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Investigating the Longer-Term Impact of a Professional Development Program: A Five-Year Follow-Up Qualitative Study

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Abstract

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Keywords

teaching in higher education, teacher professional development, long-term impact, professional growth, identity development, constant comparative method

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Investigating the Longer-Term Impact of a Professional Development Program: A Five-Year Follow-Up Qualitative Study

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Do changes in perspectives on teaching and learning that teachers experience in a professional development (PD) program persist over time? How might they evolve? In this article the author first summarizes the results of her original two-year qualitative study of Quebec CEGEP (college) teachers' perspectives on teaching and learning within a PD program. She then describes the results of a follow-up qualitative study that she conducted with the same teachers five years later. Teacher interviews were coded using the constant comparative method (Maykut & Morehouse, 1994). Three major conceptual themes emerged: teachers reported engaging (outside of teaching), innovating (within teaching) and evolving (professionally and personally). Threads that appeared in the original study re-emerged in the follow-up data. Monitoring the longer-term impact of PD programs can shed valuable light on the on-going process of teacher development.

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Introduction

Many studies (e.g., Knight et al., 2006; Teras, 2016) have highlighted the importance of professional development (PD) to enhance the quality of teaching in higher (i.e., post-secondary) education. In particular, teachers' perspectives on teaching and learning within higher education have been identified as a valuable area of research (Hativa, 2002; Kember, 1997; Kember & Kwan, 2002; Kerwin-Boudreau, 2009, 2010a, 2010b; Kerwin-Boudreau & Butler-Kisber, 2016; McAlpine & Weston, 2002). Saroyan et al. (2004) describe a perspective as a conception or belief that can be conscious or unconscious. The authors maintain that teachers in higher education should be encouraged to explore their beliefs about teaching and learning, as these perspectives act as filters and can influence decisions made in the classroom. Perspectives precede and affect one's teaching practice (Kerwin-Boudreau, 2010b).

Saroyan and Amusden (2004) emphasize that new teachers particularly are at risk for unexplored perspectives, since the ideas about teaching and learning they bring to the classroom are often based on their own experiences as learners and can include misconceptions (Hativa, 1998). Emerging from disciplinary-specific, research-oriented graduate programs and faced with an overwhelming teaching load, they resort to survival mode, an approach that resists change and improvement (Knight et al., 2006). In contrast, Trigwell and Prosser (1996) have shown that university teachers who hold more sophisticated conceptions of teaching and learning employ higher-level approaches in their teaching that are based on more complex views of learning. It would appear that improvements in teaching result when teachers' perspectives are grounded in theory and advance pedagogical understanding. McAlpine & Weston (2000) state that in order to bring about fundamental changes to the quality of teaching

in higher education, identifying and critically examining one's perspectives is a crucial first step.

Several researchers including Kember (1997) and Robertson (1999) have mapped the progression in teachers' perspectives from a teacher-focused to a more learner-centered orientation. What is notable in much of this research is that teacher change is measured through questionnaires and single interviews with one or more teachers. Therefore, the evolution in individual teachers' perspectives is not revealed, but rather inferred, as due to both time and practice, i.e., classroom experience. Kane et al. (2002) reviewed 49 studies on teachers' perspectives in higher education, outlining several flaws in data collection and analysis. No study collected information on teacher perspectives on more than one occasion, making it impossible to discern how individual instructors progressed in their perspectives over time. To address this, I conducted repeated interviews with six individual teachers over a two-year period and outlined a process of change in their perspectives over time (Kerwin-Boudreau, 2010b). These findings are summarized in the following section.

There is general agreement both anecdotally and, in the literature, (e.g., Borko, 2004) that isolated workshops or the occasional skills-based presentation do little to address teachers' underlying conceptions and fall short of the goal of improving academic excellence. My original study showed that it can take between one and two years before teachers in higher education who are engaged in a critical examination of their perspectives feel confident enough to begin to make changes in their classroom pedagogy (Kerwin-Boudreau, 2010b). Teachers identified reflection as the ongoing process between thought and action that they used when thinking about teaching and learning. Reflection can help to uncover both conscious and unconscious beliefs (McAlpine et al., 1999) and it acts as a bridge between perspectives on teaching and classroom practices (Kerwin-Boudreau). Other researchers including Ling and Mackenzie (2001) and Lawless and Pellegrino (2007) have also highlighted the critical elements of time, reflection and opportunities for implementation that define successful PD programs. In spite of this, all too often the assistance offered to teachers in higher education is sparse, inadequate or non-existent (Knight et al., 2006).

Overall, the comparative impact and efficacy of PD programs has been difficult to assess. Watson (2006) cites the wide variation in both the quality and length of such programs as problematic- the proverbial comparison of apples and oranges. Also noteworthy is the fact that few studies have attempted to assess the longer-term impact of PD programs. If, as outlined above, significant changes in perspectives and practice result from well-structured PD programs in higher education, how might these changes continue to influence teacher thinking and practice? Are acquired gains maintained over time? Do teachers continue to evolve and if so, how? The current study seeks to assess the efficacy of a PD program by examining its impact, post-completion and beyond.

Literature Review

Some studies have examined the longer-term impact of PD programs. For example, Watson (2006) described the impact of a five-day workshop followed by the possibility of two online courses on K-12 teachers reported self-efficacy in relation to using computers in the classroom. A follow-up study seven years later showed that teachers' feelings of confidence were maintained. What is noteworthy is that on both occasions only one instrument, an 11-item self-reported survey, was used to measure teachers' level of self-efficacy, and that data from only 94 of the original sample of 389 participants were included in the follow-up research. In addition to the limited scope of this investigation, these findings cannot be extrapolated to the realm of higher education. A more comprehensive mixed-methods methodology, used to assess the impact of a five-day, teacher training program for future medical educators, is described by

Andreatta et al. (2009). In this study, 13 voluntary participants were introduced to fundamental principles of instructional design, which they then applied in a 15-minute concrete teaching project within the workshop. Results showed significant pre-post workshop improvements in content knowledge as well as in attitudinal and motivational variables related to teaching. Participants were surveyed two years later, and the 50% who responded reported they were able to apply the workshop's materials to their careers, particularly when delivering lectures or talks. No doubt the design of the workshop, which focused on improving explicit teaching abilities, proved successful within this particular context. However, given the fact that learning to teach in higher education is a complex process that develops over time and involves a comprehensive assessment of one's underlying conceptions on teaching and learning (Kerwin-Boudreau, 2010b), one might question what deep underlying changes beyond the application of specific teaching techniques might have resulted from this five-day workshop? As several researchers including Teräs (2016) have pointed out, excellence in teaching will only come about through deep transformative learning that involves changes in teachers' perceptions and not merely by applying new techniques.

Teräs (2016) has described one such effective, fully online, 18-month PD program for teachers in higher education. Narrative analysis of interviews with seven participants revealed that teachers experienced changes in their teaching practice that impacted positively on student learning, as well as changes in their professional growth and identity. While this study illustrates the importance of sustained PD to bring about changes in teachers' underlying conceptions and their classroom behaviour, no assessment of this program was conducted postcompletion. Another study by Pellegrino et al. (2018) employed several measures to assess the long-term impact of participation in a PD community. Five music educators, who were involved in a PD community for 34 months as they transitioned into teaching positions in higher education, assessed the impact of this experience three years after the group ended. While the authors enumerated several benefits from this experience including an improved knowledge of the research process and the development of a professional identity, the focus was on how participation in this professional community benefitted them as individuals and not in relation to their teaching. It would appear that an investigation into the longer-term impact of PD programs in higher education on teachers' perspectives and on their classroom practice is in order.

Over the course of my original two-year study on teachers' perspectives on teaching and learning within a two-year PD program (Kerwin-Boudreau, 2009, 2010a, 2010b), I witnessed the evolution of teachers' beliefs over time. In the second year, their perspectives became increasingly explicit and grounded in their reflective practice, and this in turn influenced decisions they made in the classroom. Towards the end of the research teachers reported changes in identity, as they began to view themselves as both pedagogues and disciplinary experts. I wanted to further explore the impact of perspectives on practice and to investigate some interesting threads, notably in relation to identity, that appeared in the original study. To this end, five years after I completed my original research, I conducted a follow-up study with the original six participants. The intent was also to address gaps in the literature, noted above, on the longer-term impact of PD programs.

I situate myself in this research process as a college (known as CEGEPs in Quebec, Canada) teacher with over four decades of teaching experience in higher education, who embraces a critical social-constructivist epistemology (Schwandt, 1994). I believe that knowledge is constructed in social interaction and mediated by language/tools and that there are multiple ways of seeing, doing, and understanding (Kerwin-Boudreau & Butler-Kisber, 2016). I draw from the pragmatists (Clandinin & Rosiek, 2007) in that knowledge is experience and hence inquiry is a way of knowing that emerges from a relational, participatory, inclusive and holistic process that develops over time (Kerwin-Boudreau & Butler-Kisber, 2016). As a

Quebec college teacher studying teachers within this system, I remained conscious of my dual role of researcher/interpreter and teacher. I believe that my position as a college teacher and a peer among peers enhanced, rather than detracted from my research, as it provided me with important insider information and insight into the process that was unfolding during the interviews. By remaining self-conscious about this dual role, issues of credibility and trustworthiness were enhanced.

In the following section I first summarize the main results from my original two-year study. These results have been reported elsewhere (Kerwin-Boudreau, 2009, 2010a) and in greater detail in my book *The Professional Development of College Teachers* (Kerwin-Boudreau, 2010b). The following summary of my original research is extracted in large part from the synthesis that was presented in Kerwin-Boudreau and Butler-Kisber (2016, p. 960-961). I then outline the methodology, results and discussion from the current five-year follow-up study on the longer-term impact of PD programs on teachers' ongoing perspectives on teaching and learning, their teaching practice and their evolving identity.

Summary of Original Study: Four Patterns and Three Dimensions

Six female college teachers who were enrolled in the Master Teacher Program (MTP), a voluntary PD graduate program offered by the University of Sherbrooke for Quebec college teachers, agreed to participate in the original two-year study that was completed in 2008. These teachers were from the same cohort and I followed them as they simultaneously completed the first four courses in the MTP. The participants taught at various English language CEGEPs, had a range of teaching experience from less than one year to 25 years, and taught in different programs, including two in the Sciences, two in the Social Sciences and two in Career Programs. Hence, they satisfied criteria of both heterogeneity and representativeness or typicality, as outlined by Maxwell (2005). To guarantee confidentiality they were each assigned a pseudonym. The primary research question was: How does reflecting on teaching and learning over a period of two years in the first four courses of a PD program contribute (or not) to teachers' changing perspectives on teaching and learning? Moreover, I also searched for common themes related to teachers' perspectives as well as possible distinctions.

Over a two-year period, I collected various forms of data. This included primarily 25 hours of repeated individual interviews, which were subsequently corroborated by teachers' concept maps and their reflective journals. I analyzed these data using three methods: visual inquiry (Butler-Kisber & Poldma, 2010), and through the complementary strategies of categorizing and connecting (Maxwell & Miller, 2008). Visual inquiry as shown through teachers' concept maps helped to uncover and make explicit teachers' emerging thoughts. I categorized or coded the data using the constant comparative approach (Charmaz, 1998, 2000, 2005; Maykut & Morehouse, 1994). This method yielded a thorough thematic description of the evolution in teachers' perspectives about teaching and learning and elicited patterns across the six participants, outlining a process of development, detailed below. Furthermore, I used a connecting strategy through a narrative analysis (Lieblich, 1998) that probed the data contiguously and resulted in the production of narrative summaries (Rhodes, 2000). This method of data analysis revealed some of the distinctions, outlined below, in individual teachers' perspectives (see Kerwin-Boudreau & Butler-Kisber, 2016).

An analysis of coded interviews of the six participants revealed four major patterns or phases of evolution in teachers' perspectives. These patterns were represented through the four metaphors of *awakening*, *stretching*, *exercising*, *and shaping* (Kerwin-Boudreau, 2009, 2010b). After coding the first set of interviews, two common themes emerged: participants reported that they had become aware of their original perspectives on teaching and learning which placed the teacher in a central role, and these perspectives were beginning to shift. The

metaphor of *awakening* provided a way of thinking about what became the first major pattern. Findings that emerged from the second set of interviews indicated that teachers were more aware of the learner's role but expressed difficulty linking theories of learning with their classroom practice. This phase was represented through the metaphor of *stretching*. An analysis of the third set of interviews, which took place during the second year of the research project, revealed that teachers were beginning to experiment with new instructional strategies in their classes. They had begun the leap from theory to practice and hence this phase was represented through the metaphor of *exercising*. The fourth set of interviews indicated that teachers were beginning to assemble the pieces of the teaching/learning puzzle. They expressed a new appreciation for the meaning and purpose of assessment. Because they were beginning to demonstrate a more integrated understanding of the interdependent roles played by teacher, learner and curriculum, this phase was referred to as *shaping* (see Kerwin-Boudreau & Butler-Kisber, 2016, p. 960).

In addition to coding the data, findings were also analyzed in a more contiguous fashion. Narratives were constructed for three of the participants (i.e., a new teacher, one with five years of teaching experience, and a 25-year veteran teacher), based on their interview data. The four patterns discussed above appeared, to greater or lesser extents, in the teachers' stories, and in particular in the case of the new teacher. Further, the three narratives provided evidence of movement from a teacher-oriented perspective to one that placed students at the center of the learning process. The three narratives confirmed findings that had emerged from the coded data, that is, that a change in teachers' perspectives on teaching and learning preceded changes in their classroom practice (see Kerwin-Boudreau & Butler-Kisber, 2016, p. 960).

Thus, findings from the triple processes of visualizing (through concept maps), categorizing (through coding interview data) and connecting (through constructing narrative analyses) converged to reveal similar patterns. In line with research by others such as Kember (1997), Kember and Kwan (2002), and Samuelowicz and Bain (2001), teachers' perspectives had shifted from teacher to learner centeredness. Furthermore, the results of this study revealed that this shift was marked by three major dimensions: increased awareness of the learner and the learning process, increased intentionality to align the curriculum, and increased selfknowledge. In terms of increased awareness of the learner, teachers reported a greater appreciation for individual learning styles and a commitment to the idea that learning can only take place if and when the student is actively involved in the process. The second major dimension, increased intentionality to align the curriculum, was revealed as teachers spoke increasingly of matching course objectives, learning tasks and assessments in an effort to "demystify the curriculum" for their students and promote student achievement. An interesting set of findings emerged with respect to teacher identity. Teachers reached new insights about themselves as educators. They spoke of themselves as both disciplinary and pedagogical experts and reported enhanced confidence and greater enjoyment of teaching (see Kerwin-Boudreau & Butler-Kisber, 2016, p. 960).

Finally, reflection on practice over time emerged as the primary factor that ignited the process of evolution in teacher perspectives. Reflection is what allowed teachers to link theory with practice and to deconstruct what was happening in their classroom, thereby affording them critical insight into their practice. Additionally, as their knowledge base increased, their reflections became more grounded in theory. Based on teachers' self-reports, findings also showed that changes in perspectives preceded changes in classroom practice. It took at least one year for perspectives to be sufficiently integrated before teachers reported adjustments to their classroom practice (Kerwin-Boudreau, 2010a, as cited in Kerwin-Boudreau & Butler-Kisber, 2016, pp. 960-961).

The use of multiple methods of data collection and analysis provided comprehensive answers to the research questions. As stated elsewhere (Kerwin-Boudreau & Butler-Kisber,

2016), the use of various forms of data analysis including visual inquiry, and categorizing and connecting approaches (Maxwell & Miller, 2008), led to the successful tracking of teachers' evolving perspectives on teaching and learning. The use of multiple methods of data collection and analysis allowed for teachers' perspectives to be examined through several lenses, provided a more comprehensive understanding of the data and increased the persuasiveness of the findings (Kerwin-Boudreau & Butler-Kisber, p. 956).

In addition to identifying a process of evolution in teachers' perspectives over time, a number of unanticipated findings emerged in the final interviews with respect to teacher identity. As noted above, several teachers discussed how their identity as teacher-educators had evolved as a result of their involvement in PD. In my follow-up research, I wanted to further explore whether or not, and if so how, this sense of teacher identity was continuing to unfold, both in and out of the classroom.

While it is generally recognized that teacher identity is a dynamic, ongoing process, the concept is difficult to define. Even more challenging is the distinction between the teacher's personal and professional identities (Beijaard et al., 2004). This is because of the multifaceted nature of identity, including aspects such as the role of the self, emotion, reflection, agency and context (Beauchamp & Thomas, 2009). Indeed, several authors including Wenger (1999) posit a clear link between a teacher's personal and professional selves, claiming they are mirror images of one another. Nevertheless, while remaining cognizant of the inextricable link between the two teacher selves, and without directly questioning teachers during the interview about the two separate selves, i.e., personal and professional, I wanted to see whether or not a distinction might emerge between the two selves, in the data from the follow-up study. Based upon the parameters outlined in the Beauchamp and Thomas article, I identified the professional self as encompassing the teacher self, the person who understands the teacher's role, and who uses reflection as a guiding tool to influence their agency in the classroom. The personal self in contrast refers to more general ways of being, and encompasses the role of emotion and personal agency, and how this might influence behaviour.

Five-Year Follow-up Study

Methodology

The primary research question which emerged from the results of my original study was: What is the longer-term (i.e., five-year) impact of PD (if any) on current perspectives and practices related to teaching and learning? Additionally, through a series of 15 sub-questions, each participant was invited to comment on related topics that included ongoing teacher evolution, teacher identity, role of the teacher, role of the learner, instructional strategies, reflection and leadership. Because the questions were intentionally structured in an open-ended fashion in an attempt to understand as broadly as possible what was transpiring in the lives of these teachers, this research was emergent. As well, this research was inductive as it moved from teachers' particular experiences to general concepts and principles. This inquiry was also interpretive. Not only were teachers describing their understanding of the ongoing process of teaching and learning, but these findings were also filtered through my own personal lens of teacher and researcher. Since this study satisfied several of the common characteristics of qualitative research as outlined by Rossman and Rallis (2012), adopting a qualitative design, as in my original work, proved to be the most effective way to answer my research question. Based on several considerations, I selected the interview as my method of data collection. Most notably, because the interview had proven effective in uncovering rich data related to teacher thinking (Kerwin-Boudreau, 2009, 2010a, 2010b) and the participants were familiar with this method, I deemed this to be the most appropriate choice.

I reached out to the six participants through email, five years after the original study was completed, and inquired whether they might be interested in what I termed a "five-year check-up". I informed them that I would travel to their college to interview them individually for approximately one hour. All participants responded positively to my request. The teachers asked to be sent the questions beforehand and I felt this request was reasonable. I realized that having this prior opportunity to reflect might influence how each participant framed their five-year interim experience. Cognizant of the limited time we would be spending together I remained open to the possibility that such prior reflection might lead to richer data. Between August 2013 and April 2014, I met individually with five of the participants. A sixth participant who was not available for the face-to-face interview emailed extensive responses to all of my interview questions. At the time third-party approval was not required by my college. Each participant signed a consent form agreeing to participate in the study. They were assured of anonymity and confidentiality, and pseudonyms from the original study were maintained. Furthermore, in the five-year interim, my position as a college teacher had not changed. I was meeting the participants, once again, as a peer among peers.

The interviews were tape recorded and conducted in a semi-structured fashion (Seidman, 2013). Immediately following each interview, I listened to the recording a number of times, noting key ideas related to the participant's response to each question. This step served as an important repository of critical first impressions. I used the constant comparative method as outlined by Maykut and Morehouse (1994) and by Charmaz (1998, 2000, 2005, 2014) to code the data. This involved unitizing the data into segments of written text and then alternately expanding and collapsing these categories. Eventually, commonalities or overall themes began to emerge across the data from the six participants. I continued to further distil the main themes, moving from descriptive to more conceptual categories, until three major patterns that represented the longer-term impact of PD became apparent. For example, several chunks of data from the interview data related to leadership, mentorship and ongoing professional development converged. These were associated with teachers' activities outside of the classroom and I entitled this pattern engaging outside of teaching. A second category centered on teachers' innovative pedagogical activities in the classroom. This was in contrast to the original research (Kerwin-Boudreau, 2010b) wherein an evolution had been noted in teachers' perspectives on teaching and learning but changes were barely emerging in relation to their practice. I labeled this second pattern innovating within teaching. A third category focused on what was happening in terms of teacher identity. In my original research, a number of teachers alluded to an emerging sense of self, in response to PD, and how increased self-knowledge had impacted their identity. This thread was reiterated in the follow-up research as teachers discussed issues related to ongoing identity development, both professionally and personally. I named this third category the evolving self. Thus, the three major themes of engaging, innovating and evolving came to represent the longer-term impact of PD in higher education that was transpiring among these six teachers. Throughout the process of data collection and analysis I wrote analytic memos. This practice increased reflexivity and helped me remain conscious of my dual role of researcher/interpreter and teacher. These memos also helped me discern and elaborate emerging concepts and major themes (Charmaz, 2014).

Developmental psychologists refer to the processes of continuity and discontinuity in their attempt to explain how change occurs (Boyd et al., 2018). Continuity implies that over time, change represents more of the same, that is, an increase or expansion in amount or degree. Discontinuity, on the other hand, refers to distinct and novel changes in type or kind that appear over time. If, for example, teachers exhibit a deepening knowledge and understanding of assessment as their practice evolves but core beliefs do not alter, this would suggest a continuous, ongoing change in their understanding. If follow-up findings reveal distinct changes in kind, type or ways of thinking about assessment, this would imply more of a

discontinuous, qualitative pattern of change, with the possibility of distinct stages in understanding and novel behaviors appearing. The three patterns that emerged from the follow-up data represented both *continuity and discontinuity* in relation to the findings from my original study.

Findings

In this follow-up research, a qualitative design was used to probe six teachers' perspectives and practices on teaching, learning and identity five years after their original participation in a PD study. During an individual, one-hour interview, each teacher discussed their evolving thinking about teaching and learning and how this impacted their behavior in the classroom and within their wider college community. They also considered issues of identity and the role that PD played in their development. The three major themes of engaging (outside of teaching), innovating (within teaching) and evolving (professionally and personally) that emerged from the data are elaborated below.

Engaging (outside of teaching)

In my original study, completed in 2008, only one participant discussed her leadership role as a longstanding department head. At that time, four other teachers had a full-time teaching load and one taught part-time. There were no other references to engagement outside of teaching. In contrast, in the follow-up research conducted five years later, all of the teachers reported significant changes in their involvement in professional activities outside of the classroom. This included assuming leadership roles, continuing their professional development and mentoring other teachers. All of the teachers reported assuming leadership roles within a variety of contexts including their department, college, and the larger community college network. There were four new department coordinators, in addition to the original longstanding coordinator. During the five-year interim, all six participants had served on a variety of college and departmental committees, including senate, program and profile revisions, and curriculum committees. One participant had organized a PD workshop at her college, another had hosted an international colloquium within her discipline and a third participant had completely restructured the program within her college. Furthermore, the participants credited their experience with PD as the impetus for this involvement. Deana stated:

PD has given me a vocabulary and I have become more credible with my peers...I have had the confidence to share pedagogical strategies with peers from other disciplines and truly believe in the tool...I also understand where others are at...not everyone is open and willing to self-reflect. (Follow-up interview, August 2013).

In addition to the impressive display of involvement in leadership roles noted among all the participants, one teacher discussed difficulties she had encountered working within the constraints of the college system and local administration. It would appear that some of the college environments were more enabling than others and this in turn might impact future teacher engagement.

Another sign of engagement was evident in terms of the teachers' continued involvement in PD. At the end of my original study in 2008, the six participants had completed the first four courses in the MTP, earning eight credits in their PD program. In the ensuing five-year interim, distinctions emerged among the educators. One participant completed the entire program of 45 credits, earning a master's degree in Education. Four others completed 30

credits, earning a Diploma in College Studies. The sixth participant completed 22 credits in the PD program and was involved in ongoing summer field research and workshops within her discipline. At the time of the follow-up interviews, four of the six participants expressed no interest in initiating further PD, stating that they preferred to practice what they had learned.

A third and final indicator of engaging outside the classroom was apparent in interviewees' enthusiastic descriptions of mentorship roles they had assumed with other teachers, and they linked this role to their experience in PD. New teachers were often mentored, both within their departments and from other disciplines. Proximity of office space played a role in terms of who was mentored.

I am always mentoring new teachers...as well, other teachers who have been teaching for a while but do not have the experience of PD often use me as a mentor. (Anne, responses to follow-up interview, August 2013)

In the original study there had been no mention of mentoring, other than the involvement of one long-acting department head with new teachers. Findings from the follow-up study represented a significant departure from this original trend. Therefore, data that surfaced five years later indicated that the initial exposure to PD continued to impact the six participants in novel ways, as expressed particularly through their involvement in innovative leadership and mentorship roles. This level of engagement outside of teaching represents a distinct qualitative change, in contrast to results from the original study, and serves as an example of *discontinuity* in teacher development. Since the teachers were involved in PD activity in the original (2008) research, their ongoing engagement with PD in the five-year interim can be considered an example of *continuity* in their development.

Innovating (within teaching)

In my original research (Kerwin-Boudreau, 2010b), the analysis showed a shift in teachers' perspectives over the two-year period, as they moved from a teacher-centered to a more learner-centered focus. Teachers reported a greater awareness of the importance of instructional design and of actively involving students in the learning process. Although in year two of the original study some teachers had began to experiment with novel teaching practices, changes were noted primarily in relation to their deepening perspectives on teaching and learning.

In the five-year interim, all teachers were experimenting with innovative classroom practices to a much greater degree. These included peer feedback to promote deep learning, journals to encourage metacognition and various types of active learning with an emphasis on course design. For example:

I have completely redesigned the way courses are taught and assessed in my (one-person) department. Previously, it was lectures followed by tests. I have integrated various formative assessments (tests, reflective assignments, field trips) ...driven by active student involvement. (Carly, follow-up interview, April 2014)

Deana, one of the new teachers in the original research, reflected on how much she had changed, in terms of both her pedagogy and her priorities.

I have changed more than the students, integrating more technology and peerbased learning. Before I was at the blackboard talking and students were taking notes- they had no time to think. Now I model ways of solving problems and let them grapple with these- they have to go to each other for help. What is most important is that they learn. (Follow-up interview, August 2013)

The reported increase, noted above, in novel, learner-centered classroom practices was dramatic, and in sharp contrast to the results from my original study, wherein teachers, who had reached a comprehensive understanding of the learner and the learning process, were just beginning to adjust their pedagogy. The findings from the follow-up study on innovating within teaching represent a distinct change in the teachers' shift from perspectives to practice and serve once more as an example of *discontinuous*, qualitative change.

Finally, as noted in my original study, all the teachers referred to reflection as the underlying mechanism that was responsible for their deepening perspectives on teaching and learning, and that allowed them to comprehend the pedagogical processes at work in their classrooms. In the follow-up interviews reflection appeared to be even more solidly entrenched in their teaching practice, occupying a central role in their decision-making.

I am the queen of reflection! It is a conscious part of my everyday teaching. (Barb, follow-up interview, August 2013)

Over time, reflection on practice and in practice had grown to become an even more deeply embedded, intentional, integral part of their teaching. This represents an example of *continuity* in teacher development.

Evolving (professionally and personally)

During the final interviews in the original (2008) study, teachers referred to an evolution in their sense of self as teacher professionals. Their augmented knowledge of the principles of teaching and learning had led to increased self-knowledge. They also reported more enjoyment and confidence in their teaching. Anne stated:

I am much more confident in the classroom. I speak from a position of knowledge of teaching, as opposed to just my discipline. (Interview 5, June 2007)

Five years later, there was evidence of teachers' identity as both disciplinary expert and professional pedagogue continuing to evolve and they were able to articulate the nature of this change in more detail:

I am a better subject-matter expert who can teach effectively. I can talk about pedagogy more reliably...I have the theoretical framework to ground me. (Ella, follow-up interview, August 2013)

As well, in the follow-up interviews, educators continued to express enjoyment and confidence in their teaching:

I am much more comfortable with my teaching-compared to my original "hit or miss" formula. I enjoy teaching- this comes with the comfort and establishing relationships with students. (Ella, follow-up interview, August 2013)

In summary, towards the end of the original study, teachers began to think of themselves as wearing two hats- that of the disciplinary expert and the pedagogue. They also reported that teaching was becoming more enjoyable. These findings were even more apparent in the data five years later, wherein teachers articulated a more solid ownership of this dual identity. They talked about the emergence of a deeper understanding of what was transpiring in their classrooms as they worked out their role in the process. They spoke of improved relations with students, all of which led to greater satisfaction with their teaching. This serves as an example of *continuity* in development and reminds us that teacher growth is a dynamic, ongoing process.

What is noteworthy in the follow-up findings is the role that all teachers acknowledged that PD played in their ongoing evolution both in and out of the classroom. Anne reported a clarification of professional values:

A positive that PD does for my identity is that it confirms my principles as a teacher, for example, equity and transparency. (Responses to follow-up interview, August 2013)

Several teachers articulated how PD impacted their pedagogy. For example:

PD acted as a springboard that provided a reflective framework to continue to explore my discipline. This keeps me up to date and enhances my teaching. I am better able to contextualize my teaching- to bridge the theory-practice gap. (Carly, follow-up interview, April 2014)

Teachers reported that PD provided a vocabulary and a framework, and it enhanced their dealings with students, particularly when faced with adversity. PD also impacted their dealings with colleagues:

PD gave me the confidence to approach others, to be able to share (across disciplines) and truly believe in the tool...it also made me more open-minded. (Deana, follow-up interview, August 2013)

Furthermore, all the teachers stated that they recommend PD to their peers. Carly affirmed that life-long learning is important if you want to remain effective and engaging. She contextualized her recommendation regarding PD with "It depends on who the person is and what they want." Fran mentioned that new teachers should consider PD, a suggestion that has received support from several researchers (e.g., Hativa, 1998; Knight et al., 2006). It would appear that the experience of PD had significantly impacted teacher identity, both professionally and personally. These findings were consistent with teachers' prior conceptions of PD programs and therefore can be viewed an example of *continuity* in their development.

Another area I explored with the teachers in relation to PD was whether or not this experience might serve as a buffer against burnout. Watts and Robertson (2011) conducted a systematic study of the literature on burnout among university teaching staff. They identified three major contributing factors: emotional exhaustion, depersonalization and a lack of personal accomplishment. Younger staff reported higher emotional exhaustion scores.

Participants in my follow-up research generally agreed with the notion that PD can serve as a buffer against burnout. Several teachers referred to the "tools" that PD had provided.

PD helps you rejuvenate. The more tools you have, the better off you are to deal with students. (Ella, follow-up research, August 2013)

Deana admitted that so many factors affect burnout, but she agreed that PD "makes you open to change and helps you choose your battles." Barb, who had just recently completed a degree, stated that in her case, PD might have led to burnout. Fran affirmed that PD can serve as a buffer against burnout once the PD is completed, but not during the process. Although successful PD programs may help teachers remain engaged and innovative in their practice, these statements serve as important reminders of the significant work input that such programs entail for full-time academic staff. Creating incentives for teachers in higher education to engage in ongoing PD is a crucial avenue to explore.

In addition to commenting on the impact of PD on their professional identity, the teachers also alluded to how PD had affected them in terms of their personal identity. Participants reported an increase in happiness and confidence, and more openness towards their students and their peers. A number of teachers referred to a clarification of personal values that had resulted from their experience with PD. Carly commented on the intrinsic link between her personal identity and her professional identity:

What I do in the classroom, what I believe about teaching and learning and how I act and react towards students stems from my beliefs and values. These parts of my identity, and so much more, drive my decisions and pedagogy as a teacher. My personal identity overlaps with my professional identity. I know what I do because I know who I am. (Follow-up interview, April 2014)

The excerpts below from Fran (an experienced teacher) and Deana (a relatively new teacher) demonstrate the range of effects of PD on ongoing teacher identity:

PD validated me and my way of dealing with students. It provided a self-awareness, a vocabulary and framework to understand my actions and intentions. My teaching expertise was recognized. It also allowed me to find friends...kindred spirits in college. (Fran, follow-up interview, August 2013)

PD has made me more open-minded and open to change. I am more humble with my students and can admit failure- and how it was an important lesson for me. (Deana, follow-up interview, August 2013)

As outlined above, data from the follow-up interviews provide clear evidence of an evolving professional self on the part of teachers. Results also support their evolving personal self. References to increased happiness, confidence, openness to change and even humility suggest how their experience with PD has impacted their emotional development, clarified core values, and affected personal agency and behaviour. Because threads related to identity that appeared in the original findings resurfaced five years later, this serves as another example of *continuity* in teacher development.

Discussion

The primary purpose of this five-year follow-up study was to address a noted gap in the research literature concerning the longer-term impact of PD on teacher development in higher education. By identifying the three major patterns of *engaging* (outside of teaching), *innovating* (within teaching) and *evolving* (professionally and personally), this study provided important insight into this process. Results from the five-year, follow-up study highlight the role PD plays in ongoing teacher evolution, emphasize the central position reflection plays in this process

and suggest that successful PD programs can be linked, long-term, to more purposeful pedagogy, an enhanced enjoyment of teaching and teacher retention.

In the follow-up study, main findings were compared to general patterns that had emerged in the original (2008) research and they were analysed according to the principles of continuity and discontinuity. These principles enabled me to ascertain whether distinct and novel changes were emerging (i.e., discontinuity) five years later, or whether teacher evolution represented more of a deepening of phenomena as originally noted (i.e., continuity).

Results from the follow-up study showed signs of discontinuity, in that all teachers were engaged in innovative practices both within the wider college community and within their classrooms. A most encouraging sign was the increase in voluntary leadership roles teachers were assuming both within and beyond their college milieu (*engaging*, outside of teaching). A number of teachers alluded to the increase in confidence that PD had provided them, enabling them to approach others and to share their expertise across disciplines. This type of teacher involvement beyond the classroom is to be lauded. Policies that directly affect college students and teachers should be informed by pedagogues, and not merely driven by bureaucrats who frequently lack an understanding of the teaching/learning process. Another hopeful sign of teacher engagement outside the classroom was their enthusiastic description of the mentorship role many had assumed. Their job which they described as "helping other teachers figure out what they are doing in the classroom" suggests how a critical mass of dedicated, informed teachers can transform a college environment.

Another sign that also marked a break from past behaviour (i.e., discontinuity) was revealed in how teachers discussed their current pedagogical activities within their classrooms. Whereas teachers in the original study articulated how exposure to PD had impacted their perspectives on teaching and learning, there was little mention of its impact on their practice. I originally concluded that it could take from one to two years before teachers felt confident enough to experiment with novel instructional strategies (Kerwin-Boudreau, 2010b). This conclusion was further substantiated five years later, as teachers, speaking as experienced course designers, detailed how they were moving out of their comfort zone to embrace innovative classroom practices. In some cases, they had completely redesigned courses and curricula to ensure the central role of the learner. These findings support previously cited research (e.g., Kember, 1997; Kerwin-Boudreau; McAlpine & Weston, 2000) that, in order to improve the quality of teaching in higher education, changes in perspectives must precede changes in practice. All the teachers in the follow-up interviews detailed how their pedagogy had evolved in the five-year interim, highlighting the importance of studying the impact of PD on teachers, long-term. Finally, although some teachers claimed to have changed more than their students, the notion of how students were changing in response to teachers' novel practices was also mentioned. For example, Carly stated:

I see a different type of student emerging...more engaged, asking more questions, and interacting in class more. (Follow-up interview, April 2014)

This contrasts with findings from the original study that made very little mention of how teachers' evolving perspectives were impacting student behaviour and suggests that change is a dynamic process involving all players. The impact of teacher change on student behaviour and vice versa needs to be further probed.

In addition to evidence of discontinuity, there were ample indicators of continuity of patterns between the original and follow-up research. In my original study teachers had described reflection as the central process that ignited their change in perspectives. Five years later, they were even more able to articulate their reliance on reflection as the go-to tool that informed not only their evolving perspectives but also their pedagogical practice. Reflection

had become a thoroughly embedded, conscious, and indispensable part of teacher decision-making.

What was also noteworthy in the follow-up findings was the teachers' capacity to assess and articulate the impact, five years later, that PD exerted on their teaching, their relations with students and their sense of self. They described how PD had enhanced their teaching by provided a vocabulary and a reflective framework that included stepping back, assessing the situation and selecting the necessary tools to move forward. These tools were particularly useful in times of adversity and ultimately distinguished teachers who had, versus those who had not, been exposed to PD. The confidence that ensued from PD led to an increased enjoyment of teaching and improved relations with students, the latter point mentioned by all the teachers. Finally, PD impacted their sense of self, leading to increased confidence in the classroom and with their peers. The fact that the teachers recommend PD to their colleagues serves as a telling example of their endorsement of this activity. As well, their assertion that PD can serve as a buffer against burnout suggests a significant way forward in promoting PD programs in higher education, which are often voluntarily based. Augmenting one's skill set in an increasingly complex teaching/learning environment and making teaching more enjoyable are ideas that PD programs can promote. Although long-term PD programs require a considerable financial investment, successful programs that provide teachers with the opportunity to clarify their underlying beliefs, and lead to both improved teaching and learning outcomes (Norton et al., 2005; Teräs, 2016) are cost effective. This first-hand assessment by teachers in higher education of the longer-term impact of PD provides valuable information and helps to fill a gap previously noted in the research literature.

The impact of PD on the emerging self that first appeared in the original research (Kerwin-Boudreau, 2010b) was further elaborated five years later. In my original study, teachers were just becoming aware of the notion of double professionalism, outlined by Beaty (1993) as one's sense of self as both a disciplinary expert and a pedagogue. The ensuing period of five years demonstrated that new ideas need time to be processed and appropriated. Equipped with a reflective framework, post PD, teachers began to experiment with new pedagogies and as their teaching skills improved, their confidence grew. The teacher who emerged five years later reported greater happiness with their teaching and increased openness towards others. A number of teachers spoke of a clarification of personal values that intersected with and informed their teaching practice. Teachers reported more ownership of the concept of double professionalism and their sense of identity as an ongoing phenomenon was evident. The close ties that emerged in this follow-up study between the teachers' professional self and the personal self have been noted elsewhere (e.g., Wenger, 1999). It is extremely difficult to separate these two identities and it would appear that further research is needed to more accurately examine the impact of PD on teachers' professional and personal selves.

Baxter Magolda's research (e.g., 2009) has demonstrated the importance of gaining access over an extended period of time to the same participants in order to gauge whether change has occurred. To this end, the repeated interviews of six participants over two years and the process of change in perspectives that characterized the original research (Kerwin-Boudreau, 2010b), as well as the patterns that emerged from interviews with the same teachers five years later attest to the trustworthiness and persuasiveness of the findings. Qualitative researchers refer to the particularizability (Butler-Kisber, 2018) of data that emerge from highly contextualized studies such as these. Conle (1996) suggests that such findings might resonate with similar research and either confirm results or suggest new avenues to explore. Findings from this study highlight the substantial benefits that ensue, long-term, from PD and provide an informative template for educators and administrators alike. The fact that teachers enthusiastically embraced the opportunity to meet with me five years later reinforces the need

to give voice to their stories and provide them with ongoing opportunities to reflect on their perspectives and practice.

Certain limitations are evident in this five-year follow-up investigation. Teachers' thoughts about teaching and their description of their classroom practice were explored once, through an individual one-hour interview. A more extensive examination on more than one occasion of teachers' thoughts, coupled with an observation of their classroom practice would enrich and extend the data. Further probing on how enabling individual college environments were, would provide context for the findings and perhaps enable more of the challenges teachers experienced to surface. As well, the information in the follow-up study was only coded for patterns across the six participants; further analyses of individual teachers' experiences might reveal distinctions such as those that appeared in the original study (Kerwin-Boudreau, 2010b). Although the interview was conducted in a semi-structured fashion, findings emerged in concert with the 15 pre-determined areas related to teaching and learning that were explored. However, teacher knowledge also exists at a deeper, more intuitive level. Tacit wisdom, that often lies below the surface of conscious awareness, drives much of our pedagogical decisionmaking. Integrating alternate methodologies such as collage, concept mapping and more openended questioning (Butler-Kisber, 2018) would help to mine some of this rich data. The results of this five-year, follow-up study on the longer-term impact of a PD program in higher education reveal that teacher evolution is a dynamic, multi-layered and ever-changing process. The substantial findings that emerged from this one-hour interview suggest that additional follow-up is warranted. Researchers should continue to probe the long-term impact of successful PD programs on teachers in higher education to further elucidate the benefits for teachers, students and administrators alike.

On a final note, I cannot help but reflect on the unprecedented events over the past year that COVID-19 has exerted on teaching and learning in higher education. Almost overnight, educators were obliged to deliver their material through an online learning platform. What I witnessed in my local college context was the coming together of faculty online to help one another through this ordeal. Conversations that initially focused on technology quickly morphed into pedagogy, as educators collectively considered the impact of their curriculum on student learning. Perhaps one of the unforeseen benefits of this pandemic will be these critical conversations around teaching and learning that have ensued in response to this unique situation. The need is evident in higher education for the voices of informed educators to lead these discussions.

References

- Andreatta, P., Hillard, P., Murphy, M., Gruppen, L., & Mullan, P. (2009). Short-term outcomes and long-term impact of a programme in medical education for medical students. *Medical Education*, 43, 260-267.
- Baxter Magolda, M. B. (2009). Authoring your life: Developing an internal voice to navigate life's challenges. Stylus.
- Beaty, L. (1998, May). The professional development of teachers in higher education: Structures, methods and responsibilities. *Innovations in Education and Training International*, 35(2), 99-107.
- Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175-189.
- Beijaard, D., Meijer, P., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20, 107–128.

- Borko, H., (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.
- Boyd, D., Johnson, P., & Bee, H. (2018). Lifespan development (6th Canadian ed.). Pearson.
- Butler-Kisber, L. (2018). *Qualitative inquiry: Thematic, narrative and arts-informed perspectives* (2nd ed.). Sage.
- Butler-Kisber, L., & Poldma, T. (2010). The power of visual approaches in qualitative inquiry: The use of collage making and concept mapping in experiential research. *Journal of Research Practice*, 6(2), Article M18, 1-16. http://jrp.icaap.org/index.php/jrp/article/view/197/196
- Charmaz, K. (1998). The grounded theory method: An explication and interpretation. In R. Emerson (Ed.), *Contemporary field research: A collection of readings* (pp. 109-126). Waveland.
- Charmaz, K. (2000). Grounded theory: Objectivist and constructionist methods. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 509-535). SAGE.
- Charmaz, K. (2005). Grounded theory in the 21st century. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (3rd ed., pp. 507-535). SAGE.
- Charmaz, C. (2014). Constructing grounded theory: A practical guide through qualitative analysis. SAGE.
- Clandinin, D. J., & Rosiek, J. (2007). Mapping a landscape of qualitative inquiry: Borderland spaces and tensions. In D. J. Clandinin (Ed.), *Handbook of narrative inquiry: Mapping a methodology* (pp. 35-75). SAGE.
- Conle, C. (1996). Resonance in pre-service teacher inquiry. *American Educational Research Journal*, 33, 297-325.
- Hativa, N. (1998). Lack of clarity in university teaching: A case study. *Higher Education*, *36*, 353-381.
- Hativa, N. (2002). Becoming a better teacher: A case of changing the pedagogical knowledge and beliefs of law professors. In N. Hativa & P. Goodyear (Eds.), *Teacher thinking, beliefs and knowledge in higher education* (pp. 289-319). Kluwer Academic.
- Kane, R., Sandretto, S., & Heath, C. (2002). Telling half the story: A critical review of research on the teaching beliefs and practices of university academics. *Review of Educational Research*, 72(2), 177-228.
- Kember, D. (1997). A reconceptualization of the research into university academics' conceptions of teaching. *Learning and Instruction*, 7(3), 255-275.
- Kember, D., & Kwan, K. (2002). Lecturers' approaches to teaching and their relationship to conceptions of good teaching. In N. Hativa & P. Goodyear (Eds.), *Teacher thinking, beliefs and knowledge in higher education* (pp. 219-239). Kluwer Academic.
- Kerwin-Boudreau, S. (2009). The Master Teacher Program: Professional development for college teachers. *LEARNing Landscapes*, 2(2), 225-241.
- Kerwin-Boudreau, S. (2010a). The Master Teacher Program: A case for the evolving practitioner. *Pédagogie Collègiale*, 23(3), 1-7.
- Kerwin-Boudreau, S. (2010b). *The professional development of college teachers*. Mellen Press. Kerwin-Boudreau, S., & Butler-Kisber, L. (2016). Deepening understanding in qualitative inquiry. *The Qualitative Report*, 21(5), 956-971. http://nsuworks.nova.edu/tqr/vol21/iss5/13
- Knight, P., Tait, J., & Yorke, M. (2006). The professional learning of teachers in higher education. *Studies in Higher Education*, *31*(3), 319–339.
- Lawless, K. A. & Pellegrino, J. W. (2007). Professional development in integrating technology into teaching and learning: Knowns, unknowns, and ways to pursue better questions and answers. *Review of Educational Research*, 77(4), 575–614.

Lieblich, A. (1998). Reading a life story from a holistic-content perspective. In A. Lieblich, R. Tuval-Mashiach & T. Zilber (Eds.), *Narrative research: Reading, analysis and interpretation* (pp. 62-87). SAGE.

- Ling, L. M. & MacKenzie, N. (2001). The professional development of teachers in Australia. *European Journal of Teacher Education*, 24(2), 87–98.
- Maxwell, J. (2005). Qualitative research design: An interactive approach (2nd ed.). SAGE.
- Maxwell, J., & Miller, B. (2008). Categorizing and connecting strategies in qualitative data analysis. In P. Leavy & S. Hesse-Biber (Eds.), *Handbook of emergent methods* (pp. 461-477). Guilford Press.
- Maykut, P., & Morehouse, R. (1994). *Beginning qualitative research: A philosophic and practical guide*. Falmer Press.
- McAlpine, L., & Weston, C. (2000). Reflection: Issues related to improving professors' teaching and students' learning. *Instructional Science*, 28, 363-385.
- McAlpine, L., & Weston, C. (2002). Issues related to improving professors' teaching and students' learning. In N. Hativa & P. Goodyear (Eds.), *Teacher thinking, beliefs and knowledge in higher education* (pp. 59-78). Kluwer Academic.
- McAlpine, L., Weston, C., Beauchamp, J., Wiseman, C., & Beauchamp, C. (1999). Building a metacognitive model of reflection. *Higher Education*, 105-131.
- Norton, L., Richardson, T., Hartley, J., Newstead, S., & Mayes, J. (2005). Teachers' beliefs and intentions concerning teaching in higher education. *Higher Education*, 50(4), 537-571.
- Pellegrino, K., Kastner, J., Reese, J., & Russell, H. (2018). Examining the long-term impact of participating in a professional development community of music teacher educators in the USA: An anchor through turbulent transitions. *International Journal of Music Education*, 36(2), 145-159.
- Rhodes, C. (2000). Ghostwriting research: Positioning the researcher in the interview text. *Qualitative Inquiry*, 6(4), 511-525.
- Robertson, D. (1999). Professors' perspectives on their teaching: A new construct and developmental model. *Innovative Higher Education*, 23(4), 271-294.
- Rossman, G., & Rallis, S. (2012). *Learning in the field: An introduction to qualitative research.* SAGE.
- Samuelowicz, K., & Bain, J. (2001). Revisiting academics' beliefs about teaching and learning. *Higher Education*, 41, 299-325.
- Saroyan, A., & Amusden, C. (Eds.). (2004). Rethinking teaching in higher education. Stylus.
- Saroyan, A., Amusden, C., McAlpine, L., Weston, C., Winer, L., & Gandell, T. (2004). Assumptions underlying workshop activities. In A. Saroyan & C. Amundsen (Eds.), *Rethinking teaching in higher education* (pp. 15-32). Stylus.
- Schwandt, T. A. (1994). Constructivist, interpretivist approaches to human inquiry. In N. K. Denzin & Y. S. Lincoln, (Eds.), *Handbook of qualitative research* (pp. 118-137). SAGE.
- Seidman, I. (2013). *Interviewing as qualitative research* (4th ed.). Teachers College Press.
- Teräs, H. (2016). Collaborative online professional development for teachers in higher education. *Professional Development in Education*, 42(2), 258-275.
- Trigwell, K., & Prosser, M. (1996). Changing approaches to teaching: A relational perspective. *Studies in Higher Education*, *21*, 275-284.
- Watson, G. (2006). Technology professional development: Long-term effects on teacher self-efficacy. *Journal of Technology and Teacher Education*, 14(1), 151-165.
- Watts, J., & Robertson, N. (2011). Burnout in university teaching staff: A systematic literature review. *Educational Research*, 53(1), 33-50.

Wenger, E. (1999). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.

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