalising/ explanatory models and developing bodies of explanation as well, also seeing these as complex and irrelevant, to be avoided. Some may understand it as scientific theory, as 'ideas formally expressed in a series of statements' (Thomas, 2007, p. 27). Theory, therefore, is complex ideas that are difficult to read about and understand – something to avoid. In this article I have referred to this cluster of meanings as formal theory. It seems that theory avoidance may be anchored in a fear of formal theory, a fear based in understandings about its complexity and irrelevance. An understanding of theory as informal – personal or practical theory (Thomas, 2007) – seems to be missing from the meanings they have. They do not seem to realise that they hold personal beliefs and assumptions (theories) and apply them in practice. In contrast, staff teaching the programme understand theory as both formal and informal. They situate their teaching in specific formal theories, teach selected formal theories in different courses and design learning and teaching activities to assist students to develop and express their informal, personal theories. In this section I offer two types of suggestions: those for staff to discuss about their current thinking and approaches; and, those for what they might try in their practice.

Ideas for staff to discuss

Several points emerge from the analysis. It is clear that programme staff have a personal commitment to theory. They believe it has a significant role in students' learning and their development as teachers, so theory, formal and informal, will be retained in the programmes. There are, however, four points for staff to consider about their positions. First, discussion of the different meanings for theory and the proposed 'verbal hygiene' in the use of language about theory (Thomas, 2007, p. 147) is necessary for them to clarify the meanings they have for theory and to develop a shared understanding of how these meanings and language will be used within the programmes. Second, engagement with Carr's (2006) and Thomas' (2007) views on educational theory would also be a valuable way to explore and challenge the current commitment to theory. Staff invite students to critique their personal theories; we too should critique our own. Third, discussion is also needed about the possibility that a deficit thinking (Thrupp, 2008) view is held about students who avoid theory. Finally, we also need to engage, again, with the Māori students' view that Māori theories are valuable and should be included in courses, and to identify additional ways of doing that.

Suggestions for practice

I suggest four possible practices. A good starting point would be to accept that some students have a fear of formal theory, to empathise and work with them to allay that fear. Staff could acknowledge that students' fear of

formal theory may be well grounded. Writing about the competition between theories to be the 'correct theory' and the contrasting explanations of the same phenomenon, Morgans (2007, p. 139) concludes: 'It is no wonder that the non-theorist generally sees 'theoretical discourse' at best as confusing and at worst having no application to the 'real' world'. Having their fears acknowledged and accepted could help students to begin to overcome them.

Second, staff could introduce students to the different meanings of theory – to theory as formal and informal, to theory as the obverse of practice, as generalising/explanatory models, as bodies of explanation, as scientific theory (Thomas, 2007) – and help students to understand what meanings they currently hold, and what meanings might be useful to them. Clarifying the meanings would also give people a language to use when discussing theory.

Third, and also related to language, staff could use ideas from Thomas' (2007, p. 147) 'verbal hygiene' for thinking about theory. While his point is that we use 'theory' loosely for things that are not theory, some of his suggestions could help students become comfortable with theory. For example, theory as thinking could be called 'thinking', theory as a body of knowledge called 'a body of knowledge', and personal theory or practical theory called 'reflection' or 'reflective practice'.

Few of the students who avoid theory seem to understand theory as personal or practical. A fourth suggestion is that they could be introduced to this as informal theory and helped to see the theories they have already constructed, and the beliefs and assumptions they already hold. Personal theory is important to tertiary teachers, even necessary for them to understand their practice. Indeed personal theory cannot be avoided; it is present. But it may need to be made overt so it can be articulated, critiqued and reviewed. Informal, personal theory could be used to bridge students into engaging with formal theory. Here again we could use Thomas' suggestions for renaming. When students are fearful of and avoiding theory we could begin by referring to reflection and reflective practice before introducing the concept of informal personal theory and then bridging them into formal theory. Informal theory could also enable students to create strong links between practice and theory, reducing the theory/practice divide. This could be especially helpful to those who see theory as opposite from practice.

Underlying these suggestions for practice is my conclusion that theory, both formal (bodies of knowledge, explanatory models, scientific theories) and informal (personal and practical) has a place in the education of tertiary teachers. However, ongoing review and critique of assumptions, beliefs and practices is an essential part of engagement with such theory – for staff as well as students in the programmes – as is review of the critiques of Carr (2006) and Thomas (2007).

CONCLUSION

In this article I have explored some tertiary teachers' avoidance of theory. To do this I have considered different ways theory is understood, drawing on Thomas' (2007) four broad uses of the term as a framework through which to understand theory. This framework was also used to analyse five vignettes which illustrated students' avoidance of theory. Included in the discussion are some examples of current practices used in Massey University tertiary teaching

programmes to invite students to engage with theory. Arising from the discussion are some suggestions for future practices designed to reduce avoidance of, and increase engagement with theory. While these practices have been developed within a specific context, it is hoped that the ideas may transfer to other similar contexts and provide a stimulus for other tertiary teacher educators to help non-theorists engage constructively with theory.

Tertiary teacher educators are encouraged to:

- Accept that some tertiary teachers want to avoid theory.
- Acknowledge this avoidance, empathise with teachers and help to allay their fears.
- Introduce them to different meanings of theory. This may be as simple as formal and informal theory, personal or practical theory or as complex as Thomas' four broad uses or Chambers' nine meanings.
- Use 'verbal hygiene' to modify the language being used to reduce fear of theory; for example, using 'body of knowledge', 'reflection' and 'reflective practice'.
- Enable tertiary teachers to identify and express personal theories, then critique them. One way to do this is to encourage them to notice what they do in their practice and then ask *why* they do that.
- Encourage them to read and engage with literature on teaching to help them identify and name ideas that inform their practice.
- Help tertiary teachers to reflect on their practice, bridge them into seeing and understanding their personal assumptions, beliefs theories, and then bridge them into formal theories – thereby scaffolding their understanding of theory in manageable steps.
- Help them to make strong links between theory and their practice, emphasising the practical value of theory.

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REFERENCES

Carr, W. (2006). Education without theory. *British Journal of Educational Studies*, 54(2), 136-159.

Edwards, R. (2005). Theory. In L.M. English (Ed.), *International encyclopedia of adult education* (pp. 615-618). Basingstoke, UK: Palgrave Macmillan.

Gadamer, H-G. (2008). *Philosophical hermeneutics* (D.E. Linge, Trans. & Ed.). Berkeley, CA: University of California Press. (Original work published in 1976).

Illeris, K. (2009). *Contemporary theories of learning: Learning theorists ... in their own words*. London: Routledge.

Marx, K. (1844). *Contribution to the Critique of Hegel's Philosophy of Law*. Marx and Engels Collected Works, Volume 3. Retrieved on March 9, 2010, from http://www.marxists.org/archive/marx/works/cw/index.htm

Merriam, S., Caffarella, R., & Baumgartner, L. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). San Francisco: John Wiley & Sons.

Mills, C. W. (1959). *The sociological imagination*. New York: Oxford University Press.

Morgans, D. (2007). Beyond practice and beyond theory? In S. Smith (Ed), (2007), *Applying theory to policy and practice: Issues for critical reflection*. Aldershot: Ashgate.

Palmer, J., Bresler, L., & Cooper, D. (Eds.) (2001a). *Fifty major thinkers on education: From Confucius to Dewey.* London: Routledge.

Palmer, J., Bresler, L., & Cooper, D. (Eds.) (2001b). *Fifty modern thinkers on education: From Piaget to the present*. London: Routledge.

Palmer, P. (1998). *The courage to teach*. San Francisco: Jossey-Bass.

The Stirling Institute of Education. (2009). *The laboratory for educational theory*. Retrieved from

http://www.ioe.stir.ac.uk/research/LaboratoryforEducationalTheory.php

Thomas, G. (2007). *Education and theory: Strangers in paradigms*. Maidenhead: Open University Press.

Thrupp, M. (2008). *Secondary teaching, social context and the lingering politics of blame*. Keynote address to the New Zealand Post Primary Teachers March 25, 2010 from

http://www.cpag.org.nz/resources/speeches/res1217212641.pdf

Wellington Polytechnic. (1997). *Master of Education*. Wellington: Wellington Polytechnic.

Wellington Polytechnic. (1999). *Bachelor of Education WN2580*. Wellington: Wellington Polytechnic.

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