

Countering a 'Back-to-Basics' Approach to Teacher Education: Multiliteracies and On-Line Discussions in a Community of Practice

WENDY CUMMING-POTVIN
Murdoch University

KATHY SANFORD
University of Victoria

Abstract

Aiming to extend sociocultural theory about literacy education in teacher programs, this article reports on results from a qualitative study conducted in a Western Australian university. The project tracked a group of initial teacher and graduate education students collaborating in on-line discussion embedded in a literacy course. The article focuses on how one pre-service teacher constructed situated identities and understandings about literacy as she interacted on-line with peers and the course instructor in a community of practice (Lave & Wenger, 1991). Suggestions are provided for designing on-line CoPs that consider power and an expanded definition of literacies.

Over the past two decades, heated debates about literacy education have divided literacy researchers and teachers in many English-speaking countries. In Australia, print-media and television news stories have vehemently criticized literacy education, blaming teachers for low standards and inadequate pedagogy (Snyder, 2009). Media misrepresentations have emphasized students' underachievement in literacy, while undermining the Australian public's confidence in teachers (Doecke, Howie & Sawyer, 2006; Durrant, 2012; Snyder, 2009). Since the 1990s, the Australian media has popularized a resurgence of traditional literacy, focussing on reading and writing as skills transmitted by a linear process of turning sounds into words, words into sentences and sentences into texts (Kalantzis & Cope, 2008). The Commonwealth government has also demonstrated enthusiasm for this 'back-to-basics' approach, which has been implemented across the nation by the National Assessment Program-Literacy and Numeracy (NAPLAN), specifically standardized testing of all grades 3, 5, 7 and 9 students. Administered annually in May by The Australian Curriculum, Assessment and Reporting Authority, the test involves reading, writing, spelling, grammar, punctuation and numeracy.

But many researchers and teachers are critical of this reform, with Doecke, Kostogriz and Illesca (2010) arguing that NAPLAN adds to teachers' workloads and has negative impacts on teachers' identity and understanding of curriculum and pedagogy. More generally, Alexander (2012) critiqued the notion of high stakes assessment as that of countries adopting a 'world-class' view of schooling to outperform competitors on international testing such as Programme for International Student Assessment (PISA). In contrast to a 'back-to-basics' approach that is often highlighted in the media, Australia's contemporary educational landscape, with its intense sociocultural diversity, requires a complex approach to teaching and learning literacies (Cumming-Potvin, 2012; Mills, 2011; Walsh, 2011). In this diverse

environment, moving beyond the era of print, literacies must be widened to embrace multimodal communication, including image, sound, gesture and space (Kalantzis & Cope, 2008). This article draws on data from a qualitative study which involved a group of pre-service teachers and graduate students in a Western Australian (WA) university. Using a case study approach, the article focuses on one pre-service teacher (Caitlin – a pseudonym) as she engaged with peers and the course instructor over one semester. The research questions were:

- How do participants' perceptions and understandings of literacy develop during on-line discussion in the course?
- How does on-line discussion in the course relate to the development of a community of practice?

Set against a highly politicized environment, the study examined how pre-service teachers and graduate education students constructed their situated identities and understandings about literacy through on-line discussion in a community of practice (Lave & Wenger, 1991; Wenger, McDermott, & Snyder, 2002).

The Teaching and Learning of Literacy: From Basics to Critique

In Australian literacy education, the pressure for compliance to 'back-to-basics' goes hand in hand with initiatives such as the National Inquiry into Literacy Teaching, (Department of Education, Science and Training, 2005), recommending that teachers adopt a phonics-based approach to teaching reading. With the new national curriculum only broadly describing new literacies (Walsh, 2010) and regulatory programs such as NAPLAN focussing on conventional print, the current Commonwealth agenda appears to privilege a narrow definition of literacy. But, since the 1990s, increasing numbers of researchers have called for expanded ways of interpreting literacy to acknowledge the role of social interaction and societal change in constructing meaning from texts (Alvermann, 2010; Anstey & Bull, 2005; Brady, Holcomb & Smith, 2010; Ke, Chávez, Pei-Ni, & Causarano, 2011; Luke, 1993; Rogoff, 1990).

Citing increasingly complex connections between literacy, language and culture in a world of migration and economic globalization, a group of eminent literacy theorists argued for new conceptualizations of literacies that would include diverse text genres and evolving practices in public and personal spheres (The New London Group, 2000). Considering the uncertain literacy landscape of the new millennium, the New London Group devised the term 'multiliteracies' and proposed a pedagogy highlighting cultural diversity, multiple communication patterns and rapidly evolving technology. Multiliteracies has been associated with supplementing traditional literacy through semiotic changes and a widening of genres such as aural, spatial, visual and multimodal (Kress, 2014; Macken-Horarik, 2009). Drawing on sociocultural theory (Vygotsky, 1978), a pedagogy of multiliteracies views learning as actively constructing knowledge, with the teacher and/or more experienced peers scaffolding for the learners (Kemmis, Cole & Suggett, 2005).

Factors such as the emergence of the Internet and a burgeoning array of text types have impacted greatly on the way literacy learners and teachers engage with contemporary society (Forzani & Leu, 2012; Nichols, Maynard & Brown, 2012; Sanford & Madill, 2007). Supporters of a sociocultural perspective argue that literacy

develops through social practice, and acquiring cognitive skills results from engaging in literacy practices across institutions using cultural technologies. This paper adopts a definition of literacies that includes interrelated practices of reading, writing, listening, speaking and viewing in everyday social situations; these complex literacy practices acknowledge students' experiences and unfold dynamically across processes in sociocultural and political communities (Cumming-Potvin & Currie, 2013; Erstad & Sefton-Green, 2013).

Against the Grain: Teacher Education, Identity and On-line Learning

As part of recent Australian education policies, national teaching professional standards (AITSL, 2011) are deployed to regulate teacher education programs, registration of graduate teachers and professional development for practising teachers (O'Brien, 2012). Proponents for education in a competitive market place have argued that the implementation of normalized standards increases the status of teachers and quality of teaching. Yet numerous researchers have raised alarms about the managerial discourse of government policy (Down, 2012, 2009; Gerwitz & Ball, 2000; O'Brien & Down, 2002), which privileges efficiency, cost-effectiveness and intense competition over issues of social justice, student welfare and innovation.

Brushing against the grain of standardized approaches to teacher education, qualitative researchers have argued for communities in which learners engage in social interaction and reflect with peers and mentors (Barnett, 2006; Cumming-Potvin, 2012). Here, teacher identity is developed through social interaction and underpinned by a variety of factors including pedagogical beliefs, media images, personal stories, and past experience (Franzak, 2002; Strong-Wilson, 2007). Consequently, teacher identity is constructed through stories that shape their perceptions of self. As pre-service teachers negotiate their identities, they engage with multiple discourses related to the teaching profession (Britzman, 1991; Rogers, Marshall & Tyson, 2006). In this process of situated learning, teachers' work and the journey of becoming a teacher are understood as reflective and highly complex (Glass, 2012).

To promote pre-service and in-service teacher reflection, for more than a decade, on-line discussion has become an increasingly popular tool, especially in tertiary settings (Armstrong & Manson, 2010; MaKinster, Barab, Harwood, & Anderson, 2006; Whipp, 2003; Wood, 2012). With 17 pre-service secondary teachers, Nicholson and Bond (2003) investigated the use of an on-line discussion board, with results pointing to three major benefits: extending discussions beyond the classroom, creating space for professional and emotional support, and promoting community building with reflection. In 2006, Barnett argued that using asynchronous discussion forums with pre-service and in-service teachers enhanced ongoing efforts within teacher educator communities to better understand theory-practice connections. Similarly, in a study involving prospective and beginning teachers, Levin, He and Robbins (2006) concluded that there was slightly more critical reflection when pre-service and beginning teachers engaged in asynchronous on-line case discussion. Moreover, Stagg-Peterson and Slotta (2009) concluded that the on-line format of a graduate literacy education course provided students with opportunities to discuss topics with their peers and instructor in an in-depth manner. More recently, Biasutti and EL-Deghaidy (2014) reported on interdisciplinary project-based learning in a university teacher education program, suggesting that learning was effective as

participants collaborated in small groups using a Moodle platform in a wiki virtual environment.

Despite well-documented advantages of on-line discussion in the literature, some researchers suggest that learner success is not uniform, and educators should consider aspects such as:

- discussion prompts,
- content and structure of on-line discussion,
- participation requirements, and
- dynamics of group discussions (Celik, 2013; Swan, Schenker, Arnold & Kuo, 2007).

In this vein, pre-service teachers and graduate students' on-line discussion about literacies can provide a lens for better understanding the complexities of negotiating teacher identities. Moje and Luke (2009), for example described a range of metaphors linking an individual's identity to their literate identity, such as the identity of self or the identity of positioning. To this end, the present study aimed to promote a teacher education paradigm which views knowledge as constructed dynamically through social interaction (Hopper & Sanford, 2010).

Theoretical Considerations: Multiliteracies and Communities of Practice

As learners engage with contemporary literacy landscapes, the concept of multiliteracies suggests that human knowledge is constructed across social, cultural and material communities through existing and emerging practices (Cumming-Potvin, 2009; Mills, 2011). A multiliteracies framework (The New London Group, 2000) views literacy as more than technical skills but also as highly complex social, cultural and historical processes. Building on Luke and Freebody's (1999) four resources model, the critical orientation of multiliteracies also plays a central role in widening teachers' repertoires and deepening students' evaluation of texts. In relation to pre-service teachers' and graduate education students' understandings about literacy, this framework facilitates the capturing of interactions that respect learners' diverse backgrounds and skills.

The New London Group (2000, p. 35) described a pedagogy of multiliteracies as comprising four aspects across an iterative process:

- 1) Overt instruction
 - The teacher or more experienced learner systematically and consciously scaffolds the less experienced learner.
- 2) Situated practice
 - The learner is immersed in literacies which resemble real life situations.
- 3) Critical framing
 - The learner critiques knowledge, asking questions such as why this text was produced and whose voice is privileged.
- 4) Transformed practice
 - The learner transfers a current practice into new contexts and/or adapts the practice to suit new cultural sites.

Cope and Kalantzis (2009) expanded these four aspects to include processes of learning, such as conceptualizing (overt instruction), experiencing (situated practice), analysing (critical framing) and applying (transformed practice).

The concept of community of practice (CoP) (Lave & Wenger, 1991; Wenger, 1998) offers a framework that locates learning as engagement in community through shared experiences involving legitimate peripheral participation. Wenger, McDermott and Snyder (2002) defined CoPs as ‘groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis’ (p. 4). The three-tiered description of a CoP consists of: domain, community and practice. Domain offers the common ground and subject for CoP members, lending meaning to members’ actions and shared ideas. Community suggests the social plane of learning to foster relationships grounded in mutual respect and trust. Community provides a sense of belonging, often linked to combining ‘the heart as well as the head’ (Wenger et al., 2002, p. 28). Practice refers to members’ shared documents, language, stories, information and tools. Cuddapah and Clayton (2011), for example, suggest that CoPs can explain the complex way in which context influences human actions to generate identities and meaning. Such a concept can be helpful to understand how pre-service teachers and graduate education students develop perceptions and understandings about literacy.

The CoP literature has been recognized as an alternative to behavioural and cognitive theories, with Wenger, White and Smith (2009) recently exploring the nature of CoPs and emerging technologies. Still, some critics have argued that the social dynamics in CoPs have not been sufficiently explored (Bentley, Browman, & Poole, 2010). For example, Gee (2005a) suggested that it is unrealistic to assume all members of a CoP carry close-knit ties with each another; collaborative membership in itself can refer to different concepts across different CoPs. To better understand collaboration in CoPs (Bentley et al., 2010; Heizmann, 2011), the impact of power on how members accept or contest knowledge is useful. Roberts (2006) suggested that although Lave and Wenger (1991) noted the role of power in shaping participation, CoPs have often been examined in political and cultural isolation. Here, the work of social theorists, such as Foucault (1977, 1980) can provide conceptual tools to account for the distribution of power.

Context of the Study

Data were gathered in a Western Australian suburban university with a student population of approximately 14,000, an initial teacher education enrolment of approximately 1500 and a graduate enrolment in education of approximately 100. All participants were recruited on a voluntary basis using a process of written informed consent. They were a group of eight female students aged between mid-twenties and early fifties; four were enrolled in the University’s initial teacher education program and four had professional teaching qualifications while being concurrently enrolled in a Masters or Doctoral degree in education. The course instructor, a female in her forties, also participated in the study. Researchers were given access to the learning management system (LMS) during the study. Seven of the nine participants used English as a first language, with two graduate students (one of Middle Eastern and one of Asian background) using English with native-like proficiency.

All student participants were enrolled in a semester long course, aiming to provide opportunities to extend student understanding about teaching and learning literacies, from primary to middle secondary school. This elective course adopted a

multiliteracies approach (The New London Group, 1996, 2000), which views literacy as integrated language strands involving reading, writing, speaking, listening, viewing, sociocultural knowledge and the use of technology. Over the semester, assessment involved diverse tasks, such as writing essays, interviewing and conducting a shared literacy experience with a child aged between 6 and 15 years and posting at least five on-line messages on the course's LMS. Students accessed unit materials on-line. Student enrolment locations in WA were: four suburban and three regional, with one student located overseas.

To examine phenomena in detail and provide flexibility during data collection, the research design was qualitative (Ary, Cheser Jacobs, Razavieh & Sorensen, 2006). The depth of understanding characteristic of a qualitative approach is appropriate for working with small numbers of participants to holistically examine representations (Patton, 2002; Stainback & Stainback, 1988). Consequently, a case study approach was adopted, reinforcing the importance of induction and natural context, rather than experimentation aiming to generalize across populations. To provide triangulation, diverse data were gathered, such as student and course instructor on-line postings, pedagogical materials (information and learning guide, course reader) and researcher reflections. It is however acknowledged that given the limited number of participants in this qualitative study, transferring results to different contexts must be exercised with caution.

This article focuses on Caitlin, a pre-service teacher participant enrolled in the second year of her Bachelor of Education degree. Data were gathered largely from Caitlin's on-line engagement with peers and the course instructor. A single parent located in suburban WA, Caitlin was aged between late thirties and early forties and employed part-time as a teaching assistant. Caitlin was of interest as a focal participant due to her high level of engagement in the course's on-line asynchronous discussion, despite her busy professional and family commitments. Throughout the semester, Caitlin posted 26 LMS messages across the on-line discussion topics. With the exception of the course instructor, who posted 28 messages, Caitlin made at least 50% more postings than other participants.

Reflexivity played an on-going role throughout the study, so that researchers remained conscious of the cultural, linguistic, social, political and ideological underpinnings of the study and its effects on participants (Cumming-Potvin, 2013; Patton, 2002; Schwant, 1997). It is thus acknowledged that the research process is mediated by researchers' attitudes and positioning and ultimately by readers' interpretation of the analysis. The course instructor also engaged in a reflexive process pertaining to curricular planning, LMS postings and assessment strategies. To protect prospective student participants, the ethics' board required that analysis of data commence only after final academic grades were released and the assessment appeal period had lapsed. Prospective participants were also reassured via a process of written informed consent that their participation or non-participation in the study would not impact on their academic results.

The analysis draws on Gee (2012, 2011, 2005b) and sociocultural research relating to multiliteracies (Cope & Kalantzis, 2009; The New London Group, 2000). Gee's approach to discourse analysis identified two levels for 'discourse'. First, discourse represents stretches of language as heard in conversations or narratives. Second, discourse refers to the complex ways in which individuals use language, think, value and act. Of Gee's (2011) discourse tools for analysing the structure of

language and its social, cultural and political connections, two are of particular interest:

- intertextuality: words of others resonate in our written or oral language;
- identities: depending on context, different roles are acted out through language.

These tools resonated clearly with the study's research questions, theoretical framework and data. The qualitative analysis comprised several steps, beginning with exploring data gathered over several months (O'Toole & Beckett, 2013). Emergent themes were identified with cross-referencing to pedagogical materials and researcher reflections.

Presentation of Data

Prior to the beginning of semester, the course instructor posted on the LMS a welcome message, ten discussion topics and corresponding focus questions. She also encouraged students to introduce themselves on-line during the first week of semester. This on-line material corresponded to print material, such as the prescribed unit text (*The Literacy Landscape*, Bull & Anstey, 2005). A course syllabus explained readings and assessment, including a participation component involving on-line discussion. The presentation of LMS postings offers a snapshot of Caitlin's development over time via on-line asynchronous discussions. The selection of messages was based on multi-levelled criteria, such as Caitlin's engagement with the course instructor and fellow students (both undergraduate and graduate), curriculum materials and temporal space. The postings demonstrate how Caitlin positioned herself at the beginning, towards the middle and at the end of semester.

Beginning of Semester: Caitlin Introduces Herself On-line

The first student (Lisa) to post an LMS message introduced herself as a Master's student/primary teacher employed by 'an IT company teaching teachers to use interactive whiteboards and Web 2.0 technologies' (1st of Aug. 4:03 pm). The following evening, Caitlin responded on-line:

- Hi Lisa, My name is Caitlin. I am doing a bachelor of early childhood and primary (second year) fully external. I am a single mum, I care for my mum and work part time so I am very busy. I love the interactive white board, I was lucky enough to be placed in a classroom on my first prac where the teacher used the board for more than 50%; of her lessons, it was fantastic. My last placement, however, we had a board and the teacher did not look at it 3 weeks?; I always wondered though how I would learn about how to use it, if it would be through trial and error or if there was a course I could take. Does your company run courses or do you things like PD day workshops? I look forward to working with you and the many others doing this unit, cheers caitlin (2 Aug. 9:26 PM)

Similar to Lisa, Caitlin immediately positioned herself across multiple identities (Gee, 2011), in this case: single parent, carer and part-time employee. Caitlin then referred to herself as a pre-service teacher; she perceived that only one of her mentor teachers regularly integrated technology in the elementary classroom. Caitlin concluded her

message by expressing interest in networking professionally with Lisa, learning more about interactive whiteboards and working with fellow students, suggesting an emergent community of practice (Wenger et al., 2002).

Beginning of Semester: What is reading? Traditional Versus Contemporary Agendas

Approximately one week later, in Discussion Topic 1, Caitlin responded to the focus question:

- As a teacher (future teacher) of primary or secondary students in the twenty first century, how would you define reading?

Offering structure for organizing student learning, it can be argued that the focus questions represent systematic and conscious intervention on the part of the course instructor (The New London Group, 2000). In this early semester posting, (see below), Caitlin referred directly to the focus question and a definition of reading introduced in a previous literacy course, imbuing her text with intertextuality (Gee, 2011):

- Hi all. Thought I would respond to the focus question as I just finished (XXX course) and it's all still fresh in my head. Like many others doing the unit, I thought I knew what reading was but when asked to define it I came a little unstuck. Through doing (XXX course) I came to understand that Reading was the act of making meaning from written symbols and pictures (not limited to these two medium, but they were at the top of my head). It sounds simple but when you start to look..., it is very complex and there are many contributing factors to 'making meaning'.... With all the new technology reading is not what it used to be so I guess reading definitions need to expand to include new technologies. Even now I am still not sure that what I have written accurately portrays what reading is, purely because what I think it 'means' is based on my own ideology. Hope that makes sense and is not too confusing. cheers caitlin (8 Aug 3:24 PM).

Pondering over her definition of reading, Caitlin drew on prior experiences as a pre-service teacher engaged with literacy learning. Caitlin's remarks can be described as contextual and grounded in real-world patterns, observations and personal reflections (The New London Group, 2000). As she shared reflections with the group, Caitlin questioned the accuracy of her conceptual understandings about literacy and identified terms such as 'making meaning', 'new technologies', 'ideology' and 'discourse' (Cope & Kalantzis, 2009).

Mid-semester: Cursive Writing (Focus on Tertiary Context)

As Caitlin continued to post messages on the LMS, her perceptions and understandings of literacy became increasingly mediated through her on-line engagement with peers and the course instructor. For example, during Topic 4 (Reading: More on Pedagogy, Strategies and Resources), Caitlin addressed her message broadly to the group (see below). Nonetheless, Caitlin was responding to the course instructor's focus question and identified the subject of her message as 'cursive writing'. One aspect of the focus question encouraged participants to 'comment on re-shaped or transformed strategies or resources observed in school settings'. By line

two of her posting, Caitlin positioned her identity as a pre-service teacher commenting on academic staff's cursive writing in universities:

- Hi all just something that I noted today and found interesting. I received an assignment back and had real trouble reading the feedback, it was very sloppy and some words were impossible to read and yes it was cursive writing. This got me interested and I went back over countless assignments and ALL of the feedback given to me in cursive handwriting was very difficult to read. The only one assignment where feedback was very neat and clear was printed! Seems to prove a point made earlier that cursive writing tends to start out neat and get sloppier the more you write. Cheers Caitlin (9 Sept. 9:24 PM).

When Caitlin revisited tutors' feedback from her previous assignments, her learning appeared to evoke situated practice (The New London Group, 2000); in a purposeful and self-motivated task, Caitlin literally immersed herself in a 'countless' number of assignments. As Caitlin recounted her actions, her learning portrayed a sense of critical framing; she began to investigate patterns and analyse the breadth of the tutors' feedback, thereby drawing inferential conclusions (Cope & Kalantzis, 2009). In a double entendre, Caitlin positioned herself as a student, but implicitly adopted the role of teacher, who commented on the 'sloppy' quality of tutors' handwriting. Interestingly, Caitlin's remarks foreshadowed several LMS messages (Topic 3). For example, the following messages evoked contemporary dilemmas about handwriting, such as finding a balance between quality, aesthetics and speed:

- ...I too notice that the quality of my writing diminishes significantly as the length of the 'writing' increases. In fact I'm sure that if you cut a sample of my writing into sections and had them analysed by a hand writing expert they would think each sample was written by a different person. That does not appear to be the case with my children (I checked through their books after reading your posting). The writing in their books seems fairly consistent.(Kylie, pre-service teacher 25th Aug. 11:52 am).
- ...I only write 'properly' when I am doing it for someone else's purposes. I often find that I want my writing to be as fast as possible, and I usually write in my own personal abbreviations, like personal shorthand.... At Uni, I used to sometimes write with my hands and not look, so I could use my eyes to simultaneously see the lecturers' facial expressions. I can write properly, but commonly am not motivated to. I type a lot. I can write beautiful text for my students, but it doesn't reflect my real world choices and usage.... (Rebecca, graduate student, 29th of Aug. 8:13 pm)

With qualifiers such as 'beautiful', 'consistent' and 'as fast as possible, these messages foreshadow issues raised by Caitlin about cursive writing.

Mid-Semester: Cursive Writing (Focus on Primary School Context)

The preoccupation with cursive writing over several weeks appeared to emerge during discussion Topic 3 when the course instructor posted a focus question:

- Should primary school students still be taught cursive handwriting? Why or why not?

Parallel to this question, the course instructor cited a newspaper report (Hiatt, 2009) about cursive (running) writing in WA schools. The course instructor wrote:

- A recent report in the West Australian (Aug. 6, 2009, p.11) noted that in an increasing number of WA schools, cursive (running) writing is no longer taught. Stephen Breen, President of the WA Primary Principals' Association suggested that the importance of handwriting has recently decreased, due to increased computer use and an 'overcrowded' curriculum. Another argument raised is that printing, rather than cursive handwriting is used for completing forms and is similar to the letters on computer keyboards. However, Denise Hilsz (Principal: Winthrop Primary School) suggested that running writing provides a tool for students to develop writing fluency. What are your thoughts?

In Topic 3, several participants added to the LMS discussion by sharing perceptions about teaching cursive handwriting in schools. One graduate student/ high school teacher (Safa) argued for teaching cursive writing to provide students with 'skills' to become 'literate':

- I think that cursive still should be taught in schools, if the point is to make kids literate then how are kids able to do this if they don't have the skills needed to read a simple handwritten letter, (let alone the collections of handwritten historical texts). Bull and Anstey (2005, p.104) describe the new term as "production" rather than writing this makes sense, but at the same time it is sending off warnings that the handwritten word is not as valuable which is a bit contradictory because all TEE exams still require legibility. (22 Aug. 1:06 AM)

To illustrate contradictions surrounding the implementation of expanded notions of literacy, Safa drew on the theory of Anstey and Bull (2005). Despite new terminology and text genres, she argued, conventional print and legible handwriting are privileged in schools, due to standardized assessment. Two days later, Caitlin added to the debate about cursive handwriting (see below):

- Hi all I have been mulling this one over for a week now and really can't decide which side of the fence I sit on. Last semester in another unit this topic was discussed at length and there were some very interesting points highlighted which I have put here; The use of Vic Modern is part of the DET (mandatory) handwriting policy....That being said I think I'm sitting on the fence because I need to see the evidence or research that it [Victorian cursive] provides a tool for students to develop writing fluency. If the department implemented it on the basis of this research I would like to see the research and see if it, like other things, has dated over time, is the research still relative to the current climate ??.... cheers caitlin (24 Aug. 4:47 PM).

Having reflected at length on the debate, Caitlin remained undecided, but punctuated her message with references to the words or ideas of others (Gee, 2011). For example:

- a relevant discussion from another tertiary course;
- WA DET's handwriting policy (<http://www.det.wa.edu.au/policies/detcms/portal/>)
- the viewpoint of a local principal regarding the role of cursive writing.

End of Semester: Focus on NAPLAN

In Topic 8 (Monitoring, Assessment and Evaluation), the course instructor initiated an on-line debate about The Australian Commonwealth Government standardized assessment program. She asked student participants:

- How do you view the advantages and/or disadvantages of NAPLAN?

In this popular thread, Caitlin's message followed those of Safa and Kylie (see below). Early in all three postings, Safa, Kylie and Caitlin positioned themselves as parents, eliciting phrases and nouns, such as 'speaking as a parent', 'my child' and 'my son' (Gee, 2011). These parental identities melded with learning experiences that integrated academic, personal and professional experiences (Anstey & Bull, 2009). For example, Safa and Kylie readily acknowledged the usefulness of standardized testing for their children, while Kylie cited the work of Bull and Anstey (2005) to argue for explicitness of academic objectives:

Safa (2nd Oct. 4:26 pm)

- Speaking as a parent, the more feedback I can get on my children in school the happier I am. If it happens that it is in the form of a standardised test well even better as I can see where they are in relation to their class peers and where the school stands on a national level. Yes, I know it is a once off test which can only give me a glimpse of my child's progress I can appreciate this, unfortunately some parents might not, here the school really needs to explain this to the community....NAPLAN testing this year has raised bigger questions for me as my children's school is below the national average. ...

Kylie (3rd Oct. 2009 3:47 pm)

- Hi Safa, I agree with your comments about standardised testing. I too received my year 7 child's NAPLAN results and whilst his results were fine the school average was well below the national average. This concerns me greatly as my... child enters high school next year. ...However, there also needs to be some indicators of what a child is expected to achieve at certain specified points in the learning journey. ...The problem is, to quote Bull and Anstey (2005 p. 156), what do you measure or assess if you don't have explicit goals.

Caitlin (3rd Oct. 4:55 pm)

- Hi Kylie.... In response to NAPLAN testing I used to put a great deal of meaning on the results, but I now don't care. My son's school is doing fine in terms of national standards but I now know it is a mere snapshot of a moment in time. The results at best give me a vague idea about what's going on at school. For example my son has slipped in all areas from his year 3 test (WALNA), but I am not concerned because I know he is struggling with his teacher this year and has had a few emotional hurdles to combat as well. I guess in this sense it is helpful because I can look at the results and see whether I think he really is struggling or if it is something else. However had I not had the education through uni about standardized testing, I may have looked at the results and been more afraid that he has slipped. (3rd Oct. 4:55 pm).

In all three messages, it can be argued that discussion took on a level of transformed practice, with participants appropriately applying literacy understandings from pre-service and graduate teacher education to real-world situations (Anstey & Bull, 2009; The New London Group, 2000). For example, Safa and Caitlin agreed that NAPLAN offered a limited point of assessment. On the other hand, Safa and Kylie expressed unease about the below average national rating of their children's schools. Caitlin appeared less concerned about NAPLAN comparisons across schools and evaluated her child's results from a holistic perspective.

Discussion

As Caitlin gradually developed understandings about literacies, the pedagogical practices of overt instruction, situated practice, critical framing and transformed practice interwove seamlessly (The New London Group, 2000). Still, Caitlin appeared to reflect and interact with others predominantly through the practices of conceptualizing and experiencing (Cope & Kalantzis, 2009). For example, Caitlin defined terms, such as reading by drawing distinctions between contemporary and traditional models. Referred to as conceptualization through naming (Cope & Kalantzis, 2009), Caitlin's process of defining appeared to be scaffolded systematically via the course instructor's overt instruction in the form of discussion topics and focus questions. Mediating her engagement with these prompts, Caitlin situated her teaching practice by connecting her personal and professional literacy experiences. Towards mid-semester, as Caitlin began to engage in critical framing (The New London Group, 2000), her analysis generally involved interrogating her own actions and those of others, without explicitly connecting theory to practice. Still, Caitlin made reference to one official written policy to support her reflections about the advantages and limitations of teaching cursive writing in primary schools.

In addition to the pedagogical practices of a multiliteracies approach, the CoP metaphor provides a broad framework for examining how teacher education participants developed understandings about literacy and constructed situated identities (Lave & Wenger, 1991; Wenger et al., 2002). Highlighting social interaction, discourse analysis (Gee, 2005b, 2011, 2012) revealed that Caitlin's on-line postings were consistently punctuated with two characteristics leading towards the development of a CoP:

- intertextuality: resonating the words of others in written or oral language;
- identities: acting out different roles through language.

In this vein, throughout the semester, Caitlin's postings were not bounded as discrete texts, but formed a multiplicity of dynamic threads across layers of on-line discussion (Gee, 2011, 2012). On one level, over several weeks, language resonated throughout many postings; for example, 'focus question', 'cursive writing' and NAPLAN were revoiced across messages posted by Caitlin, her peers and the course instructor. On a second level, Caitlin used language to construct identities linked to building relationships with individuals or the group. Despite shifting interlocutors, a common thread across postings was Caitlin's enactment of multiple identities (Gee, 2005a, 2011, 2012). From the first week of semester, Caitlin positioned herself as a single parent, carer, part-time employee and pre-service teacher. By mid-semester, Caitlin commented on the quality of her tutors' cursive writing in the tertiary context and adopted dual roles of: pre-service teacher (explicit); and teacher (implicit). Towards the end of the semester, as she debated the role of NAPLAN for elementary school students, Caitlin continued to position herself with dual roles: that of parent and pre-service teacher.

It can be argued that throughout the semester, Caitlin's adopted multiple identities linked to the development of a CoP. Here, learning is viewed as more than books, classrooms or on-line learning; it is connected to identity or 'who we are, what we do, who we seek to connect with, and what we aspire to become' (Wenger, White & Smith, 2009, p. 2). Viewed alternatively, CoPs are expressed through shared spaces as people relate to one another with common interests and goals (Gee, 2005a). From the first week of classes, Caitlin expressed interest in networking professionally with peers, evoking an emergent and tentative community of practice (Wenger et al., 2002). At this early stage, the dimension of domain was expressed through shared interests, especially literacy education. While Caitlin and her peers shared personal and professional stories on-line, they gained experience and learned from each other, suggesting the practice dimension of the CoP (Wenger, White & Smith, 2009). Towards mid-semester, student participants and the unit instructor incorporated more frequent connections to outside resources, such as websites and newspaper articles. Discussion threads appeared to shift more explicitly towards the dimension of community (Wenger et al., 2002), evoking a social plane built around shared interests, such as classroom pedagogy.

There are well-documented advantages of using on-line technology to develop university students' reflection, particularly in the area of pre-service and in-service teacher education (see Armstrong & Manson, 2010; Barnett, 2006; Levin, He, & Robbins, 2006; MaKinster et al., 2006; Stagg-Peterson & Slotta, 2009). Notwithstanding, Celik (2013) and Swan, Schenker, Arnold, and Kuo (2007) suggested that learner success on-line can be inconsistent. Similarly, Foulger et al. (2013) argued that although some teacher educators have successfully used instructor modelling and exploration to mediate pre-service teachers' use of online technology and mobile devices, innovation in this area is generally in the early stages. Therefore, when examining the content, structure and participation requirements of CoPs, the impact of social systems and distribution of power can be further explored. Acknowledging that institutional requirements are pivotal for on-line discussion highlights the role of power in shaping teacher education programs. Power and

knowledge, contended Foucault (1977, 1980), are inexorably intertwined, resulting in organizational norms and compliance in universities, prisons, hospitals, schools, etc. In this study, it appeared that the course instructor aimed to adopt a sociocultural framework to develop a CoP. Prior to the beginning of semester, she welcomed students, stating:

- Dear Students, Using a multiliteracies approach, I aim to provide opportunities for extending your theoretical and practical knowledge about literacy education. I also aim to promote an on-line learning community, where you can discuss literacy related issues with your peers, in a reflective and critical manner.... Please feel free to contact me with queries.... I look forward to working with you this semester. Best wishes, (July 10, 12:22 pm).

At a deeper level, this message appeared to foreshadow student compliance via an unbalanced distribution of power during asynchronous on-line discussion (see Foucault, 1977). Whilst an instructor explicitly setting aims for a course provides an organized framework for student learning, Foucault suggests that discipline can also be used to control human interaction; as such, it can be argued that the course instructor's discourse is used at least partially to regulate categories of movement and knowledge in the online setting. Specifically, the course instructor's exclusive use of the subject pronoun 'I' suggested control over all pedagogical content, educational objectives and student queries. As well, during on-line interaction throughout the semester, formal prompts structured student learning around responding to focus questions, rather than student-initiated discussion. From a Foucauldian perspective, these online prompts limit the parameters through which students can contribute to knowledge, for example, via the discourse of established terminology in the field of literacy.

Apart from pedagogical strategies at the course level, such as online prompts, at the institutional level, academics are professionally bound to comply with formal policies; in this case, compulsory formal assessment included on-line discussion and was aligned to university graduate attributes, such as developing effective communication and life-long learning skills. As the semester progressed, lengthy discussions about 'back to basics' literacy initiatives suggested that popular media discourse also mediated participants' on-line engagement. Thus, more broadly, from a Foucauldian perspective, university engagement is viewed as influenced via a process of systemic normalization across institutions.

Concluding Remarks

Clearly, Caitlin's asynchronous on-line literacy postings represent only a snapshot of how Caitlin drew on diverse resources and learning experiences to mediate legitimate peripheral engagement and develop multiple identities as a member of a CoP (Lave & Wenger, 1991). Nonetheless, as Caitlin shared her perceptions on-line with other participants, formal responses entwined pre-service and in-service teaching stories. Caitlin also demonstrated progress towards 'critical framing' (The New London Group, 2000) through her critique of government policy and the handwriting of academic staff.

In this vein, despite the limitations of the study, on-line discussion provided an initial lens for understanding the construction of teacher identities during this literacy education course. With frequent postings, Caitlin is characteristic of a minority of

extremely active learners in CoPs (Lave & Wenger, 1991). But, on this LMS, as is the case with many on-line courses, some student participants posted infrequently, with one pre-service teacher posting only once. To deepen understandings about how knowledge is generated on-line, further research could focus on the perceptions of students labelled peripheral ‘lurkers’ (Wenger et al., 2009), who often spend a good deal of time reading, but rarely posting messages.

Apart from influencing social dynamics, the LMS employed in this study appeared to frame the structural boundaries of the CoP (Wenger et al., 2009). A distinct advantage of this on-line template was its widening of students’ physical and temporal learning space. This involved increased capacity for collaboration, with participants able to log on globally at all hours of the day or night. It was not uncommon for Caitlin to post messages in the evening (e.g. 9:24 pm & 9:26 pm) while Safa sent one message in the middle of the night (1:06 am). Nonetheless, sustaining learning over time in a CoP involves trust, mutual engagement and quality of relationships (Wenger et al., 2009). In this case, given the institution’s teaching requirements, the CoP’s life was limited to one university semester. Future research could examine the sustainability of an informal CoP following formal closure of an on-line platform.

With students’ lives flooded by an increasingly complex array of multimodal information, a ‘back to basics’ approach would appear out-dated in the twenty-first century. Nonetheless, public news stories have helped to construct a perceived national literacy crisis in which teacher educators and school teachers are perceived as incapable of imparting traditional literacy skills to their students (Snyder, 2009). This article reported on a Western Australian qualitative study, which was supported by a sociocultural framework (Vygotsky, 1986). Although the literacy course in which Caitlin and her peers were enrolled deviated from ‘back-to-basics’ through multiliteracies and on-line discussions, further development of this approach would be beneficial, especially for integrating the LMS space to other pedagogical activities. For teacher educators who are designing on-line CoPs in the area of literacy education, these results point to some practical strategies for extending university students’ learning, such as:

- Inviting professional associates from the broader literacy community to engage in on-line discussions. These members of the CoP could be currently employed specialist teachers or presidents of volunteer organizations in local, national or international contexts.
- Integrating on-line platforms involving reading and writing with tools for speaking, viewing and listening. For example, university students could design mini-research projects to implement in authentic classroom settings using programs such as iMovie or Flick-It-On (see <http://theglobalclassroomproject.wordpress.com/>)
- Promoting on-line reflection about a range of pedagogical and assessment tasks elementary/secondary classrooms. For example, university students can draw on work presented in primary, secondary and university classrooms to reflect on the design of assessment.

- Utilizing informal on-line group work to facilitate collaboration between students at different academic levels (e.g. between pre-service and in-service teachers/graduate students). For example, small groups could collaboratively develop wikis and Pecha Kucha to promote online discussion.
- Extending the use of social media sites (e.g. Facebook, Twitter, Wordpress, Tumblr, etc.) to meld seamlessly with universities' official on-line learning templates and students' use of mobile devices.

These suggestions are underpinned by an expanded definition of literacies that considers the distribution of power and manipulation of language in cultural communities (Rogoff, 1990; The New London Group, 2000). On a practical level, Foulger et al. (2013) argue that teacher education communities aiming for technological innovation will benefit from instructors researching their own practices and sharing their successes and challenges through on-going conversations. To this end, countering a 'back-to-basics' approach to teacher education aims to shift the paradigm, from one which views knowledge as object, to knowledge as constructed dynamically through social interaction (Hopper & Sanford, 2010).

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Author Biographies

Dr. Wendy Cumming-Potvin is Associate Professor and Postgraduate Research Director at the School of Education, Murdoch University in Western Australia. Focusing on new literacies and social justice, Wendy has a strong interest in technology, teacher education, gender issues and qualitative research. Wendy is chief investigator of a Cooperative Research Centre study (Australian Federal Government program), aiming to develop inclusive school communities through literacies and technology, with a focus on students of diverse sexuality and gender.

Dr. Kathy Sanford is a Professor in the Faculty of Education at the University of Victoria in British Columbia, Canada. Her research interests include gender, new literacies and technologies, learning through videogames, ePortfolios, non-formal education, and teacher education. Recent SSHRC-funded research projects include *Youth Civic Engagement: Real Life Learning through Virtual Games Environments*, *ePortfolio Development in Three Professional Programs*, and *Community first: impacts of community engagement CF:ICE*.