

2015

Metaphors as Two-way Mirrors: Illuminating Pre-service to In-service Teacher Identity Development

John Buchanan

University of Technology Sydney, john.buchanan@uts.edu.au

Recommended Citation

Buchanan, J. (2015). Metaphors as Two-way Mirrors: Illuminating Pre-service to In-service Teacher Identity Development. *Australian Journal of Teacher Education*, 40(10).
<http://dx.doi.org/10.14221/ajte.2015v40n10.3>

This Journal Article is posted at Research Online.
<http://ro.ecu.edu.au/ajte/vol40/iss10/3>

Metaphors as Two-way Mirrors: Illuminating Pre-service to In-service Teacher Identity Development

John Buchanan
University of Technology Sydney

Abstract: The transition from pre-service to in-service can be difficult for teachers. One means of looking into the minds and hearts of such teachers is to elicit the metaphors they adopt for themselves. Previous studies have indicated that during this transition much of the confidence, idealism and optimism of teacher metaphors is displaced by bleak and defeatist visions. These changes are usually explained by 'praxis shock' – a result of unrealistic prior views of teaching and equally unrealistic workloads and challenges. This research project asks if metaphors might reveal more about pre-service teachers' views and vulnerabilities, and help avert or mitigate problems encountered in the early years. Metaphors provided by one cohort of pre-service teachers were distinguished according to 'locus of pedagogy' (student-centred or teacher-centred) and 'degree of agency/efficacy' in an attempt to gauge perceptions of control in the profession. The results have implications for incoming teachers, teacher educators and the profession.

Introduction

A candle that consumes itself to light the way for others.
Teacher metaphor (source unknown)

The transition from pre-service to in-service teaching can be an uncertain and confronting time (e.g. Ingersoll, 2012; Buchanan, 2011), albeit one leavened with stimulation, new experiences and possibilities. Teachers simultaneously deal with multiple challenges of pedagogy, classroom management and administration, school politics and culture. Some beginning teachers appear to be ambushed and overwhelmed by their new circumstances. This study asks why and how this might be so, and what, if any, changes in new teachers and in their profession, might ease new teachers' entry into the profession. The study asks if metaphors elicited from pre-service teachers can be predictive, and can show the way to averting or alleviating some of the difficulties of the early years. The study draws on an illustrative example of one cohort of pre-service teachers who provided metaphors representing themselves as teachers.

Encouraging teachers to explore and discuss their metaphors for teaching can offer valuable insights into what they see as important, essential or harmful to their work. This may serve as a predictor of behaviour and decision-making on teachers' part. A study of teacher metaphors can help in understanding conditions necessary or optimal for successful 'apprenticeship' into full-time teaching, such as a sense of belongingness (Johnson et al., 2014). As such, it can inform the

profession in terms of providing optimal conditions for retaining effective teachers and their effectiveness, and for enhancing teacher morale. In short, metaphors can help teachers and teacher educators look in and look out.

Literature Review

The Contribution of Metaphors

Eliciting teachers' metaphors for themselves as teachers sheds light on their thinking about their "self-as-teacher" (Bullough, 2001, p. 64), their "teacher ideals" (p. 49) and their profession (Bullough & Knowles, 1991). Eren and Tekinarslan (2013) view metaphors as "crucial structures of the human mind" and define them as "the mental structures reflecting individuals' self-related beliefs, emotions and thoughts by means of which they understand and act within their worlds" (p. 435), in this case, their teaching worlds. Patchen and Crawford (2014, p. 287) describe metaphors as "the compasses of our consciousness, the dynamic divining rods that show us what we need to see, when we need to see it". Metaphors contribute to "producing coherence and ... making sense of life" (Bullough, 2001, p. 64).

Metaphors can serve multiple metacognitive and meta-affective purposes; they draw out teachers' "internal thinking, reflection and emotional state", in their work contexts (Johnson et al., 2014, p. 541). As with good educational practice, metaphors enable us to simplify the complex and reify the abstract (Eren & Tekinarslan, 2013), to position the teacher within her/his social and professional context (Bullough, 1997; Pinnegar, Mangelson, Reed, & Groves, 2011), and to capture a glimpse of the future, idealised or otherwise. As such, metaphors are "improvement-aimed" (LaBoskey, p. 2004, p. 817), and have the capacity to help us grow into our 'best selves'. They also serve a purpose in "demystifying and making explicit personal knowledge so that it can be articulated to others" (Thomas & Beauchamp, 2011, p. 763), as well as to the self, thereby enhancing self-understanding (Kelchtermans, 2009). Kelchtermans cautions, however, against essentialism, assuming a true, definitive self.

Metaphors offer a "window into some of the psychological aspects of self" (Loughran, 2004, p. 7), and can bring to the surface the "covert systems" (Fives & Buehl, 2012, p. 479) of teachers' implicit beliefs and assumptions. They can serve to help "beginning teachers to come to terms with themselves as teachers" (Bullough, 1992, p. 250); as "successful 'muddlers'" (p. 251) in the "messy" and "murky" world that is teaching (Fives & Buehl, 2012, p. 471). As such, metaphors can serve a purpose of assessment, or diagnosis, of individuals and groups, and of their circumstances, and their understandings and sense-making thereof, a "snapshot or a glimpse of the ideas, values and beliefs of the teacher" (Tannehill & MacPhail, 2014, p. 151); they "tap into areas beyond [teachers'] conscious recognition, shedding light on the inner realities and perceptions that shape their instruction" (Patchen & Crawford, 2011, p. 286-287).

The exploration of chosen metaphors can light the way towards understanding teachers, as well as their nature and identity, which could be described as their 'character in context' (see Anspal, Eisenschmidt & Löfström, 2012). Beauchamp and Thomas (2009) recognise the complexity of understanding teacher identity, or pre-service teachers' "complex, varied and parallel understandings" (Northcote & Featherstone, 2006, p. 257). It is mediated by context and relationships (Rodgers & Scott, 2008). It is a meaning-making enterprise that is inconstant, and yet, according to Akkerman and Meijer (2011), seeks stasis. This raises questions as to how a

struggling or successful beginning teacher might fare in either more favourable or more challenging circumstances, and how their teacher-metaphor choice might reflect this, or even shape it. Beauchamp and Thomas (2011) view teacher identity as both product and process, and as disruptive and destabilising. They identified agency and community as the two major players in the determination and formation of teacher identity; as well as the teacher's acceptance within it (see also Etelälpelto, Vähäsantanen, Hökkä, & Paloneimi, 2014). Teacher identity development accompanies and illuminates teacher socialisation (Bullough, 1997).

At the very least, studying teacher metaphors serves as healthy reflective practice (Tannehill & MacPhail, 2004; Northcote, 2009). Metaphors are commonly used teaching devices (e.g. Aubusson, Harrison, & Ritchie, 2006). Teachers are likely to become more adept at self-analysis through exploration of their metaphors, applying the maxim of "pedagogue, teach thyself" (Buchanan, 2006, p. 134). Like two-way mirrors, or looking through a train window at night, metaphors can provide an image of something beyond, while also reflecting back an image of oneself, hence the title of this paper. Eliciting metaphors arguably constitutes a learner-centred process for the developing teacher, permitting exploration, investigation and assessment from the learner's (teacher's) standpoint. Metaphors are also generative of creativity and imagination; use of metaphor may prompt teachers to explore new ways of using them as a teaching device. Boud and Hager (2011) counsel, however, that the elicitation of metaphors does not necessarily ensure deep reflection.

Illuminating the Individual and the Profession

It appears that there is a dynamism if not a tussle between personal and professional identities, between the ideal "myth of self" (Tannehill & MacPhail, 2014, p. 152), and real identities, as well as, potentially, between pre- and in-service identities. As Thomas and Beauchamp (2011) observe, discussion of metaphors tends to expose not just the 'what' of teaching, but the 'who' pertaining to teachers: who I am, who I want to be, who I should be. Alsop (2006) investigated the link between teachers' personal and professional identities. These multiple, morphing identities permit conversations among themselves, for instance between the actual and the "ought self" (Thomas & Beauchamp, 2011, p. 179), or possible self (Hamman et al. 2013); between the cognitive and the affective (Eren & Tekinarslan, 2013), and between the inner person and their context (Rouhotie-Lyhty, 2013). As part of his discussion of "teacher thinking", Kelchtermans (2009) refers to "a personal interpretive framework: a set of cognitions, of mental representations that operates as a lens through which teachers look at their job, give meaning to it and act in it" (p. 260).

Teachers' metaphors can also illuminate the teaching profession, its practice and the understanding thereof. Northcote (2009, p. 69) establishes a strong case for a "beliefs-practice nexus". This is likely to be instructive for the designers of the metaphors, for the profession, and for teacher educators. Northcote (2009) also notes, however, that the two, teacher beliefs and practice, have tended to be studied in isolation. An examination of common metaphors can identify popular "cultural myths" (Pinnegar et al., 2011, p. 640) of teaching. Understanding teachers' metaphor choices can also assist in understanding how teachers interpret their teaching-worlds. Exploring metaphors can help to promote resilience, assisting teachers to respond positively to the demands of the profession (Beauchamp & Thomas, 2011). There is scope, however, for criticism of current approaches to increasing resilience, addressing beginning

teachers' perceived deficiencies, while failing to address causes of demoralisation inherent in the profession. Johnson et al. (2014) refer to a practice, if not a culture, of ignoring beginning teachers' problems, or ascribing blame to the neophytes themselves. This could be seen as a case of the profession failing to apply its corporate knowledge about learning, to the newcomers in its field, and failing to acknowledge these newcomers' status as learners and knowers. Johnson et al. (2014) extol the virtues of schools they encountered that "provided a supportive learning environment for *teachers* as well as students" (p. 539, emphasis in original). Schuck et al. (2010) found that early career teachers coped well with high levels of challenge in their work, while ever it was accompanied by high levels of support.

Undertaken collectively, the elicitation of teacher metaphors also has the potential to elucidate patterns, if any, of the kinds of people attracted to teaching, and what attracts them. As Kelchtermans (2009) points out, "Who I am in how I teach is the message" (p. 259). Examination of changing metaphors can also provide an evaluation of professional development, mentoring and support, school culture and the like, and how these might fit better with the needs of teachers (Fives & Buehl, 2012).

Metaphors and Progression into Teaching

Northcote and Featherstone (2006) noted that their students' metaphors transcended the concerns typical of pre-service teachers, and ventured into the concerns of teachers. They note that this may be an exception to the rule, however. Beauchamp and Thomas (2011) found that as teachers entered the profession, the metaphors they offered pertained primarily to their classrooms and less to their broader role in a community of teachers. They speculate that this might be because these teachers are struggling for professional survival, and have little vision and energy for their broader responsibilities and erstwhile aspirations (see also Thomas and Beauchamp, 2011). The images chosen by Eren and Tekinarslan's (2013) pre-service participants are notable for their optimism, arguably to the point of naivety (see also, Bullough, 1997; 2001). Participants' similes included: a tree, a mother (nurturing students) the sun, and a lighthouse (guiding students). Similarly, Pinnegar, et al. (2011) found pre-service teachers' metaphors to be "confident, self-assured and optimistic" (p. 639). Teachers' responses might be driven in part by a desire to provide 'right answers' even in an anonymous survey with a known audience limited to one. A consequence of this might be potential demoralisation of other early career teacher readers of these metaphors, peers who feel less idealistic about their chosen profession or less confident their ability to 'fill their own shoes'.

The contrast between pre-service and in-service teachers' metaphors is typically dramatic. Standing in stark relief against Eren and Tekinarslan's images above, Craig's (2012, p. 90) practising-teacher participant's metaphor was that of a "butterfly under a pin", which poignantly captures an erstwhile vision and the dream shattered. The catalyst or accoutrement for this change in image was the participant teacher's developing sense of self as a (mere) curriculum implementer. This descent into pessimism in the early years of service may not entirely be harmful in the long term; it may be a necessary part of the personal and professional learning and development process.

A simultaneous embrace of inconsistent or contrary views appears possible for pre-service teachers (Northcote, 2009), a condition known as "wobbling" (Fives & Buehl, 2012, p. 484) or "mixing metaphors" (Patchen and Crawford, 2011, p. 288). Fives and Buehl contend that such

wobbling might be the birth pangs of a more sophisticated, coherent, belief system (see also Bullough, 2001). And yet, a progression or regression to more gloomy visions of teaching should avoid becoming a retreat or excuse from innovative approaches and idealism (Ruohotie-Lyhty, 2013). Another change, noted by Tannehill and MacPhail (2014), was a progressive de-centring of the teacher as the focus of the pedagogical transaction, to recognise the learner's role in the learning contract. Similarly, Anspal, Eisenschmidt, and Löffström (2012) found that pre-service teachers' self-narratives emerged from being egocentric, to encompass a greater awareness of their students' needs.

Another potential rift is that between pre-service teachers' 'flourishing' metaphors for themselves, and relatively stark and dour teacher accreditation documents. This might further explain some of the regression in teacher metaphors as their architect-builders enter the profession. Kwo and Intrator (2004) refer to deficit, technocratic and corrective programs that constrain teachers in the enactment of their craft through restrictive curricula and practices, which place little confidence and trust in the teacher. By contrast, they call on teachers to embrace their work with vocational passion, resilience, spirit, strength and heart. Similarly, at least some schools appear to quell the enthusiasm with which both new students and new teachers enter the profession. Kwo and Intrator (2004) warn against the tendency to regress to the routine. Rather, Tannehill and MacPhail (2014, p. 152) summon teachers to "stand outside the familiar professional ways of thinking, speaking and interacting". This applies individually and corporately.

Eren and Tekinarslan (2013) noted with some concern their participants' predilection for cognitive over affective images, observing that this may reflect participants' views of learning that are constrained to the cognitive. Such limited understanding may render these teachers less able to identify their students' affective battles with learning, or to identify with their students in such encounters. As a teacher, it is easy to become habituated to being the sole person in the room armed with relevant knowledge, and to overlook the students' affective (and cognitive) struggles with new and possibly conflicting information, concepts and contradictions, and the demands that understanding thereof places on learners.

Of all aspects of the study of teacher metaphors, none seems more striking than the above mentioned transformation from pre-service to in-service. Both the profession and its members are shapeshifters in a transitive sense; each impacts the other. For the individual, the effect is most likely miniscule on the profession, at least in the early years, and its possibility and potential can be lost on beginning teachers. As Kwo and Intrator (2004) contend, a focus on learning in the profession of teaching depends on an understanding of how teachers' inner selves make sense of, interact with, and respond to their working environments. Understanding how teacher metaphors develop through time is likely to illuminate changing teacher beliefs and teacher development in response to experience and experiences. Fives and Buehl (2012) observed that over time, "teachers' beliefs evolved from simplistic, unitary understandings to complex, multidimensional perspectives" (p. 484). Northcote and Featherstone (2006) on the other hand, noted that their pre-service teacher metaphors already exhibited a more sophisticated view of teaching and learning, as "percolation, refining and enlightenment" as well as community (p. 254).

A central facet of the study outlined here was to investigate and predict why teacher metaphors might change as they do upon entry into the service, and what this might mean for teaching as a profession, and for its members. Specifically, the study examined pre-service teachers' metaphors, and how they might be used to predict, and possibly avert, some of the casualties to come.

Conduct of the Study

A convenience sample (Marshall, 1996) of one cohort of students in their third year of a four-year Primary education undergraduate course was asked to choose a metaphor depicting their teacher-selves. Each student was provided with a blank sheet of A4 paper as a means to express their metaphor in a form they chose. Students were invited to take the sheets home to allow more time to consider and produce their metaphor. In all, 34 metaphors were provided, of which 25 were discerned to be mutually distinct (a gardener metaphor was adopted by five students, for example). Some students provided more than one metaphor. Given that paper was the provided medium, and probably for ease of presentation, all students chose either words or drawings (rather than, say, a sculpture, photograph or model) as a medium. The task formed part of usual classroom activities, with the view of establishing a 'community of ideas' as a discussion-starter, but on the back of the sheet was a pair of boxes, either granting or denying permission to use the metaphors as research data. If the 'no' box had been ticked, use of the metaphor was to be limited to classroom discussion. All students permitted use of their metaphor, which was provided anonymously, as data.

The metaphors were examined and categorised according to 'locus of control', that is, as representing a teacher-centred or student-centred view of learning. In an attempt to determine inter-rater reliability, two colleagues were presented with the list of the metaphors, and asked to categorise the metaphors similarly; the lists were also discussed at a staff seminar. This resulted in a plotting along two continua: locus of pedagogy, and degree of agency and efficacy. These processes are discussed later, following the introductory list of metaphors. The purpose of this process was to gain insight into the pre-service teachers' views on the extent of two aspects of their control they anticipate exercising in their work, that is, their perceptions of self-efficacy (e.g. Tschannan-Moran & Johnson, 2011; Cakiroglu, Capa-Aydin, & Hoy, 2012) and agency in teaching, in the contexts of the classroom, and beyond. Bandura (2001, p. 1) associates agency closely with "the capacity to exercise control over the nature and quality of one's life". In the absence of scope for an extended discussion of agency in this paper, the above has been adopted as a working definition here. Consistent with much qualitative research, this process attempted to capture some of the "blurriness, complexity and subjectivity" (Northcote, p. 100) of phenomena such as the journey into teaching. It aims to cloak itself in authenticity (Guba & Lincoln, 1989) and verisimilitude (Tracy, 2010) among others. While the process might be replicated (or modified) the results may well be different, and can be interpreted accordingly. Nonetheless, it is conceded here that follow-up interviews with some or all students would further clarify and confirm the findings.

Findings

The metaphors largely conformed to those commonly found in previous research. In alphabetical order, they are:

Actor	Gardener (x5)	Parrot (x2)
(Busy) bee	Helper	Performer (x2)
Coach	Helping hand	Potter
Counsellor	Lighthouse (x2)	Robot
Doctor	Motivational speaker	Security
Electrician	Mother/mum (1 each)	Train driver
Engineer	Mother penguin	Tree
Farmer	Nurse (x2)	
Fisherman	Painter	

Most, if not all, of the metaphors appeared to assume (via the explanation) an implied or explicit 'other', and/or a sense of purpose or product (e.g. the bee); nobody chose ascetic or hermit, for example. This underscores the interpersonal nature of teaching. Many of the metaphors also capture the nurturing dimension of teaching (farmer, gardener, doctor, nurse, counsellor). Nobody chose 'police officer' or 'sheep dog' as a metaphor. Some of the metaphors are ambiguous in the absence of further elaboration from the students. It was presumed that 'security' referred to a metaphorical 'security blanket', but it could also refer to a security guard or bouncer. The mother penguin was presumed to relate to 'traditional' mothering roles, even though male penguins typically take on many of the roles in caring for their young. Some metaphors, such as 'parrot' and 'robot' were difficult to locate in terms of locus of control. These two metaphors appear to place little control within the grasp of either the teacher or the student, and arguably position the former as a mouthpiece of the curriculum. These were the only two metaphors that appeared cynical or pessimistic in tone. Nevertheless, the robot image featured a robot with a heart and a female nurse (Fig. 1). Another student depicted a female performer on a highwire (Fig. 2).

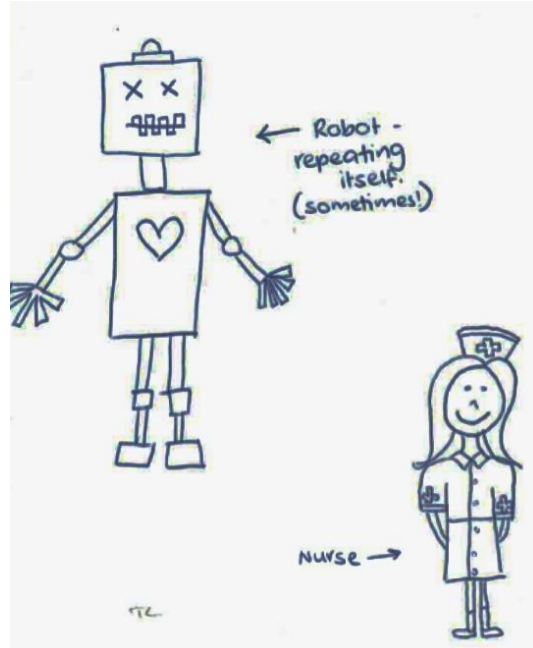


Figure 1: Nurse and Robot.



Figure 2: Performer Metaphor.

One of the metaphors (doctor) was notable for its reference to children, rather than students, in its accompanying explanation. This led to a tally of the use of the words ‘child/ren’, as opposed to ‘student/s’. ‘Students’ was much more commonly used than ‘children’, the ratio being 13:3. The mother penguin metaphor referred to “her young”. Some of the students’ responses were expressed as similes. The doctor metaphor also made reference to differentiating the curriculum:

A doctor needs to cater for each individual and take into account their experiences so far. There is no same prescription for each patient. In the same way, a teacher caters for each student ... A teacher needs to take into account the child’s experiences, abilities and needs. Like a doctor, the teacher must also know how to respond to each child’s needs with the best strategies.

The lighthouse “guides students to the shores of knowledge, attempting to direct them away from disaster and shipwreck”. For the fisherman (or woman), “when you get a big catch, it’s worth it!”, even though this requires patience and exposure to the risk of rough seas. A coach

is “there to train, encourage, teach, discipline and motivate” even though the students’ performance depends on their attitude and willingness to learn and perform at their best. The helping hand encourages, supports, congratulates and cares. The motivational speaker metaphor made specific reference to limited control: “The teacher stresses the importance of things taught and how great it will be for students to apply strategies and knowledge, but it is up to students to walk away and apply what they have heard for their lives”. The tree was seen as a protector of the students, and presented an image of strength yet flexibility (bending in the wind). An engineer works at “designing and building students for the future”. The mother penguin metaphor alluded to “educating her young on the harsh, ever-changing environment”. This appears to confirm traditional mothering roles. The painter’s work consists of “applying new knowledge to existing structures”. This is reminiscent of a pentimento, in which the earlier coats of paint may be evident, and evokes a notion that change through education may be readily identifiable on close inspection, whether or not this was the author’s intention.

The potter metaphor was accompanied by a lengthier explanation: “The hand that supports the outside of the clay represents support, and boundaries. The hand on the inside stretches the clay and expands it into a beautiful shape. It represents love, encouragement and (maybe) adventure”. The explanation proceeds to discuss outcomes if either hand becomes dominant. The bee metaphor referred to busyness, focus, outcomes (production of honey for nutrition) and collaboration with other bees. The robot “repeats itself (sometimes!)”. An electrician works at “creating the connections to turn the light on”.

Other metaphors, while still positioned as teacher-centric, because of the focus on teacher activity or behaviour, nonetheless embodied learner-centred elements. The gardener will help students grow; “we just need to ensure their environment allows them to”. Other gardener-related comments included, “planting ideas”, eliciting “a passion for learning and growing” and “nurturing and caring for students”. For one student, the gardener nurtures and watches as the “seeds grow and flourish”. For the gardener of another, “She/he fertilizes and nurtures the growth of young seedlings, and regularly waters them. When they get wild/out of control she must prune them, so the whole garden is balanced and harmonious and all plants have a chance to grow.” This perhaps suggests a level of control commensurate with the teacher-centred metaphors. Farmers “rise early, working long, hard hours all day and finish late in the evening. Their work is never-ending as there is always something they could be doing to better the farm.” The reference to the intense work of the farmer is reminiscent of the bee metaphor, again perhaps blurring the line between the teacher- and student-centred metaphors. The image accompanying the farmer metaphor was more elaborate than any of the other student drawings (Fig. 3).

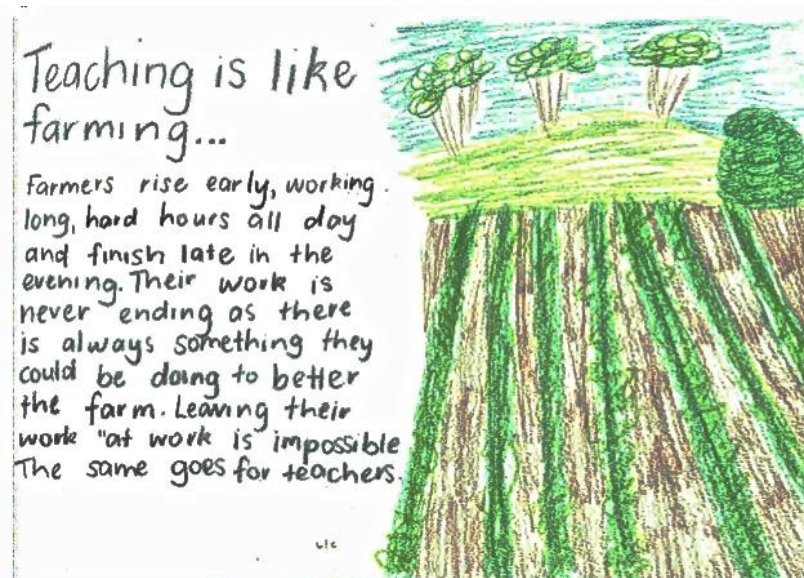


Figure 3: "Teaching is Like Farming ..."

One of the most striking features of the metaphors at first glance was the preponderance of teacher-centred metaphors. At one level, this should not be surprising, as the pre-service teachers were asked to depict or describe themselves as teachers. It may be that, had the students been asked to 'draw a teacher', results may have been different (see Chambers, 1983; Symington & Spurling, 1990). And yet, this choice also appears to defy the learner-centred approaches that appear almost instinctive in their assessment tasks, and that we, as staff, attempt to instil in them, as an alternative to a 'teaching is telling' approach.

Beyond that, identifying trends and categories in the metaphors proved more difficult. Several attempts were made to categorise the metaphors. Locus of control was proposed as a proxy for teacher- or learner-centredness, for inter-rater reliability checks with two other staff members. In the inter-rater process, similarities between the two other colleagues was higher, at 79 per cent, than consistency with my codings, at 64 per cent and 67 per cent respectively. The exercise led to conversations in which we exchanged views and definitions of 'teacher-centred' and 'learner-centred' and of the task. While our different rationales for categorisations made mutual sense, difficulties persisted in categorisation, as did I with this form of categorisation at this point. At a subsequent staff seminar, in discussions with other staff, it emerged that locus of control was an inadequate proxy for pedagogical centrality.

Subsequently, the metaphors were placed on a coaxial grid, the two axes being locus of control, and centre of pedagogy (learner- or teacher-centred), as shown in Fig. 4. This was with a view to mapping two important conditions of the pedagogical condition with regard to control: relative relinquishment or maintenance of control over pedagogy; relative control or lack of control over circumstances such as working conditions, learning outputs, outcomes and the like.

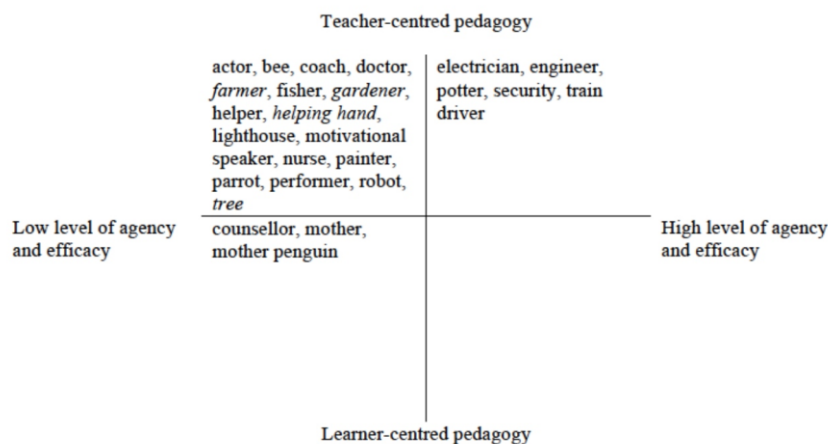


Figure 4: The Four Quadrants.

The quadrants in Fig. 4 may be described as follows:

Quadrant 1: Teacher-centred, low efficacy. In this scenario, teachers ostensibly exercise high control over pedagogy, but have low control over their circumstances, including the outcomes of their teaching.

Quadrant 2: Teacher-centred, high efficacy. This quadrant features high levels of teacher control over both teaching and other circumstances.

Quadrant 3: Learner-centred, low efficacy. In this circumstance, teachers set out to teach with a learner-centred philosophy in mind. They have little influence over their circumstances.

Quadrant 4: Learner-centred, high efficacy. This scenario is characterised by a learner-centred pedagogical approach, and a relatively high degree of control over circumstances and outcomes.

The grid above has not been finessed to the point of relatively positioning each metaphor within its quadrant. To do so would require a level of subjectivity that would be difficult to justify. As it is, the placement of the metaphors in the quadrants is subjective and contestable. The placement of ‘tree’, for example, was problematic. This, and three other metaphors (gardener, farmer and helping hand) appear to have some elements of learner-centredness in them, in that the gardener or farmer can create an environment for optimal growth. To signify this potential difference, they have been written in italics in the grid.

The electrician and others in the top-right quadrant were deemed to have greater control over related outcomes than those in the top-left quadrant. Three of these five deal with objects rather than people, perhaps according them more control. This issue will be reprised later.

Determination of agency was also problematic. Discussion with colleagues ensued with regard to ‘the helping professions’. A colleague commented, “Counsellor has a level of agency ... Does a doctor not have agency, a motivational speaker?” In the end it was determined that doctors and motivational speakers have little agency over their clients’ subsequent behaviour. Along the other axis, ‘counsellor’ was placed in ‘learner-centred’ as opposed the others, because of counsellors’ famed (and arguably stereotypical) ‘you have to *want* to change’ mantra. This again highlights the subjective nature of the construction and interpretation of metaphors.

Other categorisations are, of course, possible. A colleague suggested people-intensive versus mechanical categories. These might be termed ‘warm’ or ‘cold’, or ‘soft’ as opposed to

‘hard’ metaphors for teaching. Arguably, and perhaps pessimistically, those presenting ‘hard’ or ‘cold’ metaphors might be better prepared for the demands of the early years of teaching.

The determination of an optimal pedagogical circumstances will always be subjective. Nevertheless, inductive or discovery learning, where applicable, appears to have better and longer-lasting effects (Bruder & Prescott, 2013; Entwistle, 2012) despite some concerns such as its time-consuming nature (Bailey & Colley, 2014). Similarly, early career teachers typically complain about the lack of control they have in their work circumstances (Buchanan et al., 2013; Martin, Sass, & Schmidt, 2012). It could therefore be argued that the bottom-right quadrant, featuring learner-centrism and high efficacy, would constitute an optimal teaching circumstance. That being the case, it is interesting and somewhat disconcerting that the majority of responses are in the diagonally opposite, the top-left, quadrant.

Problems are likely to arise if teachers enter the profession with unrealistically high expectations of the power, control and autonomy they will exercise, only to have these ideals deflated or crushed. Those in the bottom-left quadrant, seeing their work as learner-centred, may well yearn for greater levels of efficacy and autonomy in their work. A teacher who is content with a teacher-centric approach, might find satisfaction in the top-right quadrant, in the context of high efficacy. The metaphors presented here suggest an inflated view of the levels of agency that exist in teaching, one that may well be shattered upon entry into the workforce. Moreover, the preponderance of teacher-centred metaphors is also somewhat disconcerting, but may be a function of the task as explained to the pre-service teachers.

Discussion and Implications

As argued above, an examination of pre-service teachers’ metaphors can offer insights into the profession, its members, and how they see their work. Metaphors present a rich and subjective wellspring for interpretation. Their subjectivity is their beauty and their terror. Correspondingly, much of the interpretation is inferential. As a colleague commented, with regard to the process, “It is like ‘reading’ a diamond and turning it over in your hand to see the facets in continually different lights.”

Consistent with previous studies of pre-service teachers, these participants’ metaphors present as positive and optimistic, by a clear majority. While the helping hand, for example, encourages, supports, congratulates and cares, it does not chastise, threaten (much less physically punish) or apportion blame. Even the robot, this ‘tin man’ (see Baum, 1900), has a heart.

As mentioned above, the metaphors raise questions of self-efficacy and agency. While at least some of the metaphors appear to capture the complexity and effort of teaching (bee, farmer, gardener, tight-rope performer), others seem to embody inflated views of the control a teacher exercises. The potter and train driver, for example, exercise considerable control, and offer little in the way of choice. Presuming they are competent, they have a reasonable chance of attaining a successful or at least satisfactory outcome. Of concern is what the beginning years of teaching might do to the idealism and arguably exaggerated sense of control of these teachers. They are likely to be confronted with the reality of little control and, at times, even hostility and resistance from a source they might not suspect – their more experienced colleagues (see, for example, Buchanan, 2012; Johnson et al., 2014). The author of the bee metaphor, for example, may encounter a dearth of collaborative will. This raises the question as to whether the pessimistic metaphor creators in this study are more, or less, ‘advanced’ in their thinking and understanding

than their more idealistic counterparts. Arguably they are more ready for the realities of the profession. In itself, though, this is a rather pessimistic concession to make. As a colleague pointed out, control might come at a cost. The train driver, for example, is confined to the rails. Consistent with the findings of Tannehill and MacPhail (2014), it may be that these teachers' metaphors will become more student-centric with time and experience.

If we are to avoid metaphorically pinning these teacher-butterflies to a corkboard (Craig, 2012), teacher educators need to assist in arming them with a resilience to cope with the demands and constraints of the profession, without causing unnecessary panic. And yet, this in itself is unlikely to be sufficient. The fault lies more with the pin and with the intent behind it than with the butterfly.

It seems strange that beginning teachers would be so surprised by the circumstances in which they find themselves, typically having undertaken several weeks of in-school practice. I attempted to understand this through developing a metaphor of my own. At a now-abandoned amusement park (already an evocative image) in Sydney, there used to be a ride called the *Space Probe*. It lifted your carriage slowly high above the ground, then let you free fall for some time, before magnetic brakes controlled and slowed the fall. While waiting in the queue, I had several opportunities to watch it operate. I boarded feeling well-informed as to what the experience would be like. Nevertheless, as we fell, I earnestly felt that the system has failed, and that we were all crashing to our deaths. Observing did not prepare me for the reality. Similarly, it may be that the highly controlled nature of professional experience offers a false mage of the complexity and demands of teaching.

From this small but typical sample, implications for the profession and for associated professional development can be drawn. The literature appears broadly to embrace learner-centred teaching approaches (e.g. Nuthal, 2007; Schweisfurth, 2013). On this basis, the learner-centred images might be deemed superior to their teacher-centred counterparts. Consequently, a teacher educator eager to promote inductive learning approaches may become disappointed at the metaphors presented here. And yet, teachers enter the profession with dual identities, as teacher and as learner. To the extent that this is the case, then it stands to reason that the teacher-as-learner should be afforded more centrality in professional development and support processes provided by their schools, jurisdictions and their more senior colleagues (Schuck et al., 2012). In some circumstances, this is being pursued with vigour, imagination and enthusiasm (McDonough, 2014), but by no means universally. Regrettably, the optimism and enthusiasm the new teachers bring to their schools may become a source of resentment-driven hostility or indifference among their senior colleagues.

The literature appears in agreement that the student does not arrive in class as a *tabula rasa*, a blank or 'blanked' slate (Duschinski, 2014). Consistent with this, it is valuable to avoid treating beginning teachers as such. They arrive armed not only with knowledge and experience relevant to their work; they also bring with them aspirations and ideals about their work and its importance that can serve to refresh the profession, and its more longstanding members, if they are open to this. At a more personal level, the visions and metaphors new teachers typically carry with them into the profession may, in turn, carry them through some of the darker and more difficult days of the job. As such, the findings from this study have the potential to raise levels of teacher satisfaction, and reduce levels of teacher attrition.

Limitations

As mentioned previously, a desire to furnish ‘right answers’ (Tannehill & MacPhail, 2014) can distort or mask more forthright, accurate answers on the part of respondents, even in an anonymous response. Arguably, respondents might be driven into competition to provide the most sophisticated, or the most striking, potent, moving or romantic metaphor. Nevertheless, this is potentially of value, as it encourages idealism, and may serve as a self-fulfilling prophecy. A quest for the most cryptic metaphor might fulfil self-enlightenment, but may fail to enlighten others, in the absence of explanation. In any case, to the extent to which this operates, it is part of a learning (and socialisation) process undertaken by teachers, and is likely to lead to greater insight on the part of respondents. In other words, the process of eliciting metaphors has the potential to be educative, to “do pedagogical work” (Tinning, 2010, p. 88). While this cohort of pre-service teachers is, as conceded above, small, its responses are broadly consistent with previous studies. That being the case, the sample might also be likely to have predictive validity for these teachers-to-be, unless circumstances typical of the early years of teaching have changed markedly since previous studies.

Future Research and Applications

Metaphors will remain a rich source of eliciting information about those who compose them. Metaphor is a commonly understood device among an educated public. It does not require specialist knowledge. As such it might take advantage of a commonality of language among teachers and researchers. Moreover, metaphors are succinct, and while potentially complex in their construction, they are relatively easily communicated. As noted above, metaphors have potential as powerful discussion-starters, intra- and interpersonally. As implicated in the preceding sentences, metaphors are inductive, and creative. Teachers regularly speak of being creative in their work, but less often refer to themselves as creators. Less frequently do they discuss what they will create or will have created. Linked to this, do words and images unnecessarily restrict our metaphors, and thereby the scope of our creativity and imagination in teaching?

More widespread elicitation and study of metaphors may prove productive in both pre- and in-service contexts. Explorations could focus on questions such as: Who might be allies and adversaries in the formation of improved pedagogical dreams, visions and metaphors? Do metaphors surrender to or defy experience and ‘evidence’? If so, how does this happen? How, and under what circumstances, are metaphors and the beliefs that spawn them deconstructed and reconstructed? Respondents could be asked what is their most dreaded metaphor (one they might usually deny, flee or repress). Research into the effects of professional development, including accreditation processes, on teacher dreams and metaphors could be instructive. In turn, how can this knowledge be used to shape the profession, schools and systems?

As an extension of metaphor plotlines (Pinnegar et al., 2011), teachers in the middle and/or at the end of their careers could be invited to provide metaphors that describe themselves and their work. It is conceivable that longstanding teachers might resist such an exercise (Bullough, 2001). Interestingly, there appears to be little resistance on the part of pre-service teachers to engage in such a process, although it should be noted that in some cases, its undertaking was an assessable activity, albeit on a pass-fail basis. Similarly, this could form part of in-service

professional development for teachers. The findings here also have implications for teacher education programs, particularly in terms of making visible the beliefs-practice link (Northcote, 2009).

Suffice it to say, in at least some situations experienced teachers may retain little will, energy or enthusiasm to inspire, motivate and encourage their newer counterparts. While this is understandable in the context of the heavy demands on teachers' energy, emotions and time, it is regrettable in a profession whose core business is teaching and learning. To the extent that educational jurisdictions can find means to assist and support and (re-)energise experienced teachers in being good models and educators for their junior colleagues, this is an investment in the profession and its work, and is likely to pay worthwhile dividends. The elicitation of and attention to early career teachers' metaphors for themselves and their work may serve as one means of understanding the needs, hopes, aspirations and fears of newcomers to the profession, and as a starting point for consideration of appropriate responses.

References

- Alsop, J. (2006). *Teacher identity discourses: Exploring personal and professional spaces*. Mahwah, NJ: Lawrence Earlbaum Associates Inc.
- Anspal, T., Eisenschmidt, E., & Löfström, E. (2012). Finding myself as a teacher: Exploring the shaping of teacher identities through student teachers' narratives. *Teachers and Teaching: Theory and Practice*, 18(2), 197–216. <http://dx.doi.org/10.1080/13540602.2012.632268>
- Aubusson, P., Harrison, A., & Ritchie, S. (2006). *Metaphor and analogy in science education*. Dordrecht: Springer. <http://dx.doi.org/10.1007/1-4020-3830-5>
- Bailey, G., & Colley, H. (2014). 'Learner-centred' assessment policies in further education: Putting teachers' time under pressure. *Journal of Vocational Education & Training*, 67(2), 153–168. <http://dx.doi.org/10.1080/13636820.2014.983956>
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26. Netherlands: Springer. <http://dx.doi.org/10.1146/annurev.psych.52.1.1>
- Baum, L. (1900). *The wonderful wizard of Oz*. USA: George M. Hill Company.
- Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175–189. <http://dx.doi.org/10.1080/03057640902902252>
- Beauchamp, C., & Thomas, L. (2011). New teachers' identity shifts at the boundary of teacher education and initial practice. *International Journal of Educational Research*, 50(1), 6–13. <http://dx.doi.org/10.1016/j.ijer.2011.04.003>
- Boud, D., & Hager, P. (2012). Re-thinking continuing professional development through changing metaphors and location in professional practices. *Studies in Continuing Education*, 34(1), 17–30. <http://dx.doi.org/10.1080/0158037X.2011.608656>
- Bruder, R., & Prescott, A. (2013). Research evidence on the benefits of IBL. *ZDM Mathematics Education*, 45(6), 811–822. <http://dx.doi.org/10.1007/s11858-013-0542-2>
- Buchanan, J. (2006). Splashing in Puddles? What my teaching and research tell me about my teaching and research. In P. Aubusson & S. Schuck (Eds.). *Teacher learning and development: The mirror maze* (pp. 131–144). Amsterdam: Kluwer/Springer. http://dx.doi.org/10.1007/978-1-4020-4642-1_8

- Buchanan, J. (2011). Teacher dis/appointments: Transitions into and out of teaching. *Curriculum Perspectives*, 31(1), 12–24.
- Buchanan, J. (2012). Improving the quality of teaching and learning: A teacher-as-learner-centred approach. *The International Journal of Learning*, 18(10), 345–356.
- Buchanan, J., Prescott, A., Schuck, S., Aubusson, P., Burke, P., & Louviere, J. (2013). Teachers and attrition: Views of early career teachers. *Australian Journal of Teacher Education*, 38(3), 112–129. <http://dx.doi.org/10.14221/ajte.2013v38n3.9>
- Bullough, R. (1992). Beginning teacher curriculum decision making, personal teaching metaphors, and teacher education. *Teaching and Teacher Education*, 8(3), 239–252. [http://dx.doi.org/10.1016/0742-051X\(92\)90023-V](http://dx.doi.org/10.1016/0742-051X(92)90023-V)
- Bullough, R. (1997) Becoming a teacher: Self and the social location of teacher education. *International handbook of teachers and teaching* (Vol. 3). Dordrecht: Springer, 79–134. http://dx.doi.org/10.1007/978-94-011-4942-6_3
- Bullough, R. (2001). *Becoming a student of teaching: Linking knowledge production and practice*. New York: RoutledgeFalmer.
- Bullough, R., & Knowles, G. (1991). Teaching and nurturing: Changing conceptions of self as teacher in a case study of becoming a teacher. *International Journal of Qualitative Studies in Education*, 4(2), 121–140. <http://dx.doi.org/10.1080/0951839910040203>
- Cakiroglu, J., Capa-Aydin, Y., & Hoy, A. (2012). Science teaching efficacy beliefs. *Second international handbook of science education* (pp. 449–461). Netherlands: Springer. http://dx.doi.org/10.1007/978-1-4020-9041-7_31
- Chambers, D. (1983). Stereotypic images of the scientist: The Draw-a-Scientist Test. *Science education*, 67(2), 255–265. <http://dx.doi.org/10.1002/scs.3730670213>
- Craig, C. (2012). “Butterfly under a pin”: An emergent teacher image amid mandated curriculum reform. *Journal of Educational Research*, 105(2), 90–101. <http://dx.doi.org/10.1080/00220671.2010.519411>
- Duschinski, (2014). Tabula rasa. In T. Teo (Ed.). *Encyclopedia of critical psychology* (pp. 1923–1927). Netherlands: Springer.
- Eren, A., & Tekinarslan, E. (2013). Prospective teachers’ metaphors: Teacher, teaching, learning, instructional material and evaluation courses. *International Journal of Social Sciences and Education*, 3(2), 435–445.
- Etelälpelto, A., Vähäsantanen, K., Hökkä, P., & Paloneimi, S. (2014). Chapter 24 Identity and agency in professional learning. In S. Billett, C. Harteis & H. Gruber (Eds.). *International handbook of research in professional and practice-based learning* (pp. 645–772). Netherlands: Springer,
- Fives, H., & Buehl, M. (2012). Spring cleaning for the “messy” construct of teachers’ beliefs: What are they? Which have been examined? What can they tell us? In K. Harris, T. Graham & T. Urden (Eds.). *Educational psychology handbook: Vol 2. Individual differences and cultural contextual factors*. USA: American Psychological Association.
- Guba, E. & Lincoln, Y. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage.
- Hamman, D., Coward, F., Johnson, L., Lambert, M., Zhou, Li., & Indiatsi, J. (2013). Teacher possible selves: How thinking about the future contributes to the formation of professional identity. *Self and identity*, 12(2), 307–336. <http://dx.doi.org/10.1080/15298868.2012.671955>
- Ingersoll, R. (2012). Beginning teacher induction: What the data tell us. *Phi Delta Kappan*, 93(8), 47–51. <http://dx.doi.org/10.1177/003172171209300811>

- Johnson, B., Brown, B., Le Cornu, R., Peters, J., Sullivan, A., Pearce, J., & Hunter, J. (2014). Promoting early career teacher resilience: A framework for understanding and acting. *Teachers and Teaching: Theory and Practice*, 20(5), 530–546. <http://dx.doi.org/10.1080/13540602.2014.937957>.
- Kelchtermans, G. (2009). Who I am in how I teach is the message: Self-understanding, vulnerability and reflection. *Teachers and Teaching*, 15(2), 257–272. <http://dx.doi.org/10.1080/13540600902875332>
- Kwo, O., & Intrator, S. (2004). Uncovering the inner power of teachers' lives: Towards a learning profession. *International Journal of Educational Research*, 41(4-5) 281–291. <http://dx.doi.org/10.1016/j.ijer.2005.08.001>
- LaBoskey, V. (2004). The methodology of self-study and its theoretical underpinnings. In J. Loughran, M. Hamilton, V. Laboskey & T. Russell (Eds.). *International handbook of self-study of teaching and teacher education practices* (Vol. 12, pp. 817–869). New York: Springer. http://dx.doi.org/10.1007/978-1-4020-6545-3_21
- Loughran, J. (2004). A history and context of self-study or teaching and teacher education practices. In J. Loughran, M. Hamilton, V. Laboskey & T. Russell (Eds.). *International handbook of self-study of teaching and teacher education practices* (Vol. 12, pp. 7–39). New York: Springer. http://dx.doi.org/10.1007/978-1-4020-6545-3_1
- Marshall, M. (1996). Sampling for qualitative research. *Family Practice*, 13(6), 522-525. <http://dx.doi.org/10.1093/fampra/13.6.522>
- McDonough, S. (2014). Rewriting the script of mentoring pre-service teachers in Third Space: Exploring tensions of loyalty, obligation and advocacy. *Teaching and Teacher Education*, 10(3), 210–221. <http://dx.doi.org/10.1080/17425964.2014.949658>
- Northcote, M. & Featherstone, T. (2006). New metaphors for teaching and learning in a university context. In Critical visions: Proceedings of the 29th Annual HERDSA Conference, Perth, WA, 10-12 July, pp. 251-258. Retrieved from http://research.avondale.edu.au/cgi/viewcontent.cgi?article=1018&context=edu_conferences
- Northcote, M. (2009). Educational beliefs of higher education teachers and students: Implications for teacher education. *Australian Journal of Teacher Education*, 34(3), 69-81. <http://dx.doi.org/10.14221/ajte.2009v34n3.3>
- Northcote, M. (2012). Selecting criteria to evaluate qualitative research. *Education papers and journal articles*. Paper 38.
- Nuthall, (2007). *The hidden lives of learners*. New Zealand: NZCER Press.
- Patchen, T., & Crawford, T. (2011). From gardeners to tour guides: The epistemological struggle revealed in teacher-generated metaphors of teaching. *Journal of Teacher Education*, 62(3), 286–298. <http://dx.doi.org/10.1177/0022487110396716>
- Pinnegar, S., Mangelson, J., Reed, M., & Groves, S. (2011). Exploring preservice teachers' metaphor plotlines. *Teaching and Teacher Education*, 27, 639–647. <http://dx.doi.org/10.1016/j.tate.2010.11.002>
- Rodgers, C., & Scott, K. (2008). The development of the personal self and professional identity in learning to teach. In M. Cochran-Smith, S. Feiman-Nemser, D. McIntyre & K. Demers (Eds.) *Handbook of research on teacher education: Enduring questions and changing contexts* (pp. 732–755). New York: Routledge.

- Ruohotie-Lyhty, M. (2013). Struggling for a professional identity: Two newly qualified language teachers' identity narratives during the first years at work. *Teaching and Teacher Education, 30*, 120–129. <http://dx.doi.org/10.1016/j.tate.2012.11.002>
- Schuck, S., Aubusson, P., Buchanan, J., & Russell, T. (2012). *Beginning teaching: Stories from the classroom*. Dordrecht: Springer. <http://dx.doi.org/10.1007/978-94-007-3901-7>
- Schuck, S., Aubusson, P., Buchanan, J., Prescott, A., Louviere, J., & Burke, P. (2010). *Retaining effective early career teachers in NSW Schools*. Report for the New South Wales Department of Education and Training.
- Schweisfurth, M. (2013). *Learner-centred education in international perspective: Whose pedagogy for whose development?* Milton Park, UK: Routledge.
- Symington, D. & Spurling, H. (1990). *Research in Science and Technological Education, 8*(10), 75-77. <http://dx.doi.org/10.1080/0263514900080107>
- Tannehill, D., & MacPhail, A. (2014). What examining teaching metaphors tells us about pre-service teachers' developing beliefs about teaching and learning. *Physical Education, Sport and Pedagogy, 19*(2), 149–163. <http://dx.doi.org/10.1080/17408989.2012.732056>
- Thomas, L., & Beauchamp, C. (2011). Understanding new teachers' perspectives through metaphor. *Teaching and Teacher Education, 27*, 762–769. <http://dx.doi.org/10.1016/j.tate.2010.12.007>
- Tinning, R. (2010). *Pedagogy and human movement: Theory, practice and research*. London: Routledge.
- Tracy, S. (2010). Qualitative quality: Eight “big tent” criteria for excellent qualitative research. *Qualitative Inquiry, 16*(10), 837-851. <http://dx.doi.org/10.1177/1077800410383121>
- Tschannan-Moran, M., & Johnson, D. (2011). Exploring literacy teachers' self-efficacy beliefs: Some sources at play. *Teaching and Teacher Education, 27*(4), 751-76. <http://dx.doi.org/10.1016/j.tate.2010.12.005>

Acknowledgments

I am grateful to my students, for furnishing thought-full and forthright metaphors of their teacher-selves. I am also grateful to my two colleagues who provided inter-rater categorisations, and to a larger group of staff members who shared their time and their minds in further analysing the data and an earlier draft of this paper.