Case-Based Learning for Classroom Ready Teachers: Addressing the Theory Practice Disjunction through Narrative Pedagogy

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Abstract: Classroom readiness and the attendant theory-practice disjunction remains a key concern of policy makers, stakeholders and graduate teachers themselves. Links between the theoretical knowledge that preservice teachers gain during initial teacher education (ITE) courses and the practical learning of their school placements need to be strengthened in order to enhance beginning teachers' classroom readiness, or capacity to use their professional knowledge in a classroom setting. We argue that a hybrid model of case-based learning, involving the writing and interpreting of local 'case-stories,' can offer preservice teachers meaningful engagement with 'real' teaching experiences and build context-dependent knowledge outside of the placement setting. This article describes a mixed-method pilot study on the development and use of an online resource of multi-modal place-based 'case-stories' of preservice teachers in Central Australia. It describes the three elements of the hybrid case-learning (HCL) model - the platform and place, structure, and resource-set. These elements interact to enable preservice teachers to enhance their classroom readiness through the development of narrative thinking practices and context-dependent knowledge. Preliminary findings suggest the HCL model offers scaffolding for the development of narrative epistemologies, leading to a change in thinking practices and the creation of meaningful connections between lived experiences and conceptual understandings.

Keywords: preservice teacher; initial teacher education; narrative; case-method

Introduction

The classroom readiness of graduate teachers is a key concern of policy makers, stakeholders and graduate teachers themselves (Teacher Education Ministerial Advisory Group, 2014; McKenzie, Weldon, Rowley, Murphy, & McMillan, 2014). Recent reports focus on the need for initial teacher education (ITE) to better integrate theory and practice in the delivery and evidence-based assessment of teacher knowledge (Gore, 2015; House of Representatives Standing Committee on Education and Vocational Training, 2007):

> *Theory and practice in initial teacher education must be inseparable and mutually reinforced in all program components . . . professional experience placements must provide real opportunities for pre-service teachers to integrate theory and practice . . . [and] genuine assessment of classroom readiness must*

capture the complex skills required for teaching . . . against a national assessment framework (Teacher Education Ministerial Advisory Group, 2014, p. x-xi).

However, research suggests that there has long been a disjunction between theory and practice in teacher education and that this results in a lack of classroom readiness (Goodland, 1990; Veenman, 1984; Zeichner & Tabachnick, 1981). Only a few solutions have been identified to address this theory-practice disjunction in education and other professions (Argyris & Schon 1974; Stuart & Thurlow, 2000). What currently lacks in the literature is a systematic analysis of pedagogical practices that enable preservice teachers (PSTs) to meaningfully engage with the 'wicked' problems of the 'swampy lowlands' of practice, and so become classroom ready (Rittel & Webber, 1973, p. 160; Schon, 1987, p. 42).

This paper examines a three-step cyclical process of how a hybrid case-learning (HCL) model that we developed enables PSTs to connect their understanding of teaching and learning with their practical classroom knowledge, skills and dispositions. This exploratory project is based in practitioner research (Allwright, 2013) and draws on the principles of Design-Based Research, to work iteratively from a pedagogical problem to a designed solution that includes both practical and theoretical components (McKenney & Reeves, 2012; Herrington, McKenney, Reeves & Oliver, 2007; Barab & Squire, 2004). The project uses a mixed-methods approach to examine how the structured generation and collaborative interpretation of local case-stories by preservice teachers enables them to achieve "authentic and enduring learning" (Shulman, 1996, p. 210) from "exposure to the complex nature of teaching and the contextual factors that inform it" (Brady, 2003, p. 4), and by connecting their theoretical and practical knowledge through the application of narrative thinking practices (Bruner, 1996).

Therefore, the aims of this pilot project were to: 1) better understand preservice teachers' perceptions of theory-practice disconnections in relation to classroom readiness and the perceived impact of the HCL model on reconnecting theory and practice; 2) determine the relative perceived effectiveness of the case-writing and case-reading elements of HCL model in developing narrative thinking skills to address theory-practice disconnections and improve classroom readiness; 3) examine ways in which a 'case-story' website can extend the capacity of the HCL model's face-to-face mode to offer a platform and place, a structure and a resource-set for the development of context-dependent knowledge and skills in preservice teachers.

Design Problem: The Theory-Practice Disjunction

The separation of theory and practice and associated privileging of abstract prepositional knowledge over embodied experiential knowledge, or "knowledge in practice" (Dohn, 2000, p.1), has its roots in classical philosophy and the Cartesian dualisms of mind and body, intellect and emotion. This separation puts the clear certainties of the theoretical world in opposition to the uncertainties and conflicts of the practical world and too often results in practice remaining unchanged by new theoretical learning. Bringing together theory and practice in such a way that it impacts on practice has long been a challenge for educators (Putnam & Borko, 2000). In 1929, Dewey commented that the "isolation of executive means and ideal interests which has grown up under the influence of the separation of theory and practice" (p. 284) had led to the replacement of "practical endeavour to make the existence of good more secure in experience' with a 'cognitive quest for absolute assurance" and "divert[ed] energy from a task [bringing theory and practice together] whose performance would yield definite results" (p. 35-36).

More recently, Schon (1983) vividly characterised the nature of the "high hard ground of theory" (p. 42) from where professional practitioners can see clearly and the 'swampy lowlands of practice' where we can neither see very far nor stand outside ourselves and our work in order to achieve certainty about the professional decisions we make. We cannot climb out of these lowlands because they are what constitute the complex landscape of the teaching context. This context is an "ill-structured domain" in which, Spiro, Coulson, Feltovich and Anderson (1989, p. 1) note, it is difficult to decide which concepts to combine and apply in practice when there are no consistent patterns of application to follow. They point out that effective methods for introductory level learning, such as 'compartmentalizing knowledge' or 'presenting clear instances (and not many pertinent exceptions)' often interfere with the kinds of advanced knowledge acquisition that are needed to respond well in the messy uncertainties of a real context (Spiro et al. 1989, p. 498).

This disjunction between theory and practice has also been conceptualised as between 'espoused theory', what we say we would do in a given situation, and 'theory-in-action', what we actually do (Argyris & Schon, 1974), or between the rules-based approaches of novices and the application of context-dependent knowledge of experts (Flyvjberg, 2004). Significantly, many of the solutions to the theory-practice disjunction offered by these writers have a component of the kinds of narrative epistemologies and case-learning methods that this project develops. Spiro et al. (1989) suggest case-method learning as an effective pedagogy to develop the acquisition of advanced knowledge; Flyvjberg (2004) sees case-study research as a key to exploring and thus developing the context-dependent knowledge that is indicative of expert practice; Argyris and Schon's (1974) description of the process to diagnose theory-in-use in order to uncover and address discontinuities between this and espoused theory is a form of case-writing.

In order to effectively address the theory-practice disjunction in ITE, a repositioning of Dewey's holistic dialectic of theory and practice needs to occur that challenges the implicit primacy of theory in a deductive model that has "ideas direct[ing] operations" (Dewey, 1929, p. 167), what Clandinin (1995, in Korthagen, 2001) describes as the "sacred theory-practice story" where theory about effective teaching is first "delivered" and then transferred to practice. Extending Dewey's (1938) model of structured experiential learning, the traditional deductive or 'outside in' model would be replaced by a model of inductive learning, building conceptual knowledge from the "inside out" as it were, starting from preservice teachers' lived and observed experiences of the professional context in order to "diagnose" what Schon and Argyris (1974) call "theory-in-use" and articulate the specific real and context-based puzzles of practice facing PST's in the classroom (p. 37). The introduction and interrogation of new concepts or theories in relation to such authentic situational material would begin a person-orientated iterative cycle of practical and theoretical thinking that breaks down the implicit hierarchical wrangle of theory and practice to create a meaningful hermeneutic relationship between specific lived experiences (of the self or others) and transferrable concepts or theories of action. In order for this shift to happen and to maintain the validity of the personal-practical knowledge gained, the examination of lived experience must have depth and rigor and be informed by the knowledge of others (Strangeways, 2015). Provision of a platform and place for collaborative interpretation, a structure for the application of lenses of theory and differing socio-cultural perspectives, and that a body of relevant, contemporary and context-rich resources is required.

Theoretical Basis for the Solution: Narrative Pedagogies

Narrative is a fundamental structure and process that we use to make sense of the world and our experiences in it (Bruner, 1996). Teachers, therefore, use stories to express teacher knowledge and identity, but also to construct such knowledge and identity (Beauchamp & Thomas, 2009). Bruner positions 'narrative thinking' as an essential counterpart to the kinds of 'logico-scientific' or paradigmatic thinking that teacher education traditionally privileges. Bruner (1996) asks, "surely education could provide richer opportunities than it does for creating the metacognitive sensitivity needed for coping with the world of narrative reality and its competing claims" (p. 149). Because narratives provide 'likelihood' rather than certainty (Polkinghorne, 1988, p. 75), they focus our attention away from the conceptual search for a 'correct' answer, and instead develop the perceptual skills necessary to understand the many conditions and perspectives operating in any given context.

As well as developing perceptual skills, narrative's attention to the specifics of particular people, in particular places, dealing with particular situations, offers a version of the complexity of the real-life setting in which preservice teachers need to apply theory (Clandinin & Connelly, 2004). Such practice is vital if PSTs are to avoid the traps of untheorized practice: "an immediate seizure of opportunities and enjoyments which conditions afford without the direction which theory . . . has power to supply" (Dewey, 1929, p. 281). Further, as Ursula Le Guin (1992) proposes, narrative provides a space for non-rational, imaginative thinking, taking us "out of the bind of the eternal present, inventing or hypothesising or pretending or discovering a way that reason can follow into the infinity of options" (p. 44-45). Rich narratives, then, provide open-ended problem solving practice, developing preservice teachers' skills and confidence in managing and even embracing uncertainty. Further, developing narrative thinking skills helps teachers recognise and embrace other perspectives, and in doing so unearth their own tacit knowledge and beliefs and metacognitively develop their professional identity

Teacher narratives have a strong profile in educational research, primarily because of narrative's capacity to explore the complexities of lived experience (Goodson, 1997; Clandinin & Connelly, 1991). They have also been increasingly used in teacher education in the form of case-studies, role-playing and autobiographies (McEwan & Egan, 1995; McLeod & Cowieson, 2001; Goodson & Gill, 2014). However, narrative pedagogies remain on the periphery of the ITE curriculum, prompting Hooley (2007) to suggest that a more rigorous use of narrative pedagogies would strengthen the relationship between professional identity and practice and, through the resulting construction of personal-practical knowledge, resolve the issue of the classroom readiness of beginning teachers.

Design Solution: A Hybrid Case-Learning Model

This project's hybrid case-learning (HCL) model (Figure 1) was generated from the research case-study, case-method pedagogy, and contextualised autobiographical writing (Bolton, 2014; Goodson & Gill, 2014), all of which involve the detailed examination of a phenomena or case in a real world context. Figure 1's depiction of the model reflects the broadly linear process in which the HCL model is introduced to PSTs; this model does not attempt to indicate the continuous and myriad interactions that occur between all the elements during PSTs' learning experiences. The contextual richness of the case itself and the constructed 'case-story' enable PSTs to encounter the embodied complexity of teaching practice both when they write and interpret case-stories. This project uses the term 'case-

story' to indicate our modification of the academic case-study into a narrative-interpretive account of the case, without the formal structural requirements of a research case-study.
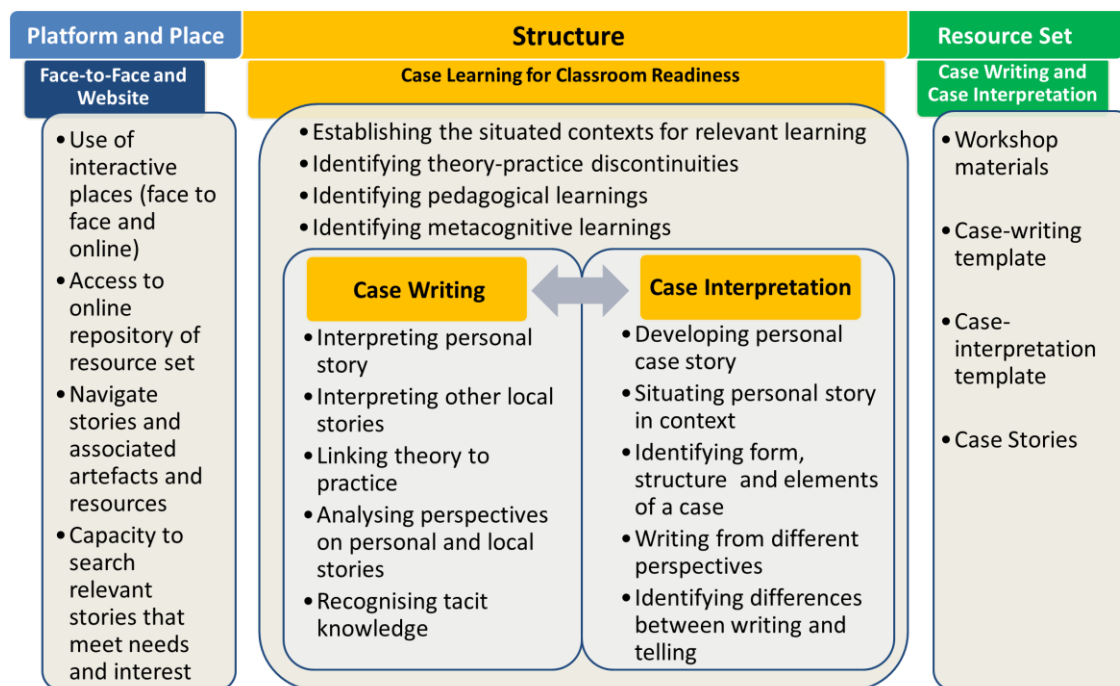

Platform and Place	Structure	Resource Set
Face-to-Face and Website	**Case Learning for Classroom Readiness**	**Case Writing and Case Interpretation**

- Use of interactive places (face to face and online)
- Access to online repository of resource set
- Navigate stories and associated artefacts and resources
- Capacity to search relevant stories that meet needs and interest

- Establishing the situated contexts for relevant learning
- Identifying theory-practice discontinuities
- Identifying pedagogical learnings
- Identifying metacognitive learnings

Case Writing
- Interpreting personal story
- Interpreting other local stories
- Linking theory to practice
- Analysing perspectives on personal and local stories
- Recognising tacit knowledge

Case Interpretation
- Developing personal case story
- Situating personal story in context
- Identifying form, structure and elements of a case
- Writing from different perspectives
- Identifying differences between writing and telling

- Workshop materials
- Case-writing template
- Case-interpretation template
- Case Stories

Figure 1: Hybrid Case-Learning Model (HCL)

Case-method is the practice of using "richly detailed, contextualised narrative accounts . . . [for] multiple levels of analysis and interpretation . . . as a pedagogical tool" (Levin, 1995, p.63) and has a solid history in other disciplines of professional learning. It has been employed in the field of business to enhance problem-solving skills and in law to enrich precedent understanding (Brady, 2003). Nursing education has also engaged in narrative approaches to case-learning in order to develop critical and conditional thinking skills (Ironside, 2003). Case-method pedagogies create a bridge between theory and practice and also between novice and expert because it generates:

> the type of context-dependent knowledge that research on learning shows to be necessary to allow people to develop from rule-based beginners (relying on analytic rationality) to virtuoso experts (offering a fluid performance of tacit skills) (Flyvjberg, 2004, p. 421).

Case-method learning is also acknowledged in the field of education for its capacity to develop contextual knowledge and skills such as conditional decision making (Brady, 2003; Levin, 1995) and for its impact on professional identity development by helping teachers clarify their tacit professional values and so be in a position to break the hold of unhelpful tacit knowledge or automatic thinking that act as a barrier to new learning (Lortie, 2002; Atherton, 1999; Levin, 1995). Such research has not yet explored the capacity of case-learning to explicitly address the theory-practice disjunctions that impact on classroom readiness.

The HCL model builds on the known capacities of case-method and autobiographical writing and offers a platform and place, a structure, and a resource-set that enables preservice teachers to build links from practice to theory in order to enhance their classroom readiness. The model offers templates for writing and interpreting case-stories that foreground the significance of context and promote the application of theory and multiple perspectives. In both writing and interpreting the cases, the templates direct the PST to attend to the type of

challenge or issue that they perceive to be the core of the case. These challenges may fall into areas such as personal factors, student relationships, teachers' work or collegial interactions, but such a framework is not offered as part of the template because the HCL model's paradigm is to begin with experience and move from experience or practice to theory. The case-writing template provides a definition of the case-story, lists its purposes and outlines elements such as 'voice' and 'data'. The template also offers a 6-part structure, including sections such as 'overview' and 'context', with brief explanations about the possible content of each part. The case-interpretation template similarly provides a definition and purposes, and lists elements such as 'application of own experience' and 'analysis of perspectives'. It offers an 8-part structure, including sections such as 'finding the facts' and 'learning with discussion', with explanations to guide the interpretive thinking and writing process. By using the case-writing templates, PSTs also contribute to a bank of place-based case-stories that articulate contemporary puzzles of professional practice for themselves and their peers. The HCL model uses a website to present PSTs' cases in hyper-textual and multi modes and with opportunities for cycles of iterative interpretation through a comment space that can be used as part of face-to-face teaching or independently by PSTs. In its use of both case-writing and case-interpretation, the HCL model brings together case-method learning and a hybrid form of autobiographical writing and case-study writing in a holistic-iterative application of narrative pedagogies.

The pilot project resulted in a range of case-stories that were published on the website, with titles such as 'The Literacy Project', 'Dangerous Minds' and 'Fell in a Fire'. The overview of 'Fell in a Fire,' for example, offers a summary of the story and the writer's perception of its key issue: 'When the passing of a family pet sets off a cascade of classroom crying, a preservice teacher finds himself trying to turn tears into learning experiences.' He opens his story,

> *It is Friday afternoon, Week 6 of Term 3. Summer has come early to Alice Springs. I am nearly half way through my final teaching placement. The timetable says modelled reading and I'm tired. The students are tired. I expect some of them to fall asleep. They are only 8 or 9 years old after all.*

As the story progresses, he describes and reflects on the 'cascade of crying':

> *Mrs Heathrow wanted to wrap it up quickly and move on. We had content to cover and she had never seemed particularly interested in emotions . . . I, on the other hand, wanted to explore emotions. I thought emotions were healthy. I thought sharing emotions was positive for wellbeing. I thought hearing from other kids would help Stevie feel better. It didn't. Two more students started crying. Maybe they wanted attention. Maybe they needed an emotional release. I don't know.*

In the website's online comments, other PSTs offered a range of responses including questions such as, 'What role do student emotions play in the classroom? And how should they be acknowledged and addressed both as personal and learning experiences?' and 'Who is available to assist teachers in debriefing after events such as this if the classroom teacher is not likely to be of assistance?' Some comments took the form of identifying issues about, for example, the 'degree to which external factors can impact on the classroom atmosphere and the skills needed by the teacher to deal with each individual event.'

This model allows preservice teachers to connect personal-practical knowledge to the knowledge of others by embedding the application of theory, socio-political and other participants' perspectives in the writing and interpretation process (Goodson, 1997). As such it requires both paradigmatic and narrative thinking. In this model, individuals approach case-writing as a case-interpreter and approach case-interpretation as a case-writer. Such an approach develops the metacognitive capacities of learners to examine not only what they

know through these narratives, but also how they come to know it, and offers a "reasoned base for the interpersonal negotiation of meanings" (Bruner, 1996, p. 147).

Methodology

The project was a small scale, mixed-method pilot study of 8 preservice teachers located in Alice Springs, Northern Territory, Australia. The majority of the participants were female (n=7) and were enrolled in undergraduate bachelor's degrees (n=6), with the remaining participants enrolled in postgraduate teaching degrees. The majority of the participants were enrolled in primary focused degrees (n=5) with the remaining participants middle school, middle/secondary, and secondary focused. There was a mix of part-time (n=5) and full time (n=3) PSTs, with 5 of the 8 on placement at the time of the pilot study. All the participants studied externally and voluntarily participated in the workshops, as per ethical approval and guidelines.

The pilot comprised of 3 stages and employed qualitative and quantitative methods of data collection. Stage 1 involved a series of weekly face-to-face professional learning workshops held over a ten week period. The workshops offered learning experiences related to case-learning and the theory-practice disjunction, case writing and case interpretation, with accompanying templates to support the case-writing and case-interpretation. The workshop facilitator/researcher kept a notebook of observations during the session. Due to the emergent nature of this research, the formation of the reflexive journal enabled the researcher to record insights into "methodological decisions made and the reasons for making them" (Lincoln and Guba, 1985, p. 327).

Stage 2 involved the development of a multi-modal website to house the completed case-stories. The PSTs undertook online case-interpretation via a private interpretive template form and a public comment that became a newsfeed at the end of each case-story, facilitating asynchronous collaborative interpretation in the online space.

Stage 3 was the evaluative stage of the project which consisted of a mixed-method survey to evaluate the workshops, a face-to-face focus group interview and an individual interview with a focus group member. The focus group and individual interview were conducted to seek further detail in relation to the case-learning process (Lichtman, 2006; Stake, 1995) and enabled the production of thick descriptions of the experiences of the participants (Merriam, 1988). The in-depth, semi-structured questions enabled "guided conversations rather than structured queries" (Yin, 2009, p. 106), allowing the participants to express their experience in their own way (Leininger, 1985). The mixed-method survey comprised quantitative and qualitative questions relating to the preservice teachers' attitudes towards theory-practice connections and disconnections, and examined how the case learning experience modified their perceptions of classroom readiness in relation to personal factors, student relationships, teacher's work and collegial interactions. It also sought to gain insight into participants' perceptions of the relative effectiveness of case-writing and case-interpretation in developing contextualised knowledge, skills and professional identity, and of the functionality of the website.

The quantitative data were analysed using frequencies and cross-tabulations, while the qualitative data were organised using NVivo 10 and analysed using thematic analysis that involved sorting and aligning the various forms of data and comparing key themes (Braun & Clarke, 2006). Emergent coding was used to group the themes into three aspects in which the HCL model operated to effect change in preservice teachers' context-dependent knowledge and narrative thinking skills: 1) how it scaffolded change 2) the nature of the change in

thinking and knowing 3) the impact of the change on theory-practice disjunctions (Ezzy, 2002).

Findings and Discussion

The findings from this pilot study of the HCL model are organised under headings that respond to our three research aims and also reflect the process of the student learning experience. Preliminary findings suggest that the three elements of the HCL model (the platform and place, the structure and the resource set that it offers) interact to offer an effective process through which preservice teachers can address theory-practice disjunctions. It firstly provided a range of scaffolds for the development of narrative epistemologies, which lead to key changes in preservice teachers' thinking practices that resulted in better connections between preservice teachers' lived experiences and conceptual understandings.

Theory-Practice Disjunctions and Case-Learning for Classroom Readiness

The majority of the PSTs experienced times when theory and classroom practice were incongruent or in conflict. One participant reported a conflict between Piaget's Stages of Cognitive Development and the curriculum:

The idea that sometimes students are just not ready to understand something yet [was] in conflict with my mentor teacher having a curriculum to get through and rushing without taking the time to check students' understanding.

Another participant reported a disjunction between theory and practice in relation to behavior management, when explaining "I was given loads of large theories but nothing practical to work with which was frustrating and disempowering."

Most participants considered both case-writing and case-interpretation as very important or extremely important in helping them connect theory with practice. One commented, however, that in the workshops:

More theory would have been good to help me make those connections between theory and practice – maybe analyse some cases that have been explicitly linked with theory.

However, the majority of the participants identified that it was likely or very likely that their sense of "classroom readiness" was modified by their participation in HCL model process, typified in the following:

Case stories provide an opportunity to think about, articulate (in writing) and get feedback on specific relevant issues in teaching. The method of case writing resonates for me. I find the process of writing and sharing my writing to be engaging (great debrief), validating (I am not alone. Others may well be interested in what I have experienced and what I am thinking) and helpful (problem solving).

The preservice teachers identified the HCL model as beneficial for learning across all four of the areas seen as challenging in beginning teachers' classroom practice: personal factors (e.g. Day & Gu, 2007; Ewing & Smith, 2003), students (e.g. Demetriou, Wilson & Winterbottom, 2009), teachers' work (e.g. Bobek, 2002; Sumsion, 2004) and collegial interaction (e.g. Le Cornu, 2013). Of the 24 factors they ranked across the four areas, three factors were categorised "useful" by all the participants, in order of highest mean: 1) understanding the various needs of students, 2) supporting students with diverse needs and abilities, and 3) being reflective. That the top two were to do with understanding and supporting students' needs suggests participants see case-learning as offering practical understanding of the diversity of the student cohort, an aspect of the classroom at the

foundation of its complexity and an area which challenges many teachers when moving from theoretical understanding to professional practice.

In terms of the specific identified benefits of case-learning for contextualised knowledge and skill development and teacher identity development (Levin, 1995; Brady, 2003) the most notable findings in relation to contextualised knowledge and skill development was the perceived capacity of case-learning to help the PSTs tolerate ambiguity, to recognise that no one perspective is "right", and to understand the complexity of teaching contexts. In relation to teacher identity development, case-writing was seen as highly effective in facilitating a community of learners where thinking is challenged and developed, and in enabling PSTs to articulate and listen to the ideas of others. Case-interpretation was identified as highly effective in supporting PSTs to develop clarity about beliefs and uncover hidden beliefs in their teaching.

The overall positive perception of PSTs suggests the model offered effective scaffolding for key changes in their thinking processes and approaches to addressing the complexity of professional practice. From this small sample is also appears that the model is most effective in developing PSTs' capacity to perceive and address diversity of students' needs and colleagues beliefs, with a linked facility to help them reflect more perceptively on their own beliefs. Hooley (2007) affirms this need for structure and process in narrative pedagogies as it "lead[s] to the generation of credible knowledge, knowledge that emerges from personal practice and reflection and which develops in relation to the knowledge of others" (p. 56). The structure of the HCL model supported the PSTs to consider the contextual significance of their experience, while gaining the perspectives of their peers, leading to the development of change and new ways of thinking.

Relative Effectiveness of Case Writing and Case Interpretation
The Impact of Case Writing

The case-writing element of the HCL model offers preservice teachers a scaffolded way to develop new ways of thinking that create links from a personal experience to a broader concept. As one participant commented:

> *The structure of the case writing . . . has assisted my thinking about a specific incident that recently occurred at school . . . The case writing structure seems to be a useful way to contextualize my experience within the broader domain of 'teacher being'. For example, it's not just my problem … it's part of being a teacher and other educators are very likely to be interested.*

The case-writing template provided in the HCL model's structure scaffolded the PST's learning by providing a framework through which she connected her lived experience with a more theoretical concept (such as 'teacher being'). This gave her the support to develop her own conceptual understandings in relation to her practice and further created an additional level of engagement and agency when she felt the details of her lived experience had value for others' professional learning. As such the model scaffolded the process of construction as well as expression of teacher knowledge and identity (Beauchamp & Thomas, 2009).

Another preservice teacher found that the case-writing process supported her to engage in reflective practice that went beyond simply the recording of experience:

> *I found it really useful when I was writing my reflections on my final placement because I was only describing what was happening…this gave me a structure. Am I actually going to call this something besides Tuesday*

> *the 4th of August? ...or is there something else I can add, based on theory,*
> *or from a different perspective?*

The process of writing and re-writing using the template meant that the HCL model explicitly scaffolded reflective practice in a way that developed new ways of thinking and knowing: it helped this writer develop multi-perspectives and recognise how theory can work as a lens to enable her to gain a deeper insight into the experience.

The scaffolding of reflective practice was seen by many as enhancing the meaning-making aspect of the process, so reflection became an agentic activity instead of simply a compliance task. The prompts in the template, one participant commented, enabled them to "get the most from your reflection, rather than something that you just have to do, because that is part of your requirements, and your mentor has to cite it." Another participant reported valuing how writing cases placed them at the centre of their learning process:

> *...it felt empowering- like that kind of I'm in charge of my own learning which*
> *has been a powerful thought for me [...]. To become a teacher, you have to*
> *make yourself a teacher.*

The scaffolding provided in the HCL model enabled the PSTs to recognise the capacity of narrative processes to create meaning from a real-life context to which they could then develop and apply theories (Clandinin & Connelly, 2004). From starting with the lived experience, the HCL Model then scaffolds this learning in a way that is "fluid, automatic, and embedded into practice" which is crucial given that individuals often disengage from new learning processes (York-Barr, Sommers, Ghere and Montie, 2001, p. 41).

The scaffolding offered was vital to address some of the misgivings participants had about the value and practice of case-writing. When asked which aspect of the workshops they were most looking forward to, most participants chose case-interpretation. One commented that she didn't expect to learn much from case-writing because "I know about me", although she later modified her point to say, "OK, maybe there are sides of me that I don't know about, I just think I do." Another initially felt that "I don't have much to talk about as I don't have much experience of teaching in schools: I'm interested in reading cases from people with experience." Many participants also noted that case writing was initially quite difficult, but recognised its value when they had begun the undertaking. In the words of one, "The first one was hard, but now I feel like I could do 5 more," suggesting that the scaffolding offered was appropriately within the PST's Zone of Proximal Development - challenging but achievable.

As well as the HCL model's scaffolded structure, its provision of a place and structure for guided collaborative discussion enabled the PSTs to develop multi-perspective thinking practices: they were able to consider the perspectives of the other PSTs in the workshop about their story, as well as the perspectives of other individuals within their case-story. Six of the participants reported that the case-learning process enabled them to develop multiple perspectives, with one commenting that:

> *Writing and reading cases makes me more aware that in any one situation*
> *there is more than one perspective and that when I'm in a 'bad' situation or in*
> *conflict with a student or colleague, I need to remember this.*

Another participant explained that the process enabled them to "broaden [my] view from being the one right way to do things," while another reported that it helped them to "read between the lines. One person's point of view will be different to the person sitting next to you." This was supported by another preservice teacher's comment: "Case writing [together] helps us to see things from a different perspective." The place and structure provided for collaborative case-writing enabled the PSTs to discover the implicit perspectives and values that impact on their teaching practice and helped them to be open to having their understandings and practices challenged.

The narrative 'place' in which this collaborative discussion occurred, explicitly valued the uncertainty and multiple perspectives within and of the stories, and created a safe place in which PSTs could bring to light their tacit knowledge and beliefs through engagement with other perspectives of their teaching experiences. They began to focus their attention towards understanding the various elements of a story and perspectives operating in the context of the story, rather than searching for a 'correct' answer (Polkinghorne 1988, p. 75). Engaging in narrative thinking helped the PSTs in this study embrace other perspectives, bring to light their tacit knowledge and beliefs and metacognitively develop their professional knowledge and identity. They were able to use narratives to explore not just what they knew about teachers and teaching but how they came to know it (Bruner, 1996).

While articulating their experiences, the PSTs were able to make sense of their experiences and gain a perspective on their teaching practice, which in turn, enhanced their feelings of readiness. As Schon (1983) affirms, the "awareness of one's own intuitive thinking usually grows out of practice in articulating it to others" (p. 243). This comment is further supported by Adelman (1988) who states: "seemingly repetitive and tangential discourse may provide a nonlinear path to coherence and insight." (p. 189). Such perspective is crucial given that linear and solution-oriented self-reflection is not always helpful. Throughout this process, the PSTs developed new ways of thinking that placed them at the centre of their learning which enabled them to better connect their conceptual understandings to their lived experiences in the classroom.

The Impact of Case Interpretation

The case-interpretation element of the HCL model was seen to further support the preservice teachers' development of reflective practices, a key benefit of the model according to one who cited reflection as "[a] vital practice that can empower your teaching as an individual". Interpretation was also seen as equal in value to case-writing for developing multi-perspectives and perceptual thinking by "…highlight[ing] our own assumptions and perspectives, whilst being able to consider those of others."

Further, collaboratively interpreting the case-stories not only helped participants recognise different perspectives, but helped them at a metacognitive level to understand the conditional and positioned nature of teacher knowledge and practice. As one participant noted:

> I really think it has shown us that different people are going to see things differently, and even if we all went into the same course, we will all still be different teachers, and have different subjectivities. Different things are going to be important to different people, we still have the same curriculum, we still have the same classroom management practices, so seeing these case studies has shown that there's no right way, so that has been really beneficial.

As York-Barr, Sommers, Ghere and Montie (2001) explain, "we filter our experiences through our own view of the world [and] reflecting alone can result in self-validation and justification" (p. 59). Therefore the process of sharing with others resulted in change and growth, particularly when operating in a reflective community, as occurred in this study (Levin, 1995).

Case-interpretation was seen as particularly strong in the way it helped preservice teachers develop their critical and metacognitive thinking by spending time engaging with their own embodied response to the case-story before drawing conclusions. According to one participant:

> It's a really powerful process because it forces me as a student to bring my thoughts and feelings to the table, and write them down and then come back to

*them, so I have to be more engaged, it keeps me more engaged and it helps me to be more self-critical.*

The case-interpretation process was further seen as powerful because of the embodiment of experience that the story itself offered: its capacity to help a preservice teacher 'see' a concept:

…because a lot of those theories you can't really grasp them unless you have seen them and I mean, I think that seems to be a common issue- "I don't understand it- I need to see it" and the cases might give you that opportunity to see it.

In this, the resource set of contextually situated case-stories clearly offers the capacity of narrative to develop "perceptual knowing" (Polkinghorne, 1988, p. 75), a key epistemology needed to enable preservice teachers to create stronger links between theory and practice and build their context-dependent knowledge.

The Impact of the Case Story Website

The website (Figure 2) also offered an effective scaffold for interpretation through its provision of a freely available (password protected) platform, an online template and a searchable set of case-stories and accompanying artefacts. Participants reported that the website was visually appealing, engaging and professional and that they could easily locate relevant information, and that, on the whole, they could find cases relevant to their needs.
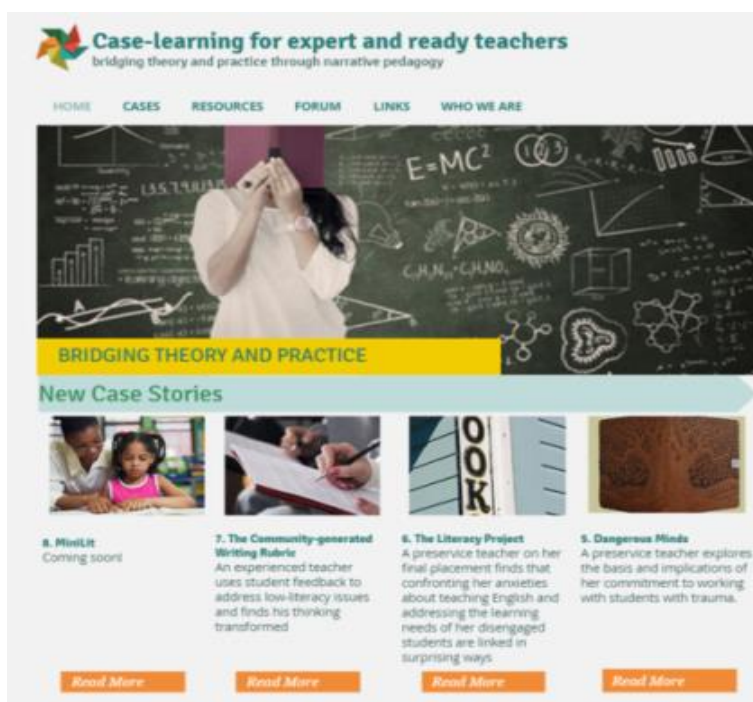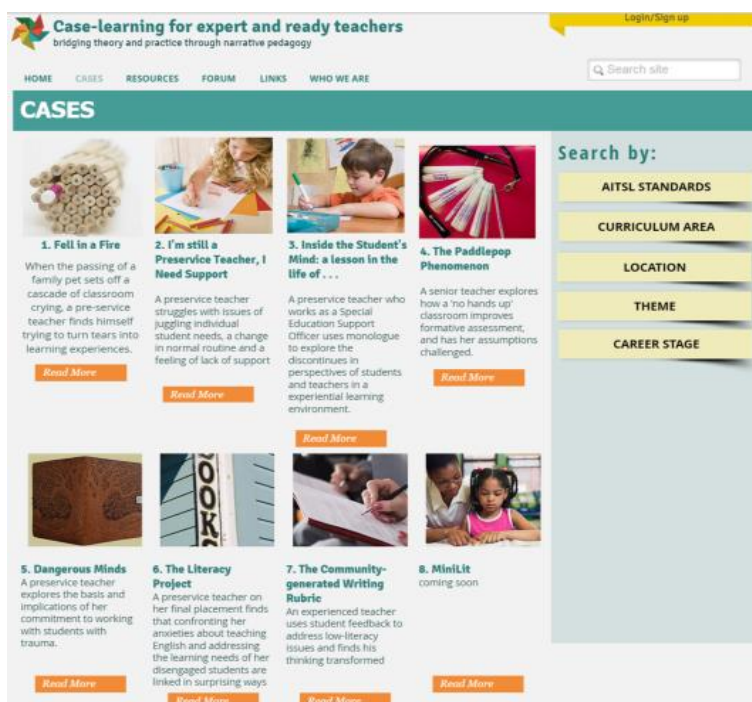
Figure 2: Case-learning Website

The website was noted as working well in conjunction with the workshops, but not as effective as a stand-alone element. Having access to a case-story before discussion was a perceived benefit. One participant noted, it could "give lots of time to read and think about the case before discussing it with a group", and another noted it "allowed for reflection and response in your own time." The online interpretation guidelines were rated as helpful, enabling them to respond honestly and professionally to a case, and, marginally less strongly, made them feel confident that their case would be responded to professionally. One participant commented that, "completing the interpretation guidelines helped me in analysing the case before posting a comment about it . . . helped me organise my thinking." This further affirms that the template's scaffolding enabled the PSTs to develop their thinking by providing the structure to focus their attention to the various elements of the story and context, and allowing them to select elements of a case-story that were of interest or relevance, providing the foundation to facilitate links between their lived experiences and conceptual understandings as well as to others.

The preservice teachers also identified limitations to the case learning website, with the key concern related to the asynchronous nature of the communication process, as they felt that the website lacked the real-time guidance of a lecturer to support individual reflection and facilitate discussion. For one participant, the online platform made it hard for them to suspend their reactive judgments and move away from their own perceptual position:

> I very much focused on my own opinion rather than reading other people's. I
> also felt more judgemental and critical than I did interpreting face-to-face.

This comment raises an important implication for scaffolding learning in a way that allows PSTs to develop conditional reasoning when interpreting cases independently or in asynchronous collaboration with peers. Pedagogical supports are needed to ensure the personal knowledge individuals generate is theoretically-based, by embedding the application of theory, socio-political and other participants' perspectives in the story writing and interpretation process (Goodson, 1997). Despite these limitations, six of the eight participants reported that it was likely or very likely that they would engage with the website

after the project, suggesting that it has the potential for effective 'stand-alone' uses, if participants are effectively prepared for meaningful engagement on this platform.

Conclusions and Implications

The HCL model offers scaffolding for the development of narrative epistemologies, which supports a change in thinking practices and results in meaningful connections between lived experiences and conceptual understandings. As a whole, the model offers a scaffold through which to address the complexity of professional practice, particularly the interpersonal and intrapersonal aspects, so connections are made between theories about student/collegial diversity and managing this in the classroom, and between the theory and practice of reflection. The key change of thinking that is developed is to do with perceptual knowing (learning to 'see' rather than to 'conclude') and this 'pausing to look while suspending judgement' enables the better recognition of PST's own and others' perspectives and of their own positioned knowing (critical self-awareness). The model's emphasis on the centrality and agency of the PST in both writing and interpreting cases repositions experience as primary in Dewey's holistic theory-practice dialectic and so both empowers them to be confident and requires them to be responsible in their linking of their own (and others') lived experiences to broader theoretical concepts.

As this pilot study found, the HCL model's provision of a platform, a structure and a resource-set offers a way to scaffold the development of narrative epistemologies that lead to perceptual ways of knowing and multi-perspectives and can result in preservice teachers accessing the "complex network of understandings, dispositions and competencies (of teacher practice) that are not easily named or measured (but which must be) . . . experienced – seen, heard and felt" (Davis & Renert, 2013, p.3).

The success of the pilot in terms of participants' perceived learning has resulted in extending the workshops to continuing and new participants in Alice Springs and in Adelaide. As a result, both the practical and theoretical results of this Design-based Research project will be refined and extended. In the practical area, the HCL model itself will be developed in response to the data collected: the number and range of case-stories will be extended; further templates will be developed to offer targeted application of theory and the AITSL standards to case-writing and interpretation; the website's search and commentary features will be refined and extended and the platform opened up to inservice as well as preservice teachers. In the theoretical area, we need to further examine preservice and continuing teachers' conceptions of the theory-practice connections and disjunctions and understand better how the three identified areas of an HCL model can bring together lived experiences and conceptual understandings to have impact on teacher professional identity and practice. In addition, we need to examine how the website can operate to create social networks for preservice and continuing teachers (intentional social networks and diverse professional allies) to support continuing professional learning to enhance classroom effectiveness.

Hybrid case-learning and the narrative epistemologies on which it is based, values the lived experience, beliefs and the powerful embodied reasons people choose to enter the teaching profession. The researchers will continue to develop the HCL model because of its scope to offer the kind of authentic and agentic learning expressed in one participant's comment: "Case-stories helped me understand my motivation and passion for education. It opened my eyes to myself and therefore helped me persist in my studies because I know clearer than ever why I wanted to become a teacher."

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