Professional Learning and Post-Secondary Teaching: Investigating Faculty's Lived Experiences of Development in Teaching Practice

by

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Abstract

This research study seeks to better understand the experience of mid-career development in teaching practice from the perspective of faculty themselves. This focus addresses several gaps in the current research which include: the lack of empirical research on mid-career post-secondary faculty; the lack of research on the experience of development from the perspective of faculty; and the lack of research that views development in teaching practice as a complex professional learning process that involves individual, social, and contextual elements as well as interrelationships between these elements.

To address these gaps, this research study adopts a sociocultural perspective of learning and a phenomenological approach to the research. A sociocultural perspective views learning as holistic and situated in the context of activity or practice – in this case, teaching practice. A phenomenological approach examines descriptions of experiences of a phenomenon in order to uncover an essential structure of that experience.

This research study employed a descriptive phenomenological approach using data from 12 interview participants and 21 survey participants. Participants were full-time mid-career college faculty and came from two different institutions. The interview and online survey questions were phenomenological in that they were designed to elicit rich descriptions of the raw experience of development in teaching practice. The data was analyzed using Giorgi's (2009) descriptive phenomenological approach and from the analysis, a structure of the experience of development in teaching practice emerged.

The findings of this study are related to the multi-phased and multidimensional structure of experience that emerged from the data. This structure includes four phases of the experience – a catalyst phase, an idea development phase, an implementation phase, and an outcomes phase. Each phase involves individual, social, and contextual elements as well as interrelationships between these elements. These interrelationships are examined through the lens of Billett's (2002) theory of co-participation, a theory that views workplace learning as resulting from an interaction between workplace affordances and individual engagement. This multi-phased and multidimensional structure offers a conceptual basis for deconstructing professional learning related to development in teaching practice for mid-career college faculty.

Keywords: educational development, faculty development, post-secondary teaching, professional learning, socio-cultural learning, phenomenological research,

Dedication

I wish to dedicate this research project to all the passionate and dedicated teachers I have had the privilege of working with throughout my career for their commitment to continuous professional learning. I thank them for their courage to take risks in the classroom for the enhancement of student learning, for their endless hope and belief in students' potential, for their creativity and thoughtfulness in motivating meaningful learning, and for making their own learning an important part of their professional lives. Our learning institutions and our society are indebted to you for the difference you make in people's lives every day. You are a source of great inspiration to me, to your students, and to your colleagues.

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Executive Summary

The main question of the research study is, “How do full-time, mid-career college faculty experience the process of development in teaching practice?” Using a descriptive phenomenological research approach, it seeks to better understand the authentic learning processes of teacher professional learning and the interrelationships between the individual, social, and contextual elements of this developmental learning process. The goal is to gain a richer understanding and conceptualization of this professional learning process in order to improve the design of support for teaching development within post-secondary institutions.

Chapter 1 examines the context and purpose for this research with a focus on the complexity of teaching practice and hence the complexity of development related to that practice. It also discusses the importance of increasing the effectiveness and institutional impact of educational development as part of society’s call for improvements in the quality of post-secondary teaching and learning.

Chapter 2 reviews empirical literature to establish that the development of teaching practice is a professional learning process that needs to be understood as a complex sociocultural process involving interrelationships between individual, social, and contextual dimensions. To achieve this, it draws on research from the fields of post-secondary faculty development, K-12 teacher learning, and professional workplace learning with the belief that each of these contributes in important ways to our overall understanding of this professional learning process.

Chapter 3 discusses the theoretical orientation of the study, which consists of three nested orientations. At the highest level, it is grounded in the philosophical orientations of phenomenology and sociocultural theory. At the next level, it adopts Billett’s model of co-participation as a theoretical lens for considering the interrelationship between individual and contextual elements of professional learning. Finally, it draws on several additional learning theories that enhance our understanding of the individual, social, and contextual elements of faculty professional learning as it relates to post-secondary development in teaching practice.

Chapter 4 outlines the phenomenological research process used for this study, which is based on Giorgi's (2009) descriptive phenomenological method. The phenomenological method was selected for this study because its approach supported the research question and because its epistemological assumptions aligned with the theoretical orientations described in Chapter 3.

Chapter 5 presents the findings of the study based on a structure of essences that emerged from a phenomenological analysis of the data. The structure includes individual, social, and contextual essences for four phases of the experience of development in teaching practice. These four phases include a catalyst dimension, an idea development phase, an implementation phase, and an outcome phase.

Chapter 6 discusses the research findings through the lens of the existing literature and explains the various ways that this study has contributed to our understanding of mid-career teacher professional learning related to teaching practice. Based on this discussion, the chapter examines a variety of possible implications for educational development for mid-career post-secondary faculty.

Chapter 1. Research Context and Purpose

1.1. Complexity of Teaching and Quality Improvement in Post-secondary education

Teaching practice that focuses on the facilitation of meaningful student learning involves many interrelated individual, social, and contextual dimensions. These interrelationships make such teaching extremely complex and the professional learning, related to the development of that practice, similarly complex. In order to achieve society's goals related to improving the quality of learning in post-secondary education, the professional learning process involved in such development needs to be considered and better understood through a lens that acknowledges these interrelated dimensions and is based on the lived experiences of the faculty themselves.

1.1.1 The complexity of classroom teaching

Classroom teaching is complex, particularly when it is focused on enabling deep student learning, learning that goes beyond memorization and recall. Over the last 20 years, my professional work as a teacher, instructional designer, and faculty developer, has affirmed for me the legitimacy of Shulmans' (2004) conclusion that "classroom teaching is perhaps the most complex, most challenging, and most demanding, subtle, nuanced activity that our species has ever invented" (p. 504). Although Shulman's comment is based on extensive research in the K-12 context, my experiences in elementary, secondary, and post-secondary classrooms, suggest that his conclusion is applicable to all levels of formal classroom teaching. It is particularly true when one conceives of teaching as a professional practice that moves beyond the simple transmission of information to a practice of facilitating learning and enabling learners to apply and make meaning of the subject matter. Such learning is generally referred to as deep learning as opposed to surface learning (Entwistle, 2007, 2010). In the post-secondary education literature, research shows that a teacher's conception of teaching practice is

intricately linked to students' approaches to learning and ultimately to the quality of that learning (Barnett, 2004, 2009; Entwistle, 2010; Prosser & Trigwell, 1999; Trigwell, Prosser & Waterhouse, 1999; Prosser, Martin, and Trigwell, 2010). Studies by Prosser, Trigwell et al. show that teacher-focused, transmission oriented approaches to teaching promote surface or memorization oriented learning approaches among students, and that student-focused, learning oriented approaches to teaching promote deep or conceptual understanding oriented learning approaches among students. Hence, if we want post-secondary education to enable deep student learning, more attention needs to be paid to supporting authentic teacher learning processes and acknowledging the complex individual, social, and contextual interrelationships required to facilitate such learning.

1.1.2 Quality improvement in post-secondary education

Quality assurance discussions related to improving student learning in post-secondary education, are generally referring to deep learning as opposed to surface learning (Canadian Council on Learning, 2009; HEQCO, 2010). However, transmission or surface oriented approaches to teaching still dominate the landscape in post-secondary education and, in many cases, faculty in post-secondary education do not conceive of teaching practice as anything beyond the transmission of information, let alone the type of deep learning described above (Akerlind, 2003; Knapper, 2010). While government policies and institutional mandates are important, at the end of the day it is the classroom teacher that has the most direct influence on student learning (Entwistle, 2007; Lindblom-Ylänne, 2010; Vermunt, 2007). If, as a society, we want more of our post-secondary graduates to demonstrate deep, conceptual understanding in their areas of study and acquire the ability to apply this understanding in meaningful ways, then significant attention needs to be paid to supporting teachers in the development of their teaching practice and to engaging them in the pursuit of this desired aim. Despite the importance of helping teachers in post-secondary education develop their practice from transmission oriented approaches to student learning oriented approaches, little attention has been paid to this professional learning process in post-secondary education.

1.1.3 Quality improvement and teaching practice

Moving teaching practice from focusing on the transmission of information to enabling deep student learning is a complex professional learning process with many individual, social, and contextual dimensions (Bamber, Trowler, Saunders, & Knight, 2009; Davis, 2008; Opfer & Pedder, 2011; Timperley & Alton-Lee, 2008; Trowler, 2008). Based on K-12 sector research, Shulman (1987, 2007) explained how teaching that is focused on the facilitation of deep learning, requires not only subject-matter knowledge, but several other types of knowledge including general pedagogical knowledge, knowledge of the learners, knowledge of the learning context, knowledge of learning processes specific to their discipline, curriculum knowledge, and assessment knowledge. Acquiring such knowledge and gaining the confidence and skills to apply the knowledge effectively to classroom practice involves a professional learning process that remains poorly understood in post-secondary education (Kreber, Castleden, Erfani, & Wright, 2005; Mälkki & Lindblom-Ylänne, 2012; Sadler, 2012a; Stes, Min-Leliveld, Gijbels, & Petegem, 2010).

Having taught in various contexts and at various levels of education (including K-12, adult education, and post-secondary education), and having experienced professional learning related to a variety of individual, social, and contextual dimensions, I believe that several similarities exist across educational contexts. On an individual level, such professional learning requires profound conceptual changes related to the role of the teacher, the meaning of content, and the nature of learners and learning (Weimer, 2002). Adopting a teaching approach that focuses on enabling student learning as opposed to transmitting information can require significant epistemological and/or ontological changes on the part of teachers as well as on the part of their students. Implementing teaching practices that focus on enabling student learning can involve immense risks in the classroom because, given the dominance of transmission oriented teaching, clear examples and models of learning-oriented approaches are rarely available. On a social level, adopting teaching practices that do not align with the status quo can meet resistance from students, colleagues, and administrators. As well, given the continuous advances in technology and the increasing diversity of our population, the social context of the classroom is constantly changing and very little information is available on a timely basis to help teachers navigate these changes. On a contextual level, changes in teaching and assessment practices can create the need to question and revise policies, assessments, and/or curriculum, processes that are deeply embedded in disciplinary,

institutional and departmental histories and cultures. Research shows that social narratives, as well as people's individual narratives, resist such change (Kegan & Lahey, 2009). As a result, teachers, who strive to develop in their teaching practice and enable deep student learning in any formal educational context, must engage in a change process that requires not only a re-evaluation of learning goals, teaching and learning activities, and assessment activities, but also a re-evaluation of themselves as teachers and of their students as learners.

Although we can be informed by the work done on teacher learning in the K-12 sector and thus the general phenomenon of teacher development, moving from a transmission or surface oriented teaching approach to one that enables deep student learning in post-secondary education involves many individual, social, and contextual factors that do not exist in K-12 education (Entwistle, 2007, 2010; Richardson, 2001). Some of the individual factors that are unique to post-secondary education include both the focus on individuals' subject matter expertise as a primary condition for being hired as a teacher as well as the general lack of preparation for the role of teaching and hence the lack of understanding of learning processes. Social factors include things such as the lack of rewards for and acknowledgement of effective teaching as well as the lack of emphasis on the quality of learning that results from instructional practices. Social norms that exist for the post-secondary classroom, both from the teacher and student perspective, are firmly rooted in the practices of teacher focused, transmission oriented approaches (i.e. teachers lecture while students passively absorb information and memorize it for tests). These practices are further supported by contextual elements such as classroom design and assessment practices. Another social factor that is unique to post-secondary education is the age and developmental stage of the students. Ranging from young adults to mature adults, post-secondary education students are oriented towards the goals of adulthood (i.e. careers, financial, relationships). Other contextual factors include things such as class sizes, institutional mandates, expectations of professional accreditation bodies, and the commodification and intensification of post-secondary education (Trowler, 2008). All of these factors work together to create a complex multidimensional landscape for teacher professional learning as it relates to the development of student-focused, learning oriented approaches to instruction. Trowler, Saunders, & Bamber (2009) support the argument for a multidimensional approach to quality enhancement efforts, with respect to teaching and learning, saying that "enhancements of practice are produced by a complex array of individually and collectively induced incentives, histories, and values" (p. 2). A better understanding of the interrelated

individual, social, and contextual elements of development in teaching practice is necessary for supporting and promoting such development in post-secondary education.

1.1.4 Teacher professional learning processes

In order to support and promote development in teaching practice in post-secondary education, there is a need to better understand teacher development as a complex professional learning process, one that includes many interrelated individual, social, and contextual dimensions. Such an understanding of professional development, one that acknowledges and takes into account the complex and situated nature of facilitating deep learning in the post-secondary classroom, is needed if professional learning efforts are to result in instructional changes that enhance teaching and learning in post-secondary education (Dall'Alba & Sandberg, 2006; Entiwistle, 2007, 2010; Knight, Tait, & Yorke, 2006; Fitzmaurice, 2010; Webster-Wright, 2010, Weimer, 2010). Each time I step into a classroom, either as a teacher or an observer, I am acutely cognizant of the complex interplay between a variety of individual, social, and contextual elements. Unfortunately, they are rarely acknowledged in discussions about development in teaching practice (Eraut, 1994; Kane, Sandretto, & Heath, 2002; Saunders, Bamber, & Trowler, 2009). Although there are exceptions (Amundsen, Alenoush, & Frankman, 1996; Knight & Trowler, 2000; Kreber, 2010; McAlpine & Weston, 2000), the research literature tends to examine aspects of faculty development in a way that isolates or disconnects them from the complexity of actual practice. Examples of this include discussions on teaching conceptions and their impact on student learning, faculty development programs and/or teaching strategies (Trigwell, 2010); faculty engagement in development activities (Gillespie, Robertson, & Associates, 2010), and learning-centred teaching (Ramsden, 2003). Although researchers in the K-12 context have begun to acknowledge the need for an approach to teacher professional learning that situates such learning in the context of practice (Borko, 2004; Opfer & Pedder, 2011; Timperley & Alton-Lee, 2008), they also call for a "more complex conceptualization of teacher professional learning" (Opfer & Pedder, 2011, p. 377), one that moves beyond a focus on activities or programs and seeks to acknowledge the complex interrelationships between individual, social, and contextual factors in this learning process. In my primary professional role as a faculty developer, I believe that a better understanding of teacher professional learning processes is needed in order to more effectively support faculty continuous professional learning related to development in teaching practice.

The underlying premise of this thesis research is that discussions about post-secondary teacher learning, as it relates to the development of teaching practice, under-acknowledge or largely overlook the complex and multidimensional nature of learning-centred teaching practice and hence the complex and multidimensional nature of the professional learning process involved in development of this practice. As well, it contends that, to better understand this professional learning process, more empirical data is needed that explores the experiences of faculty themselves and that acknowledges the interrelated individual, social, and contextual dimensions of these experiences. In the post-secondary education context, relatively little attention has been paid to understanding the complex professional learning process that faculty experience as they move their teaching practice from one that is focused primarily on the transmission of information to one that enables deep student learning. A richer understanding of faculty professional learning processes, related to development in teaching practice, will enable informed design of more effective professional learning environments to support teachers in this complex learning process. That is ultimately the goal of this thesis research.

1.1.5 Mid-career faculty professional learning

Specifically, this thesis research seeks to better understand how mid-career post-secondary teachers experience the process of continuous professional learning related to development of their teaching practice. According to Baldwin and his colleagues (Baldwin, Lunceford & Vanderlinden, 2005; Baldwin, DeZure, Shaw & Moretto, 2008) this is an important group of faculty that has typically been under-researched and overlooked. Baldwin et al. (2005) contend that this group of faculty deserves more attention and empirical investigation because the mid-career period is the longest and often the "most productive phase of academic life" (p. 98). As well, Baldwin et al. (2008) explain how mid-career faculty are at a professional stage that has several unique characteristics, compared to novice teachers. First, since their jobs are secure, they experience fewer extrinsic motivators for improving performance. Second, they are more likely to "reach a career plateau where professional goals are less clear, even while an array of…personal and professional options may be available" (p. 48). Without motivating professional goals, mid-career faculty may experience higher levels of disengagement and, given the increasing rates of social change discussed earlier and the need for development to cope with these changes, we can appreciate why understanding how to support faculty

development needs at this specific stage are important. To this end, Baldwin et al. (2005), argue that

> It is important to know how the large middle component of the academic profession is adapting to changed work demands and performance expectations while, simultaneously, they are serving critical instructional, leadership, administrative, and mentoring roles within their programs and institutions. (p. 100)

Although focused primarily on faculty in research universities, Baldwin concludes from his body of research (Baldwin & Blackburn, 1981; Baldwin et al., 2005; Baldwin et al., 2008) that many mid-career faculty experience lack of attention and neglect despite the fact that they comprise the largest group of full-time employees in the academic workforce. In this study, mid-career faculty are defined using Baldwin et al.'s (2005) definition which is faculty with 6-20 years of full time post-secondary teaching experience. Adding to Baldwin's research from the perspective of community college faculty would enhance our understanding of mid-career faculty experiences within academic institutions.

In summary, this research responds directly to the recommendation of Menges & Austin (2001) in their review of research in post-secondary education - that more research is needed that examines how teachers in post-secondary education learn and develop over time and that takes account of the "complexities of the personal, organizational, and political contexts of teaching and learning" (p. 1148). Accordingly, this research considers development in teaching practice as a professional learning process; one that involves a change in the teacher's knowledge, skills, or attitudes resulting in improvements in student learning, as perceived by the teacher. Consistent with much of the current literature, it takes the position that this experience needs to be better understood as a process that views the individual, social, and contextual dimensions as interrelated (Davis, 2008; Entwistle, 2010; Opfer & Pedder, 2011). In the individual dimension, this thesis research assumes that there are emotional, cognitive, epistemological, and ontological components that influence the development process (Kegan, 1982, 1994). In the social dimension, it assumes that all learning involves a complex interplay between multiple individuals and multiple social contexts. In the contextual dimension, it assumes that development in teaching practice is a professional activity that is embedded within a larger institutional and cultural context and that this inevitably impacts continuous professional learning process.

1.2. Teacher Learning Processes and the Field of Educational Development

There is a universal call for improving the quality of student learning in post-secondary education. Although there are many dimensions to this call, we know empirically that pedagogical practice has a significant impact on student learning (Entwistle, 2010; Trigwell, Prosser, & Waterhouse, 1999). Despite such pressure and such evidence, teacher learning processes related to moving from transmission oriented approaches to deep learning oriented approaches are rarely researched or discussed in the teacher professional learning literature. This is particularly troublesome when it comes to the field of educational development, which has arisen in response to such pressure and evidence.

1.2.1 The field of educational development

Quality assurance agencies around the world are calling for improvements in the quality of post-secondary education (Bamber, Trowler, Saunders, & Knight, 2009; Canadian Council on Learning, 2009; HEFCE, 2009; HEQCO, 2010). Although these calls for improvement have many dimensions, including access, accountability, engagement, and integration with the larger society, the enhancement of the quality of teaching and learning is a significant part of this agenda. As discussed earlier, teaching practice has been shown empirically to have a significant impact on student learning (D'Andrea & Gosling, 2005; Entwistle, 2010; Trigwell, Prosser, & Waterhouse, 1999). As well and more broadly, the quality of student learning is seen as directly related to the achievement of economic objectives related to innovation, international competitiveness, the application of research to business challenges, and the skill improvement of the workforce as well as social objectives related to the development of active citizens and the development of a more tolerant and inclusive society (HEFCE, 2009). These factors have contributed to significant growth in the field of educational development which, although it has existed since the 1970s, has seen dramatic growth in the last 20 years in terms of the number of educational developments specialists, the body of research, and the publication outlets (Christensen Hughes & Mighty, 2010; Schroeder & Associates, 2011; Sorcinelli, Austin, Eddy & Beach, 2006).

Today, the majority of post-secondary institutions have established departments specifically focused on enhancing teaching and learning throughout the institution (Sorcinelli et.

al., 2006). Focus on the improvement of teaching practice has raised the profile and influence of the field of educational development, a field alternatively referred to as faculty development, instructional development, and academic development (Amundsen & Wilson, 2012; Gosling, 2009). These departments are structured based on a variety of orientations to promoting and supporting the development of professional practice (Blackmore, Chalmers, Dearn et al., 2003; Gosling, 2003; Land, 2001, 2003; Rowland, 2003) and offer a diverse array of programs and services designed to support faculty professional learning at individual, departmental, and organizational levels (Amundsen & Wilson, 2012). In a systematic review of the literature, Stes, Min-Leliveld, Gijbels et al. (2010) describe these variations as follows:

> Professional development, faculty development, and academic development are terms related to instructional development as well; however, each concept has its own specific focus. Whereas instructional development explicitly aims to develop faculty in their role as a teacher, professional development concerns the entire career development of a faculty member and is not limited to teaching, but also considers research and social services (Centra, 1989). The terms academic development and faculty development have the same focus as the concept of professional development, but they also include the aspect of organizational development as described above. While the term academic development is used in Australasian and British contexts, the term faculty development is common in North America (Taylor & Rege Colet, 2009). The concept of educational development is used by Taylor and Rege Colet to indicate the whole range of development activities as described above: instructional, curriculum, organizational, professional, academic, and faculty development. (Stes et al., 2010, p. 25-26)

Despite these varying perspectives, Macdonald (2003) claims that there is widespread agreement regarding educational development as a field "which encompasses those activities concerned with developing learning and teaching at individual, departmental, faculty, institutional, and even at national/international levels" (Macdonald, 2003, p. 4). In a conceptual review of the educational development literature in post-secondary education, Amundsen & Wilson (2012) use the term educational development "to describe actions, planned and undertaken by faculty members themselves or by others working with faculty, aimed at enhancing teaching" (p. 90). This definition aligns with the way teacher development is understood in this research. What remains missing from educational development discussions, however, is the notion that efforts to enhance teaching need to be based on a deeper theoretical and conceptual knowledge of teacher learning related to the development of professional practice. I contend that this is an aspect of the educational development field that requires significantly more attention and research in order to achieve the quality goals that are driving its growth.

1.2.2 The conceptualization and practice of educational development

In the post-secondary educational development literature, the conceptualization of educational development practice minimizes and/or neglects completely the notion of teacher professional learning as a complex, situated and multidimensional processes. In this literature, the dominant focus remains on the elements, factors or content of professional development (a program orientation) (Gillespie, Robertson, & Associates, 2010), as opposed to how teachers authentically learn and improve their professional practice (a learning orientation) (Webster-Wright, 2009). The program orientation focus persists despite the fact that such an orientation has been repeatedly shown as inadequate for promoting continuous professional teacher learning (Stes, et al., 2010). Although the two orientations are interrelated, I would argue that they have fundamentally different conceptual underpinnings. As previously discussed, the program orientation focuses on what to deliver with respect to professional development activities and is based on atomistic development related to the technical knowledge and skills or competencies of a profession (lesson planning, using technology, designing assessments). A learning orientation, on the other hand, is based on a deep understanding of how teachers learn and is grounded in a situated conceptualization of that learning as well as the professional practices and processes related to such learning. Although both are needed, I argue that, until a deeper theoretical and conceptual understanding of the phenomenon of teacher professional learning informs the practice of educational development, the field will remain ill equipped to make grounded and effective decisions related to the design of activities and programs. As a result, activities or programs may or may not necessarily achieve the intended results.

A review of several volumes in the field of educational development (Eggins & Macdonald, 2003; Sorcinelli et al., 2006; Gillespie & Robertson, 2010; Lawler & King, 2000; Saroyan & Frenay, 2010) reveals a significant neglect in discussing teacher learning processes generally and particularly discussing these processes as complex, situated, and multidimensional. The focus in these volumes is on aspects of the field such as: educational development programs and practices, understanding the overall field, conceptualizations and models, research methods, and knowledge and skills needed by the educational development professional. From an instructional design perspective, it is shocking how little attention is paid to the theoretical basis for understanding teachers as professional learners and for understanding their learning processes. From the perspective of learning design, it is almost impossible to develop effective learning support systems without a deep and evolving

understanding of your learner and a coherent theoretical basis for the learning processes you are trying to support (Jonassen & Land, 2000). Exceptions to these dominant perspectives do exist in the work of educational developers such as: Amundsen, Saroyan, & Frankman (1996), Knight, Tait, & Yorke (2006), Kreber (2009); and McAlpine & Weston (2000). The work of these researchers, which is discussed in more detail in chapter 2, begins to contribute to an understanding of faculty learning processes and to acknowledge the complex interplay between individual, social, and contextual elements.

Critiques regarding the neglect of discussions related to teacher learning processes in teacher professional development literature are also found in the K-12 literature (Evans, 2008; Penuel, Fishman, Yamaguchi, & Gallagher, 2007; Timperley & Alton-Lee, 2008). A current, edited volume in the K-12 context called *Teacher Learning that Matters: International Perspectives* (Kooy & vanVeen, 2012), reinforces this neglect. Based on their extensive review of the teacher learning research (11 reviews and 34 additional studies on PD interventions), we see that the focus of such research remains primarily on what makes effective professional development (a program planning orientation) as opposed to how teachers learn (a learning orientation). Kooy and van Veen identify several problems with this body of research including, unclear measurements of "effectiveness", lack of coherence regarding 'a theory of improvement', and too small samples of teachers involved in a single intervention. Despite these weaknesses, they do pull out effective features of teacher professional development based on their review. These features, which are similar to those presented by Richardson and Placier (2001) include: connected to everyday practice; focused on subject-specific issues of practice such as pedagogical content knowledge and student learning processes of a specific subject; grounded in evidence-based or evidence informed content; designed to include active and inquiry-based learning as well as collective participation; sustained over a time for a sufficient duration; and perceived as coherent with the teaching context. They claim that the organizational dimension is neglected in most studies. In a chapter called, *Professional Learning: Creating Conditions for Developing Knowledge of Teaching*, John Loughran cites a study by Wei, Darling-Hammond, Andree, Richardson, & Orphanos (2009) that examined the nature of teacher PD programs throughout the United States. These researchers argued that "the structures and supports that are needed to sustain teacher learning and change and to foster job embedded professional development in collegial environments fall short of that which is necessary for real change" (cited in Loughran, 2012, p. 50). It is interesting, that despite the

long history of teacher professional development at the K-12 level in comparison to post-secondary education, many of the issues and critiques related to how the field is conceptualized and enacted are similar.

Along with others mentioned earlier (Dall'Alba & Sandberg, 2006; Knight, Tait, & Yorke, 2006; Webster-Wright, 2010) I contend that, without a clear understanding and articulation of the theoretical and conceptual underpinnings of the very phenomenon being enacted and supported, namely the learning processes of post-secondary faculty engaged in the development of their practice, it will be difficult for the field of educational development to increase its effectiveness in this domain. It is such an understanding that is needed for informed discussions of educational development practice and for ensuring that educational development efforts align with and support the underlying learning processes involved in achieving the complex cognitive, affective, and behavioral goals of development in teaching practice.

1.3. Teacher Learning: A Complex Professional Learning Process.

Another indication of the inadequacy of educational development is that, despite the extensive resources being leveraged for development of teaching practice, post-secondary "teaching remains largely didactic, assessment of student work is often trivial, and curricula are more likely to emphasize content coverage than acquisition of lifelong and life-wide learning skills" (Knapper, 2010, p. 229). Several faculty developers, who have been involved in facilitating instructional development for many years, echo Knapper's concerns (Christensen-Hughes & Mighty, 2010; Gibbs & Coffey, 2004; Ramsden, 2003). I would argue that this lack of systemic change in instructional practice adds to the argument that more needs to be understood about teacher learning processes and the complex interrelationships between the individual, social and contextual dimensions related to the development of teaching practice.

1.3.1 Teacher learning as professional learning

In literature related to professional learning in occupations other than teaching, we also find critiques of approaches that do not acknowledge the interrelationships between individual,

social, and contextual dimensions. Eraut (1994) has long criticized approaches to professional learning in several professions (teaching, health sciences, engineering and accounting) for assuming that the accumulation of propositional knowledge will lead to improvements in practice. As Eraut and others explain, such an approach to professional development makes significant assumptions about peoples' ability to integrate that knowledge into practice; assumptions that are unsupported in the research. Eraut (2007a) contends that understanding learning related to professional practice needs to acknowledge learning in three dimensions: (1) the elements of practice – situational, decision-making, actions, monitoring; (2) the modes of cognition and their dependence on time available for thinking; (3) the context and its influence on cognition and learning. He says that all three of these dimensions constitute an "epistemology of practice that treats sociocultural and individual theories of learning as complementary rather than competing" (p. 405). Other professional and workplace learning researchers also call for such learning to be based on a deeper understanding of the authentic learning processes. Such learning processes would acknowledge the interaction between individual, social, and contextual factors (Billett, 1996, 2006, 2009b) and would be based on experiences of the professionals themselves (Webster-Wright, 2009). Webster-Wright's review of professional learning articles, written in 2006-2007 across 5 professions including teaching, found that professional development discourse remains focused on the provision of activities and programs rather than on an understanding of learning experiences of the professionals themselves. She argues that the current research discourse on professional learning continues to place a disproportionate focus on content delivery and decontextualized skill development and fails to conceptualize professional learning as holistic (cognitive, social, emotional) and deeply situated in the context of everyday practice. She contends that the "experience of learning, especially continuing professional learning (CPL) is still poorly understood" (p. 704) despite decades of research and theorizing about such learning. According to Webster-Wright:

> The experience of learning in every day practice is rarely studied in a way that maintains the integration of all these aspects. There is a need for more research beyond the "development of professionals" that investigates the 'experience of PL [professional learning]" as constructed and embedded within authentic professional practice. (p. 713)

She argues for a reconceptualization of professional learning as something that treats the professional as an engaged, self-directed learner, as opposed to someone who is deficient in their knowledge and/or skills and in need of development. Such a conceptualization, says

Webster-Wright, requires research that “views the learner, context, and learning as inextricably interrelated rather than acknowledged as related, yet studied separately” (p. 712).

1.3.2 Situated nature of teacher learning

Even though the research addressing teacher professional learning in the K-12 context is relatively more developed than that in post-secondary education, both in sheer quantity of research and in its inclination to pay more attention to its complex and multidimensional nature, we find similar critiques regarding the inattention to the teacher’s professional learning processes (Borko, 2004; van Veen, Zwart, & Meirink, 2012). Borko describes most professional development activities as fragmented, intellectually superficial, and not based on what we know about how teachers learn. She advocates a situative perspective for both the research and facilitation of teacher learning. Building on the ideas of Lave & Wenger (1991), she describes this perspective as one that conceptualizes learning as occurring through the interaction between the individual and the sociocultural context. For teachers, says Borko, “learning occurs in many different aspects of practice” (p. 4). This includes their classrooms, their school communities, collegial interactions, student interactions, and professional development activities. Some aspects of teacher learning that emerged from Borko’s review are that “meaningful learning is a slow and uncertain process for teachers, just as it is for students” (p. 6); that, although teachers welcome opportunities to engage in conversations about their work, it is much more difficult to engage them in dialogues that challenge assumptions and ask them to critically examine current practices; and that the contexts of teaching are powerful influences on teacher learning. She argues that studies of teacher learning, must take into account “both the individual teacher-learners and the social systems in which they are participants” (Borko, 2004, p. 4). This is supported by several other K-12 researchers (Kagan, 1992; Shulman, 2004; Wideen, Mayer-Smith, & Moon, 1998). Although studies exists that view teacher learning as a complex situated process (Clarke & Hollingsworth, 2002; Timperley & Alton-Lee, 2008; Opfer & Pedder, 2011), these researchers claim that the results of their work are still largely ignored in the design of support for teaching development.

Despite the existence of research in K-12 acknowledging teacher learning as a complex situated process, it is important to recognize that there are significant translation issues for the unique context of teaching and professional teacher learning in post-secondary education that

need to be studied and understood separately. Menges & Austin (2001) describe the post-secondary teaching context as unique from the K-12 environment in several ways. First, in post-secondary contexts, education is geared towards adults instead of children and towards societal goals including research, economic and sociocultural development, or employment. Post-secondary faculty generally engage in teaching as secondary to their identities as researchers or professionals in a particular field and, as a result, apart from their own experiences as a student, most faculty have minimal preparation for the multifaceted role of facilitating learning, let alone deep learning. Because most post-secondary faculty are primarily oriented to their discipline or profession when they enter the institution, they may go through their entire faculty career thinking of themselves only as a career professional or scholar (i.e. an economist, political scientist, biologist or doctor) rather than an educator. Their primary identity remains with their discipline or profession. This can become quite a barrier in improving the quality of student learning in post-secondary education because their focus remains on communicating what they know about their discipline, rather than on the facilitation of student learning related to their discipline, which are two very different processes (Healey & Jenkins, 2003; Knight and Trowler, 2000).

Further to that, unlike other complex professions such as medicine, engineering, and law, where professionals undergo intensive education and training for all aspects of their profession, post-secondary faculty assume their teaching role with little or no education related to applying relevant theoretical concepts, knowledge, and skills to the practice of being an effective educator. This includes an understanding of the psychological and sociological aspects of learning as well as the professional skills needed to effectively facilitating student learning (Menges & Austin, 2001). Without a formal theoretical or knowledge base to inform their teaching practice, personal theories and assumptions guide faculty approaches. Both Fenwick (2003) and Eraut (1994, 2000) have explained how such personal theories and assumptions can prove inadequate in professional situations and often make it difficult to conceptualize and adopt new approaches to one's practice. In terms of continuous professional learning related to teaching practice, most post-secondary faculty rely primarily on their own experience in the classroom (Warhurst, 2008). Although experience is a powerful catalyst for learning, this learning is limited if the experience is not processed and considered through new and/or alternative lenses (Brookfield, 1995; Eraut, 1994; Fenwick, 2003). Because post-secondary teaching is often an isolated and solitary activity, immediate environments may not provide

opportunities to learn from experience in a way that expands one's thinking, challenges existing knowledge and beliefs, and develops one's practice related to the facilitation of learning (Healey & Jenkins, 2003; Neumann, Parry, & Becher, 2002; Warhurst, 2008).

Teacher learning, related to the development of teaching practice in postsecondary education, needs to be understood within this unique context and so, although the K-12 literature on teacher learning is useful, it is not adequate. More needs to be understood about post-secondary teacher learning in light of the unique individual, social, and contextual elements related to this specific professional learning process.

1.3.3 Interrelated individual, social, and contextual dimensions of teacher learning

Menges & Austin (2001) point out that most of the studies related to teacher learning are survey analyses which "typically take account of only a very few variables at a time and, thus, obscure distinctions that are critical for understanding the life of any particular teacher" (p. 1129). They support the notion that research on teacher learning "should attempt to account for the complex and simultaneous effects of developmental, affective, and motivational influences, as well as cognitive factors" (p. 1122). In an earlier article, Menges (2000) offers a framework for research about teaching in post-secondary education that includes four areas: teacher, learner, content, and context. He argues that, to expand our understanding of teaching in post-secondary education, research needs to address areas where these components overlap or intersect. He advocates for research that recognizes "the importance of context-specific investigations, including personal, organizational, and political contexts, as well as the perspectives of the participants in teaching and learning" (Menges, 2000, p. 8).

1.3.4 Focus of this research study and outline of the thesis

In the field of post-secondary education faculty development a few researchers have begun to respond to the gaps identified by Menges and Austin (2001); those of understanding professional learning from the perspective of the teachers and of recognizing the importance of context in research investigations. Research on the development of teaching practice from the perspectives of the faculty themselves includes: Amundsen, Saroyan, & Frankman (1996), Amundsen, Gryspeerdt, & Moxness, (1993), Akerlind, (2003, 2005a, 2007), and Van Eekelen,

Boshuizen, & Vermunt, (2005). Knight, Tait, & Yorke, (2006) investigated faculty professional development using a research lens that acknowledged the complex interrelationships between individual, social, and contextual dimensions. Only a small number of researchers have integrated both of these gaps into a single research study (Gregory & Jones, 2009; Kreber, 2010; Warhurst, 2008). Although this study hopes to contribute broadly to the research on faculty professional learning, it aims specifically at making a contribution that integrates both of the gaps identified by Menges and Austin.

This thesis research intends to further our understanding of faculty's authentic experiences of the professional learning process related to the development of teaching practice in a way that acknowledges the interrelationships between individual, social, and contextual elements. Based on the work of Amundsen & Wilson (2012), it defines development in teaching practice as a change in knowledge, skills, attitudes or beliefs that result in improvement in student learning. Specifically, it will add to the empirical research in several ways. First, this study will focus on the experiences of faculty themselves related to development in their teaching practice. Second, it will probe these experiences to uncover the interrelationships between various individual, social, and contextual dimensions. Third, it will focus on the experiences of mid-career faculty whose learning paths may or may not have included formal development programs. Finally, the sample will include multiple individuals at multiple institutions and to try to uncover common elements of experiences across individuals and contexts.

The main question of the research study will be, "How do full-time, mid-career college faculty experience the process of development in teaching practice?" As mentioned earlier, development in teaching practice in this study will be defined as a change in knowledge, skills, attitudes or beliefs that resulted in improvement in student learning, as perceived by the teacher. Based on the retrospective phenomenological descriptions of lived experiences, the goal of this thesis research is to better understand the authentic learning processes of teacher professional learning and the interrelationships between the individual, social, and contextual dimensions of this developmental learning process. I believe that in order to better support teachers in continuous professional learning related to their teaching practice, it is critical to explore this learning process through the actual experiences of faculty themselves. I contend that a richer understanding and conceptualization of this professional learning process will result

in more informed and effective approaches to the design and support of teaching development within post-secondary institutions.

Chapter 2 reviews empirical literature to establish that the development of teaching practice is a professional learning process that needs to be understood as a complex sociocultural process involving interrelationships between individual, social, and contextual dimensions. To achieve this, it draws on research from the fields of post-secondary faculty development, K-12 teacher learning, and professional workplace learning with the belief that each of these contributes in significant ways to our overall understanding of this professional learning process.

Chapter 3 discusses the theoretical orientation of the study, which consists of three nested orientations. At the highest level, it is grounded in the philosophical orientations of phenomenology and sociocultural theory. At the next level, it adopts Billett's model of co-participation as a theoretical lens for considering the interrelationship between individual and contextual elements of professional learning. Finally, it draws on several additional learning theories that enhance our understanding of the individual, social, and contextual dimensions of faculty professional learning as it relates to development in teaching practice.

Chapter 4 outlines the phenomenological research process used for this study, which is based on Giorgi's (2009) descriptive phenomenological method. The phenomenological method was selected for this study because its approach supported the research question and because its epistemological assumptions aligned with the theoretical orientations described in Chapter 3.

Chapter 5 discusses the findings of the study based on a structure of essences that emerged from a phenomenological analysis of the data. The structure includes individual, social, and contextual essences for four dimensions of the experience of development in teaching practice. These four dimensions include a catalyst dimension, an idea development phase, an implementation phase, and an outcome phase.

Chapter 6 discusses the research findings through the lens of the existing literature and explains the various ways that this study has contributed to our understanding of mid-career teacher professional learning related to teaching practice. Based on this discussion, the chapter

examines a variety of possible implications for educational development for mid-career post-secondary faculty.

Chapter 2. Literature Review

In this chapter, I review relevant empirical literature that helps us understand the faculty professional learning process as it relates to development in teaching practice. The goal is to uncover what is currently known about the various individual, social and contextual dimensions of this learning process, as well as the interrelationships between these various dimensions. To achieve this goal, I will draw from three bodies of literature: the faculty development literature in post-secondary education related to development in teaching practice, the K-12 literature on teacher professional learning, and the professional workplace learning literature. I contend that each of these bodies of literature makes a distinct and important contribution to our overall understanding. Whereas previous research studies have brought together two of these bodies of literature, I am not currently aware of any research that has brought together all three.

The chapter begins with a review of the post-secondary faculty development literature which is well developed in terms of the individual cognitive dimensions of this learning process. Research related to the conceptions of teaching and to reflection on practice is central to understanding this dimension. Research that uses a sociocultural lens sheds light on the role of social interactions and work contexts in this learning process. Finally, a few studies that have been conducted from the perspective of faculty themselves and that offer descriptions of the individual, social and contextual elements of this learning process provide rich insight into faculty experiences. Because this final group of studies is small and based largely on single cases, this thesis research intends to contribute further empirical data based on multiple individuals.

The review then examines the K-12 teacher learning literature which is important because of its long research history. Despite the differences between the post-secondary education and K-12 contexts, there is a significant amount of K-12 research that contributes to our understanding of various individual dimensions of teacher learning as well as the situated dimensions of development in teaching practice. This section of the review begins by examining models that are helpful in conceptualizing teacher professional learning as a

developmental process and then considers various individual dimensions that appear to have a significant effect on teacher learning. It ends with a review of research that enhances our understanding of the multidimensional and situated aspects of the teacher learning process.

Finally, the review examines professional workplace learning research that focuses on development in professional practice. This body of research has a longer history of research using a sociocultural lens and contributes rich insights into the interrelationships between individual, social, and contextual factors involved in situated professional learning. Several researchers in this field have demonstrated empirically the complex interrelationships between the individual, social, and contextual elements of this process. As well, studies that investigate the authentic experiences of the professionals themselves provide important insights into this process. Because development in teaching practice, for mid-career educators, occurs largely within the context of everyday practice, this seems like an important contribution to our overall understanding.

In reviewing empirical research from these three bodies of research, I seek to build a foundation for the underlying premise of this thesis research, which is that research on post-secondary teacher learning, as it relates to the development of teaching practice, under-acknowledges or largely overlooks the complex and multidimensional nature of teaching practice and hence the complex and multidimensional nature of the professional learning process related to development of this practice. In order to better understand this professional learning process, more empirical data is needed that explores the interrelated individual, social, and contextual dimensions of faculty's professional learning experiences related to development in teaching practice.

I contend that such research will be most meaningful and insightful when it is based on the authentic professional learning experiences of the faculty themselves and when it adopts a research approach that acknowledges the interrelationships between the individual, social, and contextual aspects of these developmental experiences.

2.1. Development in Teaching Practice in Post-secondary education

As mentioned earlier, the focus in Amundsen & Wilson (2012)'s definition of educational development on actions "planned and undertaken by faculty members themselves or by others working with faculty, aimed at enhancing teaching" (p. 90) aligns with the focus of this research study. In this study, we are focused on the individual's experiences of development in teaching practice and therefore are most interested in the post-secondary education literature that relates to aspects of the individual teacher's learning process in this area. A review of this literature reveals a significant body of research on the individual cognitive dimensions of the development process. This includes research related to conceptions of teaching and learning, to teaching development as a process of expanding awareness, and to the role of reflection in instructional development. A few research investigations have started to provide insight into the affective dimensions of this process. As well, a small number of empirical studies have begun to adopt a sociocultural lens to investigate social and contextual dimensions of development in teaching practice and to acknowledge the interrelationships between these dimensions. In this section, I review the post-secondary education literature in each of these areas.

2.1.1 Conceptions of teaching and learning

Conceptions of teaching and learning literature presents a continuum of individual perspectives of teaching that can be used to inform discussions about development in teaching practice. Conceptions of teaching research explores the underlying beliefs and values that guide instructional behaviour and decision-making. Pratt (1992) defines conceptions as follows:

> Conceptions are specific meanings attached to phenomena which then mediate our response to situations involving those phenomena. We form conceptions of virtually every aspect of our perceived world, and in so doing, use those abstract representations to delimit something from, and relate it to, other aspects of our world. In effect, we view the world through the lenses of our conceptions, interpreting and acting in accordance with our understanding of the world. (p. 204)

In trying to understand the learning processes related to development in teaching practice, the conceptions research offers insight into a variety of meanings attached to post-secondary teaching and into the multiple aspects of those conceptions that relate to teaching practice. The conceptions research views teaching and learning on a continuum. On one end

of this continuum is a teacher-focused and transmission-oriented approach to teaching, which represents a less sophisticated view of teaching. On the other end of the continuum is a student-focused, learning-oriented approach which represents a more sophisticated view. There is a significant body of research to show that this variation in post-secondary conceptions of teaching and learning exists (Akerlind, 2003; Kember, 1997; Kember & Kwan, 2000; Martin & Ramsden, 1992; Samuleowicz & Bain, 1992, 2000). The research generally suggests that teachers hold a predominant conception of teaching and that this conception guides their approaches to instruction and assessment (Kember & Kwan, 2000). Although debate persists as to whether conceptions of teaching are stable or variable and hierarchical or inclusive (Akerlind, 2003), there is little debate about the actual existence of varying conceptions amongst teachers and their impact on student learning (Kember & Gow, 1994; Trigwell & Prosser, 1997; Trigwell, Prosser & Waterhouse, 1999; Trigwell, 2010). In this section, I review the conceptions of teaching literature in order to gain insight into the many factors involved in evolving to a more sophisticated conceptualization.

In a review of 13 studies investigating conceptions and beliefs about teaching amongst university academics, Kember (1997) attempted to synthesize the findings to date. He argues that, given the demonstrated relationship between teaching conceptions and the quality of student learning (Trigwell & Prosser, 1997), efforts to enhance the quality of student learning should take teaching conceptions into account. Teaching approaches, says Kember, are "strongly influenced by the underlying beliefs of the teacher" (1997, p. 255). Across the 13 studies, Kember found significant commonalities in the categories used to describe varying conceptions of teaching and in the relationship between teaching conceptions and the quality of student learning. Kember argues that the consistent characterization of conceptions of teaching across the 13 studies provides strong evidence that varying conceptions do exist and that it is possible to identify a teacher's dominant or primary conception. In the studies that Kember reviewed, conceptions of teaching are categorized in anywhere from two to five different categories, which are described as follows. At opposite ends of the continuum are a teacher-centred/content oriented conceptions of teaching and a student-centred/learning-oriented conceptions. Between the two ends of continuum, the conceptions are characterized as follows: imparting information, transmitting conceptual knowledge, enabling student-teacher interaction, facilitating understanding, and facilitating conceptual change. The generally held view in faculty development research is that a teacher-centred/content oriented conception is a less

sophisticated view of teaching than a student-centred/learning-oriented conception and that a student-centred/learning-oriented conception is required to bring about deep learning (Akerlind, 2007, Entwistle, 2000; Ramsden, 2003).

Trigwell & Prosser's (1996) Approaches to Teaching Inventory (ATI) aligns the five conceptions discussed above with the following five approaches to teaching:

> Approach A: a teacher-focused strategy with the intention of transmitting information to students; Approach B: A teacher –focused strategy with the intention that students acquire the concepts of the discipline; Approach C: A teacher/student interaction strategy with the intention that students acquire the concepts of the discipline; Approach D: A student-focused strategy aimed at students developing their conceptions of the discipline; Approach E: a student-focused strategy aimed at students changing their conceptions of the discipline. (p. 277)

This inventory comprises of 16 items that are intended to differentiate between these approaches. Despite criticism about the conceptual and psychometric credibility of the ATI inventory (Meyer & Eley, 2006), an updated version continues to be a widely used instrument for "formally monitoring approaches to teaching" (Trigwell, Prosser, & Ginns, 2005, p. 349) and is used as a data collection tool in other studies discussed in this review. A recent study using the ATI (Lindblom-Ylänne, Trigwell, Nevgi & Ashwin, 2006) provides evidence that approaches to teaching are affected by discipline and context. This two part study involved 340 teachers from a variety of disciplines in Finland and the UK. In the first part of the study, teachers completed the inventory based on a normal teaching context. In this study, teachers in the "hard" disciplines (i.e. sciences, health sciences, mathematics) were more likely to report a teacher/transmission-focused approach than teachers in the "soft" disciplines (i.e. education, social sciences, liberal arts). However, when teachers reported on teaching outside their normal contexts, they were more likely to adopt a different approach. The researchers claim that this provides "strong empirical evidence for the view that, rather than approaches to teaching being stable, teachers change their approaches to teaching according to their perceptions of their situation" (p. 296). This evidence lends support to this thesis' argument that development in teaching practice has individual, social, and contextual elements.

In a study involving 39 academics, Samuelowicz and Bain (2001) extended their earlier conceptions of teaching research (Samuelowicz & Bain, 1992). Samuelowicz and Bain (2001) describe teaching-centred orientations as those in which the "academic provides ready-made

understandings and methods for students, shows them how to apply the knowledge, and interacts with them to ensure that the understanding has taken hold" (p. 320). Learning-centred orientations are those in which the "teacher assists the students, through extensive interaction, to personalize their understanding of the material, and to use their new understanding to interpret the world in an altered way" (p. 320). The academics in their study were from three universities and a range of disciplines: architecture, education, nursing, psychology, physiotherapy, engineering, chemistry, physiology, and entomology. They gathered data using semi-structured interviews with questions focusing on: beliefs about teaching, beliefs about knowledge, beliefs about student learning, and beliefs about the links between teaching and learning. They asked the participants to "describe characteristic instances and concrete teaching situations to exemplify their perspectives" (p. 304), believing that this would help uncover their "typical ways of thinking" (p. 301). Using grounded analysis, this study revealed nine belief dimensions that made up faculty orientations to teaching and that characterized fundamental differences between teaching-centred and learning-centered orientations: (i) desired learning outcomes; (ii) expected use of knowledge; (iii) responsibility for organizing or transforming knowledge; (iv) nature of knowledge; (v) place of students' existing conceptions; and (vi) teacher-students interaction; (vii) control of content; (viii) professional growth and learning, and (ix) responsibility for learner motivation. Such a multidimensional view of teaching conceptions provides greater depth to our understanding of the conceptions identified in Kember's review (1997). It could be argued that, because of these multiple dimensions, shifts in conception impact teaching practice comprehensively and make it a learning process that calls into question many aspects of ones' teaching practice. It is also possible that teachers may make a shift in one dimension and not others, making the impact of their shift more or less observable and measurable. Based on available evidence, Samuelowicz and Bain believe that shifts in orientation are possible as long as we recognize that it will be a slow and complex process, requiring a deep understanding of transformative learning by those facilitating such a shift.

Kember & Kwan (2000) sought to learn more about approaches to teaching and the relationship between conceptions and approaches. Based on interviews with 17 lecturers in three departments and building on prior conceptions research, they developed a characterization of approaches which presented the differences between content-centred and learning-centred teaching as made up of various components which each exist on a continuum.

The model consisted of a one-dimensional motivation component and a five-dimensional strategy component. The five dimensions of the strategy component included instruction, focus, assessment, accommodation for student characteristics, and source of experience/knowledge. In the motivation component, they describe the motivators of content-centred approaches as being "extrinsic to the lecturer's teaching such as syllabus, examination marks, qualifications, etc." (p. 476). Motivators on the learning-centred end of the continuum involve "recognizing that motivating students is an intrinsic part of the teaching role" (p. 476). In the strategy dimension, content-centred instruction involves the lecture supplying content whereas learning-centred instruction involves "encouraging students to discover and construct knowledge" (p. 476). The focus of content-centred teaching is towards the whole class whereas the focus of learning-centred teaching is towards individual students' needs. Content-centred assessment is based on tests and quizzes whereas learning-centred assessment is more flexible and offers students choices. Content-centred teaching does not tend to accommodate for student characteristics. Finally, a content-centred teaching approach uses only the lecturers experience or knowledge whereas a learning-centred teaching approach also utilizes and respects student experience. Kember & Kwan found a high correspondence between "a lecturer's conception of teaching and his/her approaches to teaching" (p. 485). These researchers argue that approaches will remain consistent with deep seated beliefs unless pressures arise from other factors such as institutional influences, curriculum design, or student factors. They conclude that "fundamental changes to the quality of teaching and learning are unlikely to happen without changes to lecturers' conception of teaching" (p. 489). More research is needed to understand faculty experiences of both conceptual changes and changes in teaching approaches.

More recently, Postareff & Lindblom-Ylänne (2008) analyzed the descriptions of teaching provided by 71 academics from a variety of disciplines. Their aim was to uncover variation in approaches to teaching and conceptions of teaching on a general level. Using semi-structured interviews and content analysis they identified ten aspects of variation within the larger categories of learning-focused versus content-focused approaches. These ten aspects were further grouped under the following four broader aspects:

> (1) teaching process including planning of teaching, teaching practices, and assessment practices; (2) learning environment including teachers' role, students' role, interaction, and atmosphere: (3) conception of learning; and (4) pedagogical development, including development of one's own teaching and pedagogical awareness. (p. 112)

The results of this study uncover more factors that contribute to the complex relationship between the two broader conceptions of teaching (content-focused versus learning-focused) and many aspects of teaching practice.

In contrast to the idea that conceptions of teaching exists on a continuum from content-focused, which is less sophisticated or complete to learning-focused, which is more sophisticated or complete, Pratt (1998/2005) argues that effective teaching results from being able to make explicit and informed decisions based on a broad understanding of the learners, the content, and the context. Pratt (1992) sought to understand conceptions of teaching by exploring teachers' actions, intentions, and beliefs which, based on other research, were seen as core aspects of conceptions of teaching. Pratt's initial research involved interviews with 253 people from five different countries, the majority of whom were adult educators. They investigated teachers' actions, intentions and beliefs in relation to the following elements of teaching: content (what is to be learned), learners (the nature of the learners and their learning processes); teachers (roles, functions, responsibilities), ideals (purposes of education), and context (external factors that influence teaching and/or learning). The research was based on the assumption that this interrelated and internally consistent "constellation of elements formed the basis for a person's understanding of teaching" (p. 205). Based on a phenomenological analysis of the data, Pratt and his colleagues identified five perspectives of teaching, each with their own "legitimate form of commitment and valuing in teaching and corresponding ways of thinking, acting, and believing in relation to instruction. These perspectives are: (a) transmission (content delivery), (b) apprenticeship (modeling ways of being), (c) developmental (cultivating the intellect), (d) nurturing (facilitating personal agency), and (e) social reform (seeking a better society). From this initial research, Pratt and his colleagues (Pratt & Associates, 1998/2005) developed the Teaching Perspectives Inventory (TPI). This self-report, self-scoring inventory analyzes teacher's intentions, beliefs, and actions in relation to the five elements mentioned above in order to identify a dominant perspective (or conception). Pratt's work, which is now based on ten years of accumulated responses from more than 1000,000 respondents in more than 100 countries (Collins & Pratt, 2011) uncovers important elements that make up the multidimensional nature of teaching practice. Citing a "mounting body of evidence that effective teaching depends on context, discipline or field of practice, and culture" (p. 359), Collins and Pratt argue against the idea of a learner-centred, constructivist approach to teaching as being the only view of good teaching. They maintain that the TPI is a tool for

helping teachers to clarify their perspectives and for promoting reflection, discussion, and clarification related to one's perspective. They call for "respect for the intellectual, relational, moral, and cultural aspects that are essential to understanding what it means "to teach" (p. 373).

In this section, I have reviewed several different (but related) schemes for thinking about conceptions of teaching. Despite the differences in the specific schemes, all of the work discussed above conceives of conceptions of teaching as multidimensional and provides insight into the complexity of teaching practice and hence into the development of this practice. This body of research is considered to offer evidence that differing conceptions exist among post-secondary faculty and that relationships exist between conceptions of teaching, approaches to teaching, and student learning (Trigwell, 2010). Consequently, any efforts to improve student learning must address conceptions of teaching.

2.1.2 Development in teaching practice as a process of expanding awareness

Because this research seeks to understand the learning process related to development of teaching, it is important to consider various conceptualizations of that process. Conceptualizing development in teaching practice as a process of expanding awareness is an empowering way of thinking about teacher professional learning. The conceptions of teaching literature generally considers one's views of teaching to be stable (as opposed to changeable) and hierarchically exclusive (as opposed to inclusive). However, several researchers have challenged this view (Akerlind, 2003; Pratt, 1992, 1998; Ramsden, 2003). These researchers argue that conceptions of teaching should be thought of as "related in a hierarchy of inclusiveness" (Akerlind, 2003, p. 376) where increasingly sophisticated views of teaching and learning are acquired through a process of expanding awareness and where increasingly sophisticated views include less sophisticated views, but not vice versa. The notion of learning as a process of expanding awareness was explored quite extensively by Marton & Booth (1997). They argued that a learner's way of understanding is tied to their structures of awareness, "that the learner is simultaneously aware of certain aspects of a situation or a phenomenon…that certain aspects become figural, in focus or focal, whereas other aspects recede to ground" (p. 82). They went on to say that one's way of experiencing something can "be understood in terms of the dimensions of variation that are discerned and are simultaneously focal in awareness, and in terms of the relationships between the different

dimensions of variation" (p. 101). Akerlind's (2008) research of university teachers' growth and development in teaching supports this view of development as a process of expanding awareness and suggests that, with increased awareness of various dimensions of teaching and learning, teachers can shift their focus and evolve their understanding of teaching practice as it relates to the facilitation of student learning. This, in my mind, offers a significantly more empowering basis for development in teaching practice than the idea of changing teachers' conceptions. It offers a useful framework for conceptualizing and supporting the growth process.

The notion of development in teaching as a process of expanding awareness was introduced into the post-secondary teacher learning literature by Martin and Ramsden (1992). Their study of 13 lecturers examined how they developed in their understanding of teaching and how this understanding was "embodied in their practice" (p. 148). The 13 participants were part of a one-year program where they examined research on student learning and discussed the implications of this research for their teaching. As part of the program, participants redesigned one of their courses and then taught the course. While teaching the course, participants engaged in discussions about their intentions and practices before each class, and then debriefed the class with a supervisor observer. The interview and observation data, as well as participants' course evaluation tasks, were analyzed with a focus on the relationships between the following three aspects of teachers' understanding of teaching and learning: (i) the way in which they defined teaching topics; (ii) the way in which they "attempted to bring the students into a relationship with that knowledge" (p. 149); and (iii), the way in which they saw students' learning. The authors use three case studies to illustrate the process of teachers' development, which they describe as a process which involves "teachers' changing conceptions of how content is represented to students, how students are helped to come into relationship with that material, and how learning occurs as a consequence of that engagement" (p. 154). They describe four levels of teaching where the two lower levels focus on presenting a "taken for granted existing body of knowledge" (p. 154) to the students and the two upper levels focus on engaging students in a process of discovery and knowledge construction. At the highest levels, teachers continuously evaluate the effectiveness of the processes in helping students learn. Based on the data from their study, Martin and Ramsden argue that learning to teach more effectively in post-secondary education involves a process of "expansion of awareness, both of one's own capabilities and limitations as a teacher and of the effects of teaching on students' learning" (p. 154). All of the teachers in the case studies moved from thinking about teaching

and learning as a process of transmitting information to a place where they were asking more questions about what was happening or not happening in the students' learning process. They found that, as teachers learned more about student learning, they became "more interested and excited about trying to affect it" (p. 154). Hence, Martin and Ramsden argue that, in efforts to improve student learning, the question is not "How can we improve university teaching?", but rather "How can we change lecturers' understanding of teaching?" (p. 155). This, say the authors, "clearly embraces much more than the observable competencies of teaching", which is a shift in thinking about teacher professional learning that is argued for in this thesis. Martin and Ramsden's study offers a foundation for considering how a process of expanding awareness of teaching and learning looks in post-secondary teaching practice and supports a developmental model of teacher professional learning, one that is based on a firm understanding of how "academics develop as teachers" (p. 155).

Using narrative data from Walker's personal experience of development in the teaching of physics, Entwistle and Walker (2002) developed a conceptual model of the *Evolving Sophistication in an Understanding of the Discipline and Teaching*, which appears in Figure 2.1 below.

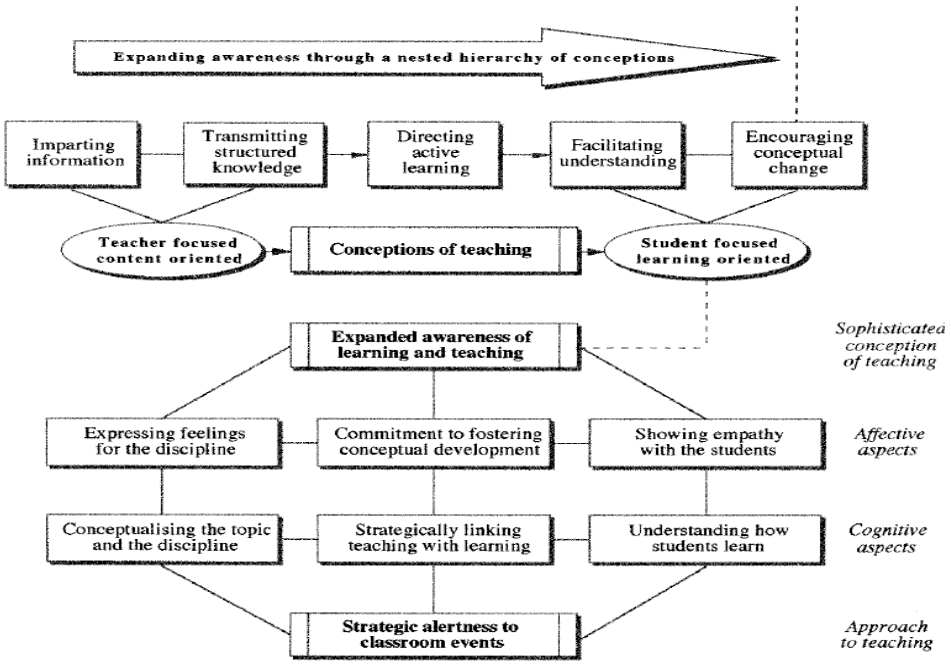


Figure 2.1 Evolving sophistication in an understanding of the discipline and teaching. From Entwistle & Walker (2002, p. 36).

Entwistle and Walker (2000) claim that a student focused and learning oriented conception of teaching, which is more sophisticated, involves an expanded awareness -"seeing additional goals for teaching and learning which were originally not perceived explicitly at all" (p. 353). The goals relate to the "nature of both disciplinary knowledge and student learning" (p. 359). This expanded awareness involves affective aspects, cognitive aspects and an approach to teaching that requires strategic alertness to classroom events. Affective aspects include things such as expressing feelings for the discipline, committing to fostering conceptual development in students and showing empathy with the students. Cognitive aspects involve conceptualizing the topic and the discipline, strategically linking teaching with learning, and understanding how students learn.

Akerlind's (2003, 2004, 2005) research builds on the evidence regarding variation in teachers' conceptions of teaching and on the influence of conceptual orientation on practice (Samuleowicz & Bain, 2001; Kember & Kwan, 2000; Trigwell & Prosser, 1997). Akerlind uses a phenomenographic approach (Marton & Booth, 1997) to investigate academics' "conceptions of their own growth and development as a university teacher" (2003, p. 378). Akerlind's (2003, 2004) first study involved interviews with 28 academics at a research-intensive university in Australia. Because phenomenographic research aims to uncover a structure of the critical variations in meanings or ways of understanding the phenomenon under investigation, her participants were selected to represent as much variation as possible. This included variation in experience, in disciplines, in cultural backgrounds, in gender, and in types of appointments held at the university. The disciplines represented by the participants included social sciences, economics, natural sciences, humanities, and information sciences. They ranged in experience from a few months to 35 years and held appointments from tenured to short-term contracts. She used semi-structured interviews and asked questions about how teachers went about teaching, what they were trying to achieve in their teaching, and why they did things the way they did. Follow-up questions were used to encourage elaboration and probe for underlying meaning. Based on her data, Akerlind proposes four categories of description, each representing "qualitatively different ways of understanding being a university teacher" (2004, p. 367). These include the experience of teaching as: a teacher transmission focused experience; a teacher–student relation focused experience; a student engagement focused experience; or a student learning focused experience. Akerlind argues that the relationships between the categories are inclusive and that a more sophisticated understanding of teaching includes

awareness of the other conceptions, but not vice versa. Limited understandings of teaching, she contends, are a result of lack of awareness of other ways of understanding it and of taken for granted assumptions. As she explains elsewhere, "the conceptions of teaching constituted during a phenomenographic analysis are based on different combinations of awareness of key aspects of teaching and learning, not on different systems of beliefs about teaching and learning" (2003, p. 378). This aligns with Martin and Ramsden's (1992) view of teaching development as a process of expanding awareness and represents a significant shift in thinking about conceptions of teaching. In this view, conceptions are viewed as changeable (as opposed to stable) and hierarchically inclusive (as opposed to hierarchically exclusive). Akerlind identified four areas in which there was a variation in awareness: (i) the role of the students in the teaching learning process; (ii) what students gain from the teaching-learning process; (iii) what teachers gain from the teaching-learning process; and (iv) the potential impact or benefit from the teaching-learning process. The hierarchy of expanded awareness, which she describes, offers a refreshing alternative foundation for a developmental perspective of teacher professional learning, one which, like Pratt's (1998/2005) perspective focuses on expanding awareness of the various dimensions of teaching and learning as opposed to 'changing' teachers' conceptions or beliefs.

Research on teaching conceptions held by post-secondary faculty, provides significant insight into the variation in thinking about teaching practice and the many variables that influence such thinking. Ramsden's (1992, 2003) and Akerlind's (2003) work provide meaningful frameworks for considering what teaching and hence development in teaching looks like based on three qualitatively different views of subject knowledge, the function of the teacher, the relationship between the teacher and the student, and the learning process. The notion of expanded awareness is also extremely helpful when considering teacher learning as a developmental process because it makes the process less focused on teacher change and more focused on helping teachers expand their awareness of the learning transaction and navigate the many dimensions involved in that transaction. It acknowledges the complexity of shifts in practice and takes away the idea that this can be externally imposed and strategically managed using simplistic approaches to continuous professional learning. These studies, however, still deal primarily with the individual and cognitive elements of teaching; how a teachers' thinking might look as it develops and how a teachers actions might change based on their changes in thinking. They do not address how faculty experience the process of

developing more sophisticated conceptions of teaching. As we know from other research, this process has powerful affective dimensions (Amundsen, Saroyan, & Frankman, 1996; Keltchtermans, 2005), involves individual struggles related to re-conceptualizing one's discipline or role in the classroom (Entwistle & Walker, 2000), and is affected by social and contextual dimensions that either afford or constrain individual efforts to make changes to teaching practice (Mälkki & Lindblom-Ylänne, 2012). A clearer understanding of the teachers' experiences of this process would enable better design of efforts to facilitate teacher learning. Such an understanding might include insights into their thoughts and feelings when they try to take action on new levels of awareness or when the new level of awareness requires deep personal change. In this thesis research, the intent is to gain a better understanding of the multidimensional nature of the development process by gathering authentic descriptions of the process as experienced by post-secondary educators.

2.1.3 Reflection and the development of teaching practice

As the conceptions of teaching research shows, improvement in teaching practice demands a commitment from faculty that extends far beyond the adoption of some new ideas for teaching. Reflection is an important cognitive activity in the process of expanding awareness and hence the development of teaching practice and the research on reflection, as it relates to development in teaching practice, is well developed. This research contributes significantly to our understanding of the individual cognitive dimension of this professional learning process.

The work of McAlpine and her colleagues (McAlpine, Weston, Beauchamp, Wiseman & Beauchamp, 1999; McAlpine and Weston, 2000), on the reflective processes of professors in relation to their teaching practice, provides insight into the nature and roles of reflection in post-secondary teaching. McAlpine & Weston (2000) support the notion of the "evolution of expertise in teaching as a complex process requiring experimentation, practice, feedback and time" (p. 377) and conceive of reflection as an essential mechanism in the process of developing teaching expertise. They documented and analyzed the reflective processes of six successful university professors in their day to day planning, instructing, and evaluating of learners in order to better understand how reflection acted as a "mechanism for turning experience into knowledge about teaching" (p. 364). The participants in their study were experienced professors (8 to 10 years of university teaching) from two Canadian universities (McGill

University in Montreal and Queen's University in Kingston). The data was collected through pre and post course interviews, videotaping of one third of their 39 hour courses, and pre and post class interviews for each of the video-tapings. Using the data, they sought to verify, refine, and elaborate a model of reflection developed from the literature. This model, as originally conceived, had six components: "goals, knowledge, action, monitoring, decision-making, and corridor of tolerance" (McAlpine et. al., 1999, p. 106). Although most of these components are assumed to be understood by the reader, the corridor of tolerance is briefly explained. According to McAlpine et al., "this corridor is premised on the idea that many aspects of teaching are not modified or changed as long as the cues being monitored fall within what the individual deems to be acceptable" (p. 109). Their data analysis involved four tiers of coding: the first tier identified "episodes" of reflection; the second tier identified evidence for the components of reflection, namely monitoring and decision-making; the third and fourth tiers sought to identify more detailed elements of monitoring and decision-making. The data analysis resulted in an "expanded and refined understanding of how professors reflected" (p. 116) in relation to their teaching practice, and particularly related to formative evaluation of that practice. McAlpine et al. (1999) explain their findings related to teacher reflection using the six components of the initial model. When reflecting, teachers attended most often to the following dimensions of *goals*: the goals of their teaching methods, the goals of the content, the goals related to student understanding, and the goals related to student participation. When *monitoring* their teaching, professors attended most frequently to student cues. These included verbal comments and non-verbal cues. Teachers monitored students' experiences of learning in a number of ways and drew on their general knowledge of student characteristics as they engaged in decision-making about their actions. When cues being monitored fell outside the *corridor of tolerance*, the teacher was more likely to modify their teaching. In relation to *decision-making*, most changes were made to method or content, with surprisingly few changes being made to objectives or evaluation. Finally, McAlpine et al. claim that "*knowledge* domains provide the basis for the plans, monitoring and decision making which guide teaching as well as reflection on teaching" (p. 123). This knowledge includes pedagogical knowledge, knowledge of learners, pedagogical content knowledge, and content knowledge. The experienced and accomplished teachers in this study were "nearly always able to be explicit about the knowledge they were drawing on" (McAlpine et al., p. 123) as the foundation of their rationale for monitoring and decision-making. McAlpine and Weston identified the salience of learner knowledge and of past experience in this process.

In a further analysis of the data, McAlpine and Weston (2000) identify different "spheres" of reflection, each with a distinct nature – practical, strategic, and epistemic. They describe these spheres as follows:

> Practical reflection focuses on improving actions in a particular course or class. Strategic reflection involves an attention to generalized knowledge or approaches to teaching that are applicable across contexts. Epistemic reflection represents a cognitive awareness of one's reflective processes, as well as how they may impede reflection and enactment of plans. (p. 364)

McAlpine and her colleagues' research expands our understanding of reflective processes in the development of post-secondary teaching in a number of ways. First of all, it identifies various cognitive elements of reflection (goals, knowledge, action, monitoring, decision-making, and corridor of tolerance) in post-secondary teaching. Second, as they describe in the quote below, McAlpine and Weston's (2000) research affirms the centrality of goals in teacher reflection and action.

> Goals are the component around which the process of reflection takes place since goals represent the teacher's expectations or intentions about what is to be accomplished in terms of instruction and form the basis for actions to be taken in order to achieve these. (p. 368)

Given that goals form the basis for in reflective processes and actions, understanding teachers' goals becomes crucial in understanding their learning processes. Third, their research extends our conceptualization of the reflection process with the notion of a corridor of tolerance. This notion suggests that teachers are only likely to modify their teaching in relation to things that they find bothersome or outside their corridor of tolerance. Although they acknowledge that this notion requires further research, it helps considerably with understanding why faculty may or may not make adjustments to their teaching practice. A fourth contribution is the identification of the role that pedagogical and experiential knowledge play in teachers' thinking and decision-making processes. McAlpine and her colleagues identified various types of knowledge teachers draw on to inform their decision making and showed how the quantity and quality of that knowledge was related to the effectiveness of their decision-making. Despite these significant contributions, McAlpine and her colleagues' research focuses primarily on the individual, cognitive aspects of development in teaching practice. In order to better apply this research to educational development practice, more research is needed on the interrelationships between cognitive, affective, and behavioral aspects of teacher thinking and decision-making and how

these interrelationships are experienced in the development of teaching practice. As well, we need to better understand how the thinking processes that McAlpine and her colleagues identified are affected by the social and contextual dimensions of teaching practice.

In an exploratory study, Kreber (2005) adds further to our understanding of reflection and its relationship to development of teaching practice. Her aim is to identify concrete indicators of reflection that would make the "process of reflection more visible and tangible" (p. 324). Grounded in a conceptual model of reflection that emerged from Mezirow's (1991) transformative learning theory and Kreber & Cranton's (2000) scholarship of teaching model, her conceptual model has three different domains of knowledge in teaching (instruction, pedagogy, and curriculum) and three kinds of reflection in each of these domains (content, process, and premise). The model contains nine different forms of reflection and is represented in a three by three matrix, as depicted below (Kreber & Cranton, 2000).

Content What to do	Instructional *Instructional knowledge* is concerned with various aspects of instructional design and the instructional process,	Pedagogical *Pedagogical knowledge* is knowledge about how students learn	Curricular *Curricular knowledge* is knowledge of the goals, purposes and rationales for our classes, courses or programs.
Process – How to do			
Premise – Why to do			

The data in the study was collected from 36 full-time faculty in natural and life sciences. Faculty participants came from seven science disciplines: biology, mathematics, psychology, chemistry, earth and atmospheric sciences, physics, and computer sciences. In this study, the focus on a single disciplinary area (science) was intentional based on other research about disciplinary perspectives on teaching. The study included three different sources of data: semi-structured interviews, the Approaches to Teaching Inventory (ATI) (Prosser and Trigwell, 1999); and a repertory grid designed on the basis of the ATI scores. The semi-structured interviews were based on the conceptual model described above. The goal of the interview was to uncover specific, concrete indicators or objective measures of reflection. The ATI scores were intended to differentiate those teachers who pursued primarily a teacher/content-focused approach and those who pursued a primarily student/learning-focused approach. The conceptual model was intended to frame their analysis of various types of reflection. As well, comparisons were made between less experienced and more experienced teachers.

Several results that emerged from Kreber's (2005) study are interesting in relation to understanding teacher professional learning processes. First, using the ATI, they could not make a distinction between those who primarily pursued a teacher/content focused approach and those who pursued a primarily student/learning focused approach. All of the "36 respondents rated both conceptual change items [those related to a student/learning focus] and transmission items [those related to a teacher/content focus] equally high, thereby indicating they engaged in both intentions and strategies equally often" (p. 332). This contradicts some of the research discussed earlier related to the approaches to teaching and challenges the idea that conceptions of teaching are stable across teaching contexts. Second, although most teachers claimed that they reflected, "few could provide objective indicators of their reflection" (p. 337) without considerable prompting during the interview. This caused the researchers to the question whether the teachers did not know how to articulate their reflective processes related to teaching or whether they did not know how to engage in reflective processes related to teaching. Third, although the researchers did find some evidence of each of the nine reflective processes of the conceptual model in the study data, 'premise reflection', or reflection related to why teachers did what they did, was not a common type of reflection. This was true across all three domains – instructional, pedagogical, and curricular. Kreber expresses concern about such a finding, given the importance of examining assumptions in the process of changing one's practice (Kreber & Cranton, 2000) and calls for further research into the processes of making reflection visible as part of the teaching development process.

In a follow-up study, Kreber and Castleden (2009) expanded on their earlier sample of academics in the sciences (pure/hard fields) to include 10 faculty from the pure/soft fields (English literature, philosophy, sociology). Building on the findings of Lindblom-Ylänne et al. (2006), who found differences in approaches to teaching in the two fields, Kreber and Castleden wanted to investigate differences in reflective practice related to teaching between the two fields. They make the link between reflection on teaching and development in ones' conceptions of teaching, arguing that if faculty are less prone to reflection, they are less likely to develop more sophisticated conceptions of teaching. In this second study, all participants were considered experienced (more than 3 years full time). The data in this study was collected only through semi-structured interviews based on the conceptual model described above. In addition to identifying specific indicators of reflection for each of the nine forms of reflection, they identified whether reflection was primarily experience-based or research/theory-based. They

found that, with both groups, reflection was primarily experience-based suggesting that post-secondary faculty are commonly unaware of the connections between their practice and instructional or learning theories. They generally found that faculty in the pure/soft fields were able to provide more specific, concrete indicators of reflective practices for each of the nine forms of reflection than faculty in their previous study from the sciences (pure/hard fields).

Kreber (2005) and Kreber and Castleden's (2009) work contributes to our knowledge of the way epistemological structures of various disciplines relate to reflection on practice and hence to teachers' development of their conceptions of teaching. The a priori conceptual model of reflection, developed by Kreber and Cranton (2000), containing nine different kinds of reflection, offers a useful developmental framework for understanding the scope of teacher reflection. The 2009 study identified many concrete indicators for different domains of reflection – instructional, pedagogical, and curricular and different levels of reflection – content, process, and premise. Their study also revealed that the types of reflection that faculty engaged in were partially attributable to the epistemological structure of their discipline and that for many faculty, intentional interventions, designed to promote pedagogical and curricular reflection, might be needed to facilitate development of more sophisticated conceptions of teaching.

2.1.4 The relationship between teacher thinking and teacher practice

As is shown by McAlpine and Weston's (2000) work on reflective thinking processes, there is a significant "space" between thinking and action as it relates to teaching practice. Conceptualizing the relationship between teacher thinking and teacher actions or practice is significant in understanding and supporting development in teaching practice because the ultimate goal of institutionally supported faculty development is enhanced teaching practice and ultimately enhanced student learning. Kane, Sandretto, & Heath (2002) argue that, as researchers concerned with improving teaching practice, "it is imperative that we understand how the links between beliefs and practice are made so that we may facilitate …growth and development" (p. 196). They discuss this relationship as one between teacher thinking and/or beliefs (espoused theories of action) and teaching practices (theories in use). In this study, the processes that occur for teachers in the space between thinking and action are an important part of the developmental process that we are trying to understand. A couple of researchers in the field of post-secondary education faculty development have begun to explore this space.

In trying to understand the links between thinking and action, McAlpine, Weston, Timmermans, et al. (2006) felt that the primarily cognitive frameworks provided by the conceptions of teaching literature "did not fully represent the complexity" (p. 601) of this relationship. They adopted a socio-cognitive perspective to try and describe the space between thinking and action. In their study, McAlpine et al. focused on the relationship between the thinking and actions of two experienced university lecturers. McAlpine and her colleagues collected their data using multiple in-depth interviews of a mathematics lecturer and an education lecturer (pre/post course and pre/post class) as well as observations of the lecturers' teaching actions. Based on previous research, they analyzed the data for goal statements and knowledge statements claiming that "these represent the problem spaces lecturers construct to inform teaching actions" (p. 604). Their multi step analysis revealed four zones of pedagogical thinking that influence teacher actions. The researchers named these zones as conceptual, strategic, tactical, and enactive and describe the four zones as follows:

> The most, abstract, conceptual, includes abstract statements and beliefs about teaching and is akin to the notion of 'conceptions'. The most concrete enactive, refers to thinking in the moment of action. Between these two are strategic and tactical zones which encompass the 'space' between conceptions and actions; collectively, these two most closely approximate 'approaches' to teaching. Strategic thinking refers to the broad design of instruction, relationships among elements in relation to context…Tactical thinking refers to the operationalization of the strategic thinking through specific processes and procedures. While each zone is conceptually distinct, the actual boundaries are fluid, flowing into each other. (p. 606)

McAlpine et al. (2006) acknowledge that experienced and accomplished teachers "continually engage in a dynamic process of redefining the internal problem spaces constructed to represent factors in the social and physical environment" (p. 610). They identify several factors that influence teachers' ability to use reflection productively in the development of their practice. These include (i) having sufficient experience upon which to reflect in order to recognize patterns; (ii) learning to monitor the appropriate cues; (iii) having a large enough repertoire of instructional strategies to select appropriate alternatives; (iv) reducing the risks and constraints involved in trying something different; (v) having the ability to carry out alternative actions; (vi) having the personality characteristics that influence the development of expertise. Their research shows how data, which is grounded in the experiences of the teachers themselves, can offer rich insight into teacher learning processes. Although still focused primarily on the individual, cognitive dimensions of teacher thinking, the identification of the strategic and tactical

zones begins to address the interrelationships between the individual dimension and the social and contextual dimensions.

Building on the work described above, as well as other faculty development research on transformative learning (Cranton, 2006; Taylor, 2007), Mälkki and Lindblom-Ylänne (2012) conducted a study to better understand the link between reflection and action in relation to development in post-secondary teaching practice. Given the evidence that knowledge gained through reflection is not necessarily used to enhance practice (Kreber, 2004; McAlpine et al. 1999; Taylor, 2007), they sought to further understand the dynamics of the relation between reflection and action including the nature of this link and the kinds of factors that intervene. Through analysis of interviews with 76 university teachers, they identified barriers between reflection and action as well as bridges or "fluent connections" (p. 34) between the two. Barriers involved contextual constraints as well as personal factors. Contextual constraints included things such as lack of time, nature of the discipline, expectations of the department, expectations of the students, and class sizes. Personal barriers included lack of understanding, tools, or methods to bring about pedagogical ideals as well as lack of confidence. Bridges between reflection and action seemed to be more personal in nature and included a sense of personal agency, a sense of self-efficacy or being able to use one's strengths and abilities, and sense of personal satisfaction in being able to enact an ideal. Through their study, Mälkki and Lindblom-Ylänne demonstrate the significant role that institutional context plays in the processes linking reflection and action. Based on their findings, they suggest that an important aspect of pedagogical development efforts might involve helping participants "discern between personal, social, and institutional issues entangled with their thought and action" (p. 47).

The work of McAlpine et al. (2006) and Mälkki & Lindblom-Ylänne (2012) starts to provide insight into the "space" between thinking and action as it relates to teaching practice. It confirms that a complex and multidimensional process occurs in this space that involves a variety of individual, social, and contextual elements. Designing faculty development support in ways that take into account the elements of this space and helps to build the types of bridges that Mälkki and Lindblom-Ylänne have identified is important in achieving the quality goals described in chapter one. This research hopes to add to our understanding of how faculty experience this space.

2.1.5 University teaching development and the affective domain

A small body of research is emerging related to the affective dimension in the development of university teaching practice. Although the emotional dimensions of teaching practice have been acknowledged in the K-12 sector for some time (Hargreaves 1998, 2005), studies that examine this dimension of teacher development in post-secondary education are few and far between. In 2005, while conducting an investigation of teacher change, Martin and Lueckenhausen expressed surprise at their discovery of the emotional dimensions of this process. In their study of 31 teachers who were not new to teaching or to teaching their subject, change involved anxiety and uncertainty which in some cases was extreme. Using semi-structured interviews and a metaphor analysis, these researchers tried to gain insight into teachers' experiences of change. Depending on the way teachers viewed change (i.e. their metaphors of change), they identified a range of positive and negative emotions associated with change. Although an exploration of the metaphors that emerged from their study is beyond the scope of this discussion, their findings related to the emotional impact of change are worth noting. Several faculty experienced change as gratifying or exciting but many others expressed feelings of concern, uncertainty, or stress. They conclude by saying that "teaching and learning is not an emotion free zone" (p. 410) and that it is surprising that so little attention has been paid to this dimension since "university teachers are thinking and feeling people and when their identity and integrity is challenged, they respond with their hearts as well as their heads" (p. 411).

In a recent study that investigated university teachers' emotional experiences during teaching, Hagenauer and Volet (2014) also found that teachers experienced a range of positive and negative emotions in teaching-learning situations. Their study involved semi-structured face to face interviews at two time points with 15 teachers. All of the teachers had many years of teaching experience, mostly at university. They argue that it is important to understand the emotional dimension of teaching practice because it impacts on teachers' well-being and satisfaction, because emotional relations with students impact teaching practice, and because many decisions that teachers make about their practice are made on an affective relational basis" (p. 241). If this turns out to be true, then much more attention needs to be paid to the affective domain in discussions about development in teaching practice. Using a phenomenological approach in their data analysis, three broad themes related to emotions emerged. These included the "importance of the intrinsic value and social nature of the

professional practice of teaching…, the criticality of the degree to which expectations of students' engagement were fulfilled or not and…the realization that the professional practice of teaching was only partly controllable" (p. 240). In other words, teaching was inherently an emotional experience because teachers valued the work they did and it was a social practice; teachers' emotions, both positive and negative, were linked to the ways students responded to their efforts; and even experienced teachers felt insecure or anxious with anything they perceived as new. Hagenauer and Volet stress that the emotional dimension needs to be considered in discussions about development in teaching practice and suggest that particular attention be paid to helping teachers cultivate positive relationships with student.

2.1.6 Using a sociocultural lens to investigate teacher learning processes

If we accept that, in order to improve the quality of student learning in post-secondary education we must promote and support the development of teaching practice, then it is important to move beyond cognitive lenses for a better understanding of this professional learning process. Sociocultural lenses seem more able to account for the interrelationships between individual, social, and contextual dimensions and to offer frameworks for researching such interrelationships (Trowler, 2008). Although research related to faculty development from this perspective is limited, studies that use a sociocultural lens contribute insights into these interrelationships and confirm the importance of acknowledging them. A key criticism of the post-secondary education teacher development research is that it fails to adequately consider many elements of the contexts in which teachers practice their teaching (Ashwin, 2008; Boud & Brew, 2013). This includes things such as disciplinary differences, institutional cultures, and educational ideologies and policies (Trowler, Saunders, & Bamber, 2009). In this section, I review studies that examine the process of development in teaching practice using a sociocultural lens.

Pickering (2006) investigated the "process of pedagogic change and the influences that affect it" (p. 319). Her study involved case study research of four novice lecturers. She argues that more faculty development research needs to focus on understanding process, as opposed to measuring outcomes. Her study acknowledges the situated nature of professional learning and that the "workplace is a complex and multidimensional context" (p. 321) for such learning. In exploring influences on the change process, she identified internal influences for change

(including beliefs and conceptions of teaching) and external influences of change (workplace dimensions, including participation in a development programme). She found that participants core beliefs "did not appear to shift substantially during the study", but that "aspects of day-to-day experience appeared to disturb these beliefs, producing uncertainties ('tensions') between beliefs, and as a result the lecturers' pedagogic perspectives, that is their sense of what was possible, plausible and desirable were adjusted" (p. 323). As Pickering points out, professional learning is "situated and options for change are perceived as pragmatically bounded, suggesting the need to take account of complex contexts which reflect lived experience" (p. 329). She found that "the dialogue between an individual practitioner's lived experience and their pedagogic perspective" (p. 319) played a significant role in how individuals defined the potential for change. Her use of the term, "pedagogic perspective" expands the notion of conceptions of teaching and learning to include more than one's beliefs about teaching and learning. It integrates the contextual elements of beliefs, which is an important extension. Like Kreber (2010), Pickering's study also revealed the significant role that faculty identity played in informing teaching and learning practices. She also found that student encounters were the most powerful source of disturbances to core beliefs. Her findings suggest that disturbances to beliefs are just the beginning of the pedagogic change process and that more research is needed to understand faculty experiences of moving from a change in pedagogic perspective to actual changes in teaching practice.

Pickering (2006) emphasizes that the pedagogic change process is developmental and begins long before one can observe changes in practice, and that change is influenced by all aspects of the faculty's context (department, classroom, institution, etc.) as opposed to just the formal learning programme. Because her study focused on understanding the process of development, several new ideas have emerged from her data analysis. This includes the influence of the pragmatic aspects of a teaching context on development, the explicit identification of tensions/disturbances as catalysts for change, the explicit recognition of disturbances as just the beginning of the change process, and the introduction of the notion of pedagogic perspective as a view of teaching that has individual, social, and contextual dimensions. This study will build on Pickering's work by examining how mid-career faculty experience the process of development, as opposed to novice teachers, and by collecting data from a larger sample size.

Although limited research has been done that directly explores the role of non-formal learning as it applies to post-secondary teaching, Knight & Trowler (2000) and Knight, Tait, and Yorke (2006) have investigated this social and contextual dimension of new teacher learning. Their findings report an interaction between formal learning provisions such as workshops, conferences, courses and printed materials, and non-formal opportunities such as conversations with departmental colleagues and mentors. They found that faculty placed considerable emphasis on non-formal learning, and suggest that formal methods were generally associated with taking on the faculty role, whereas non-formal social learning was associated with ongoing formation as a teacher. Grounded in the sociocultural ideas of the workplace as an activity system (Engeström, 2001), and professional learning as socially situated (Chaiklin & Lave, 1993), Knight and Trowler (2000) argue that "improving teaching involves developing systems of work relations, most significantly at the departmental level" (p. 69). They conducted interviews with 24 new full time or tenure track faculty in two Canadian and eight English institutions. The participants were largely from education departments, but faculty from physics, women's studies, engineering, and deaf studies were also part of the group. The interviews were lightly structured and sought to uncover how work contexts either afforded or constrained faculty efforts to improve teaching and learning. Based on the interview data, results from a previous study (Trowler & Knight, 2000) and other literature on faculty work environments (Blackburn & Lawrence, 1995; Boice, 1992), the authors describe how new academics perceive their work contexts in relation to efforts to improve teaching and learning under the following headings: (1) freedom, isolation, and collegiality; (2) uncertainty, goal fuzziness and role conflict; (3) support for teaching; (4) service expectations; (5) research expectations; (6) overall workload; (7) home and work; (8) departmental management. Although new academics enjoyed the freedom and autonomy in their work, this also led to a sense of isolation. Given the structure of work and work spaces, a sense of collegiality did not easily develop. It appears from the results of this study, that new faculty experience a lot of stress and anxiety due to many competing priorities and are offered little support in navigating this tension or in building their confidence and skills. Based on this study, Knight and Trowler conclude that, in many cases, the work contexts are "counterproductive in terms of realizing good teaching and learning practices" (p. 77). They argue that effective departmental leadership and the creation of departmental cultures conducive to teaching development are keys to improving teaching and learning. Knight and Trowler's study contributes to the literature on teacher professional learning by providing insight into social and contextual dimensions of that learning process. The

results of their study highlight the importance of the local, departmental culture in the development of teaching practice for new academics. Further research is needed to address the interrelationships of the social and individual elements as they relate to the professional learning of experienced faculty.

In another study on teacher professional learning in post-secondary education, Knight, Tait, & Yorke (2006) define professional learning as "the development of capabilities that occur as a consequence of situated social practices" (p. 320) and argue that professional learning of teachers occurs within a complex activity system that involves an "interplay between individuals and environments" (p. 320). Their research used the sociocultural lens of activity theory (Engeström, 2001) to investigate the role of informal learning in the professional learning of teachers. Their survey data from over 2,000 part-time tutors and 248 full time teachers revealed how important it was to situate professional development efforts within "people's daily activity systems" (Knight, Tait, & Yorke, p. 334). Using Engeström's conceptualization of activity theory, they identified tensions in the system that can prevent faculty from engaging in better educational practices. These include tensions with established forms of assessment, departmental norms, roles of the learners, objectives of learning. They go on to say, however, that with appropriate attention to both the individual and the activity system, these tensions can be productive in motivating system learning and change, an idea that is inherent in Engeström's activity theory. Based on the results of their study, Knight, Tait & Yorke (2006) argue that the non-formal dimensions of faculty professional learning are "fundamental, not incidental" (p. 328). They contend that what is needed are "workplaces that evoke learning" (p. 332) - workplaces that have space for the creation of shared meanings, that encourage collegiality and participation, and that promote effective procedures and practices for learning. They call for more research into the nature, processes, and affordances of practice-based learning, as well as for the need to ground teaching enhancement efforts in teacher's practice. This study hopes to respond to this call by gathering faculty descriptions of authentic experiences of development in teaching practice and attempting to better understand the interrelationship between formal and non-formal learning and between the individual and contextual dimensions in the teacher professional learning process.

Using the sociocultural lens of situated learning theory, Warhurst's (2008) study of 29 new lecturers at a research intensive university revealed several affordances and constraints of

participatory or social learning mechanisms. Warhurst used several data collection and data generation methods including: learning logs, sociograms, and semi-structured interviews. Drawing on the works of Lave & Wenger (1991) and Wenger (1998), Warhurst argues that "situated theorising … broadens the focus of workplace learning research, from an examination of communicative interactions to a consideration of the nature of participation in practice" (p. 456). Despite efforts to promote learning-centred teaching in the formal faculty development program, the social construction of pedagogic meaning came from "participation in everyday workgroup practice" (p. 459). Warhurst's study reveals several social learning processes that helped to facilitate the process of learning to teach, including processes for developing a sense of belonging, for supporting a "trajectory of learning from practice" (p. 462), and for enabling identity formation related to becoming a post-secondary teacher. Warhurst contends that the nature of that learning needs to be critically examined because it is largely determined by several "communal qualities" (p. 458) including the types of interactions, degree of inclusion, nature of inquiry related to teaching, and structure of the work. Using a term from Boud & Middleton (2003), he deems the academic communities in his study as "loosely-coupled communities" (p. 200). By this he means that the social context does not offer strong or coherent support related to teaching practice. Hence, despite the fact that participation in work practice was the primary way of learning, there were few examples of "purposeful pedagogic interactions" (p. 459) in this social learning environment.

> Many of the lecturers perceived that their departmental colleagues in general had … contributed negatively, or only marginally, to their learning to teach. Analysis of lecturers' interactions with departmental colleagues in general confirms these perceptions in revealing a paucity of direct pedagogic actions to enable workplace learning. (p. 460)

When lecturers did report conversations that extended their understanding of teaching or engaged them in "constructing pedagogic meaning" (p. 460), it was primarily through shared problem solving. Based on his findings, Warhurst advocates for an approach to faculty development that reflects an understanding of both individual and social learning. He explains how purposeful actions of agentic individuals played an important role in the development of teaching practice at the institution he studied. Individual learning that occurred in the faculty development program contributed significantly to purposeful pedagogic interactions in the departments and seemed to address some of the limitations of the incidental social learning. He concludes that "both individual and social aspects of learning should be analysed as

intertwined" (p. 465). It is such an approach that this study intends to pursue. Building on Warhurst's work, I hope that this study will enhance our understanding of the interaction between individual agency and the social context in promoting development in teaching.

A study by Gregory & Jones (2009) builds on research by Kember & Kwan (2000) and Prosser, Trigwell, & Martin (2003) which shows that contextual factors can move teachers away from approaches that are consistent with their beliefs. As discussed earlier, Kember and Kwan say that teachers are "likely to have a predominant or preferred approach to teaching and are also likely to adopt [an] alternative approach if the teaching or learning environment appears to demand it" (p.487). They identify the following contextual factors that may play a part in influencing teachers to shift away from their preferred approach: "extensive and intensive procedures for course development and approval…, intensive procedures for monitoring and reviewing teaching, team teaching, large classes, teaching rooms that are not conducive to the type of teaching preferred…, heavy teaching loads" (p. 487). Building on these findings, Gregory and Jones used grounded theory to develop a contingency model of teaching approaches which "emphasizes the interplay between structure (forces in the environment) and the agency of individual lecturers (forces in the lecturer)" (p. 769). They conducted interviews with twenty five lecturers in the field of management studies from five different Melbourne universities. There is no indication in their article as to the years of teaching experience of the participants. Through the grounded theory process of constant comparison, a clear theme emerged which demonstrated "how participants were continuously striving to ensure that they felt competent in their role whilst also rising to the challenge of responding to student diversity" (p. 776). This main concern of "balancing professional capability with the requirements of a heterogeneous student population" was depicted by the term "maintaining competence". Gregory and Jones found that, in a context of massification (constant increasing of the number and diversity of students) and minimization (constant decreasing of resources), as well as the constant presence of public judgment (either by students or other audiences), teachers will select strategies of distancing, adapting, clarifying, or relating. The model that emerged from their research is comprised of two continua: (i) people or ideas focused and (ii) structured or flexible. This resulted in four quadrants, each representing a different strategy focus: distancing (structured and ideas-focused); clarifying (structured and people-focused); adapting (flexible and ideas-focused); and relating (flexible and people-focused). Focused on maintaining competence, teachers will select strategies that suit their personal preferences and are

perceived as effective in a particular environment. Although acknowledging generally the influence of values, assumptions, beliefs, and expectations as moderating variables or "forces in the lecturer", Gregory and Jones identified five specific types of values that had a moderating force in the lecturer: valuing high academic standards, valuing active participation, valuing equity, valuing teaching, and valuing diversity. Besides the individual influences, the "forces of the environment" also played a significant role in a teachers' choice of teaching strategy. These environmental influences included teaching delivery method (i.e. lectures, labs, tutorials), subject content, student cohort, workload demands, support services, and [institutional] policies and procedures. These researchers claim that it is "the interplay between the forces in the lecturer and the forces in the environment that leads to the adoption of a particular strategy at a given point in time" (p. 781). Based on their findings, they believe that teaching development practices should recognize maintaining a sense of competence as a main concern of teachers, and therefore work with them to build on their individual strengths and navigate the "changing environmental conditions in order to enable student learning" (p. 783).

In a study of 9 academics from three different disciplines (law, English literature, and physics), Kreber (2010) began with the assumption that teacher identity was the foundation for understanding teachers' pedagogical practices, interactions with students, and goals for learning. Based on a summary of the faculty development literature, Kreber argued that teacher identity developed as a result of interrelating personal and contextual factors. Using semi-structured interviews, Kreber sought to "gain insight into the factors paying a role in how academics define themselves as teachers, the larger educational goals they espouse, and the pedagogies they use" (p. 171). Her study empirically confirmed several personal and contextual influences on teacher identity and hence practices. Personal factors that influenced identity and hence practice included things such as educational goals (subject matter goals, critical thinking goals, the role of post-secondary education), conceptions of learners (learner capabilities, role of the learner in knowledge building), self-concept related to teaching (self-efficacy, confidence), and teaching experience. Contextual factors that influenced identity and hence practice included factors in the social context (department, discipline, sociocultural background, other networks), factors in the occupational context (job/career preparation, educational development opportunities, relationships with other teachers). Kreber's study highlights the many factors involved in the development of teachers' identities and hence pedagogies and confirms the interrelationships between individual, social, and contextual elements of this development

process. For example, a physics teacher commented on how departmental traditions restricted her to traditional methods of teaching because “otherwise students would complain” (p. 183). Things such as feedback from other teachers or students acted as social influences on several teachers’ individual decisions regarding approaches to teaching. This study will build on Kreber’s work by investigating and understanding in greater depth how teacher’s experience the process of development in teaching rather than focusing on identifying factors that contribute to the process. As well, it hopes to gain insight into ways that teachers navigate tensions that arise between individual, social, and contextual dimensions of this process.

Finally, two studies by Roxå, Mårtensson, and their colleagues (Mårtensson, Roxå, & Stensaker, 2012; Roxå and Mårtensson, 2009, 2011), use a sociocultural lens to investigate teachers’ conversations related to development in teaching practice. In their first study, Roxå and Mårtensson (2009) solicited 106 responses to a questionnaire which asked about faculty’s conversations related to teaching and learning. Their results showed that “most teachers rely on a small number of significant others for conversations [about teaching]” (p. 547) and that these significant networks, as Roxå and Mårtensson name them, had some common characteristics. These characteristics included privacy, mutual trust, and intellectual intrigue. When teachers talked about teaching, they did not want their conversations to be heard by anyone who was not invited into the discussion. They selected conversational partners based on trust in their judgment, respect, and confidentiality. According to Roxå and Mårtensson, it is the “atmosphere of privacy and trust that allows them to open up in a way that makes learning possible” (p. 555). In a subsequent study, Roxå and Mårtensson (2011) used a case study approach to investigate how strong academic microcultures, or groups of people working together in an academic environment, interact in relation to teaching and learning quality. They conducted a total of 22 semi-structured interviews with representatives of five microcultures. They found that, although these microcultures were all committed to teaching and learning excellence, they were also limited by the set boundaries and frames of their traditions. Improvement options, related to teaching and learning, were discussed “inside the existing teaching and learning paradigm within each microculture” (Mårtensson et al., 2012, p. 8). The results of these two studies reveal both the strengths and limitations of teachers’ social contexts for supporting development in teaching practice. This research hopes to shed further light on the interrelationships between the social dimensions highlighted by Roxå and Mårtensson and

other individual and contextual dimensions of teachers' interactions related to development in their practice.

The research reviewed in this section shows empirically that teachers' pedagogical practices result from interrelationships between many individual, social, and contextual dimensions, thus pointing to the value of a sociocultural lens for investigating development of such practices. In studying the pedagogic change process, Pickering's (2006) research reveals how teachers' decisions about teaching are "pragmatically bounded" by the context of their practice and how change processes begin with individual disturbances to a teachers' core beliefs about teaching and learning. Knight, Tait, & Yorke's (2006) research, which shows the fundamental role of non-formal social and contextual elements in faculty learning, reinforces the importance of examining professional development processes as they occur in the context of everyday practice. Kreber's (2010) study confirms that there are many personal and contextual factors that influence teachers' identities and hence practices. Roxa and Martensson's work (Mårtensson, Roxå, & Stensaker, 2012; Roxå and Mårtensson, 2009), offers specific insights into the non-formal, social elements and further reinforces the importance of examining the process of development as it occurs within the context of practice and through a lens that acknowledges the powerful social influences on that practice. All the studies discussed in this section showed how individual perceptions of the social context of their work (larger educational goals, amount of collegial support, departmental expectations, sense of collegiality, control over teaching) affected teaching and learning practices. From this body of research we come to more fully appreciate the importance of studying development in teaching practice through a sociocultural lens and considering what Gregory & Jones (2009) refer to as both the forces in the individual and the forces in the environment as well as the interrelationships between these forces.

2.1.7 Understanding faculty experiences of development in teaching practice

The underlying premise of this research is that the complex and multidimensional nature of teaching practice is generally under acknowledged or largely overlooked in relationship to continuous professional teacher learning and the development of teaching practice in post-secondary education. I believe that a richer and more comprehensive understanding of the process will emerge from an investigation that focuses on faculty experiences of the

development process. The importance of understanding the process of development in teaching practice, as experienced by the faculty themselves is a central argument in this thesis research. In this section, I review literature that investigated development in teaching practice through teachers' own narrative descriptions of their experiences. These studies focus particularly on capturing the faculty learning process as a coherent narrative account rather than extracting decontextualized factors related to the experience.

In a four year case study, Amundsen, Saroyan, and Frankman (1999) build generally on literature related to the development of pedagogical expertise (Berliner, 1998, 1991; Kagan, 1992), and more specifically on Ramsden's (1992) characterization of the evolution of teaching thought in post-secondary education. Building on earlier work (Amundsen, Gryspeerdt, & Moxness, 1993), Amundsen et al. document the process of growth in university teaching using a variety of methods, including semi-structured interviews, communications with the principal investigator, self-generated teaching metaphors and poems, course outlines, and course ratings over a five-year period. At the time, very few investigations had been conducted to uncover the nature of development in teaching practice at the post-secondary level, as experienced by the faculty themselves. Their study provides such insight, uncovering individual, social, and contextual aspects of Frankman's development process. For example, on an individual level, he struggles with making shifts in his thinking about teaching and learning and at the same time maintaining a coherent narrative as a professional educator. He speaks about the necessity of "re-inventing himself as a teacher" (p. 14). On a social level, he struggles with releasing control to the students. He writes about how he felt like a "fifth wheel" in the classroom, when he introduced a small group project, and that he felt like his direction and expertise were not needed or valued in the same way. Finally, on a contextual level, he struggles with committing to shifts in practice when the institutional reward structures and grading systems did not support such shifts. In a poem, Frankman describes his shift in thinking about teaching rewards as something coming primarily from the institution, to coming from the learner, to coming from the learning. From this study, we gain powerful insight into individual, social, and contextual elements of the growth process including: (a) the evolution of one's view of self as educator; (b) the need to intentionally support the linking of knowledge about teaching and learning and teaching actions; (c) the ongoing need for alignment of values and practice; (d) the importance of talking about one's thoughts as "central to ongoing development" (p. 14); and (e) the recognition of the contextual impediments to teaching improvement. In discussing the nature of

the change process, the authors noted that changes in values, thinking and practice were “out of sync” (p. 37) and suggest that “the relationship between changes in thinking and changes in practice [are] complex and merit further investigation” (p. 37). Amundsen et al.’s study presents a rich narrative of a single economics faculty’s professional learning process and affirms the importance of narrative data in trying to understand aspects of human experience. It demonstrates the importance of capturing faculty experiences of the teacher learning process in order to fully understand its multidimensional nature. As the authors point out, many of the elements of professional growth identified in this study were noticeably absent from discussions about professional growth in teaching at the time of publication. Since then, few other studies have captured such rich narrative accounts of post-secondary faculty’s experience of development in teaching practice, as it occurred over time. This thesis study hopes to add to this research by capturing multiple faculty members’ personal accounts of their lived experiences related to development in teaching practice.

In a paper, referred to earlier in the discussion of expanding awareness, Walker (Entwistle & Walker, 2000) provides a narrative account of his personal experience of developing from a teacher-focused/content-oriented educator to student-focused/learning-oriented one. He identifies a number of transitions related to his goals for teaching, which he links with the notion of expanded awareness. These transitions include going from organizing and conveying testable knowledge, to promoting understanding, to questioning the nature of physical knowledge, to developing a multiply inclusive approach to teaching. Teaching based on organizing and conveying testable knowledge created tension for him between “the abstract and neatly sanitized accounts of reality presented in the curriculum and [his] own often contradictory personal experiences” (p. 346). As he wrestled with this tension, he came to a deeper understanding of the concepts. This led him to focus on promoting understanding of the content. As he altered his teaching to foster that understanding, he developed a deeper awareness of the structure of the knowledge in his discipline. He began to “understand aspects of the real world in terms of the course content, and also the course content in terms of the real world” (p. 14). Grappling with the paradoxes and conceptual challenges of the discipline led him to engage with students in questioning the nature of physical knowledge. Although this was very challenging pedagogically, it created a sense of wonderment and intrigue for some students and cultivated an “intrinsic motivation to inquire further” (p. 347). In trying to encourage students to reflect on their learning, Walker encountered a host of student

responses, many of them resistant and even hostile. Through this phase, he developed a "multiply inclusive approach" in order to meet the expectations of all students. In this approach, he balanced the delivery of content, the emphasis on understanding and application, and the cultivation of inquiry. In the passage below, he describes, where he ended up as he continually sought to increase student engagement and insight.

> [The] learning outcome that [he] came to value most was an awareness of learning itself as a transformative agent, a means of redefining an individual's relationship with the world and thus fundamentally altering both that individual and his or her world. (p. 349)

Walker's account is particularly meaningful for this research because it captures his experience of expanding awareness related to teaching practice and hence development of his practice. Although the authors recognize the limitations of a single narrative account, they also suggest that "the authentic voice, presenting a more complete historical account within an everyday context, seems to contain important elements lost from the abstracted, decontextualized descriptions reported from a series of focused interviews" (p. 351). They also contend that "such authentic accounts may well have an important function within staff development" (p. 352) because they retain the "emotional and personal elements" of this experience. These arguments are significant for the direction of this thesis research since they identify several important gaps in the current body of research. This includes the lack of data to inform our understanding of the non-cognitive aspects of the professional learning process and the lack of studies focused on mid-career faculty and their experiences with the process of development in teaching practice.

In a study of fifteen experienced college teachers from three different colleges in The Netherlands, Van Eekelen, Boshuizen, and Vermunt (2005) collected 86 examples of teacher learning episodes and analyzed them using a phenomenographic method (Marton, 1986). Beginning with Cochran-Smith and Lytle's (1999) three conceptions of how teachers' learn, they sought to better understand self-regulation in post-secondary education teacher learning. Cochran-Smith and Lytle's three conceptions included formal investigations into the literature of teaching and learning, conscious reflection on aspects of teaching practice, and intentional investigations of classroom practices. In their study, they defined learning as "an experience whereby knowledge, skills, and new attitudes related to work are acquired and recognized by the teachers themselves" (p. 448). Their theoretical review of three perspectives of professional workplace learning (self-directed learning, experiential learning, and reflective practice) revealed

five prevailing assumptions about workplace learning: (1) it should be a self-directed and active process; (2) it is a purposively and consciously controlled planned process; (3) it is a spiral process; (4) reflection is an important phase in the learning process; and (5) it should involve a behavioural change. However, they cite several other authors who argue, based on empirical evidence, that workplace learning is generally not conscious, not intentional, focused on problem resolution, dependent on individual interests, and rarely solitary.

Based on these opposing views, Van Eekelen et al. (2005) sought to characterize the learning of experienced post-secondary teachers. They found that teachers learn by doing, they learn through interactions with students and colleagues, they learn by reading, and learn by thinking while busy with other tasks. Learning in interaction with others occurred most frequently. About two thirds of their learning was unplanned and one third was planned. Unplanned learning came about as a result of external events or pressures or as a result of doing something and unintentionally learning from it. The researchers found that teachers were directed more by working goals (a problem or task) then they were by learning goals. Outcomes of the learning were characterized in two ways: getting insights and changing behaviour. Getting insights included gaining professional knowledge or making a resolution for the future. Changing behaviours included changing social behaviours or performing new technical skills. Factors that stimulated or inhibited learning included time, motivation, expectations of others, and connections with external contacts (contacts in the field). Learning for the teachers in this study was largely unplanned and came about as a result of a work activity or situation. Their findings were quite different from what they expected in that teachers rarely participated in training, read, or went to the literature to learn about their practice, they rarely engaged in conscious and structure reflection on their practice, and they never engaged in formal and intentional investigations of their classroom practices. The findings of this study challenge the five prevailing assumptions of workplace learning identified above and align much more closely with the findings of those researchers that claimed that workplace learning was generally not conscious, not intentional, focused on problem resolution, dependent on individual interests, and rarely solitary. Van Eekelen et al. found that, although teacher's learning was not generally self-regulated (with planned and intentional learning goals as well as ways to monitor progress related to the learning goals), their teaching practice was self-regulated (with planned and intentional teaching goals as well as ways to monitor progress related to those teaching goals). Learning resulted from the process of self-regulation of teaching practice, rather than

self-regulated learning. Although the researchers recognize that their study only involved a small sample of teachers, this previously unidentified conception of teacher learning emerged from their findings. They describe this conception as follows.

> Teachers learn by all kinds of day-to-day teaching experiences without planning this….They also learn in a non-linear way by solving problems. These processes might not be self-regulated in order to learn as such, but firstly regulate (their improvement of) their teaching practice. Besides this self-regulation of their teaching practice with learning as a result, teachers also deliberately set time aside for self-regulated learning experiences. (p. 467)

According to Van Eekelen et al., this conception acknowledges the situated nature of teacher learning and the specific context of teacher learning processes at the workplace.

Akerlind (2003, 2005) also studied faculty growth from the perspective of the faculty themselves. She used phenomenographic research methods to uncover variations in meaning related to the phenomenon of growth and development in teaching. In the study discussed earlier, in relation to expanding awareness, she investigated variation in the meaning of growth and development. In the study discussed here, Akerlind's (2005) goal was to explore university academics' experiences of their own growth and development. The participant group and general methodology appears to be the same as in the study discussed earlier. The interview questions for this study included: how did they go about growth and development, what were they trying to achieve, and why did they do what they did. In this case, her approach to understanding experience was not focused on faculty's process of the experience, but rather their purposes and activities related to growth and development. Akerlind describes the outcomes of this study in two different ways. Six qualitatively different views of growth and development emerged from the faculty data. These included development as: (i) becoming more productive and efficient in one's work; (ii) achieving academic credibility and recognition; (iii) improving the quality and effectiveness of one's work; (iv) accumulating personal knowledge and skills; (v) increasing understanding in one's field; and (vi) contributing to disciplinary growth or social change. Akerlind claims that faculty conceptions of development were related to "both their contextual circumstances and the personal intentions underlying their work as an academic" (p. 26). It follows logically that if faculty conceive of teaching differently, they will conceive of growth and development in that practice differently. Akerlind's study provides an empirical basis for this. Based on this research, Akerlind argues that support for academics' development ought to address the full range of meanings, rather than assuming a shared

understanding of development. This range of meanings would include many dimensions of variation, as described below.

> From a focus on the individual academic to a focus on the field or society in which they are situated; from a sense of a natural end-point to growth as an academic to a sense of an endless potential for development; from a sense of quantitative accumulations of achievement, knowledge and/or skills to a sense of qualitative shifts in perspective and understanding; from a focus on the views of others as the sole indicator of the worth or quality of academic contributions to the valuing of academics' own self-opinion; and from a desire to avoid feelings of anxiety and inadequacy to a desire to be challenged and to give altruistically to one's field or society. (p. 27)

Akerlind's (2003, 2004, 2005, 2007) work contributes a rich examination of variation in meaning with respect to growing and developing as a university teacher and provides some foundational considerations to inform a developmental perspective of teacher development. Her studies demonstrate how phenomenographic research methods can be used to learn about teaching growth and development from the faculty's perspective. The thesis will add to Akerlind's work by using phenomenological research (the differences between a phenomenographic and phenomenological approach are explained in Chapter 4) to investigate faculty's experiences of development in teaching practice in order to better understand the interrelated individual, social, and contextual dimensions of this process. Unlike Akerlind, the goal of this research is to uncover a structure for the process of development as opposed to the dimensions of variation in growth and development experienced by academics.

In a more recent study, Sadler (2008, 2012a, 2012b, 2013) used longitudinal case studies to investigate how new lecturers in post-secondary education experienced the development process as they adopted more student-centred approaches to teaching. Sadler conducted three semi-structured interviews with 11 teachers from a variety of disciplines (history, psychology, physiotherapy, sports science) over two years. Sadler used a thematic analysis of the interview transcripts to uncover influences on teacher development. What emerged from the complete study (Sadler, 2008) were three key influences and one core influence. The core influence on development was interactions with students. Three key influences that affected and were affected by those interactions were teacher knowledge, confidence as a teacher, and peer support and training received. Interactions with students were a "critical influence upon how the teachers developed" (2012b, p. 154) because they provided important information and feedback about their practice. In these critical instances of

interaction, teachers' enhanced their awareness of students' needs and gained "better insight into students' understanding of the subject" (p. 154). This expanded awareness prompted development, either as a change in practice or a conceptual change related to their teaching. Teachers' knowledge, confidence and perception of support had a significant influence on how teachers processed and responded to their interactions with students. Sadler's study (2012a) also highlighted the contextual influences on teachers' development towards more student-centred approaches which included things such as the topic being taught and the perceived level of students' prior knowledge. Finally, even when teachers' had student-centred conceptions of teaching, they still struggled with how to achieve that vision of teaching in the context of their classroom and particular subject. Sadler (2012a) points out that this finding challenges previous research which suggests "a congruent relationship between conception, intention and strategy" (p. 743) in teaching practice without "acknowledging the real difficulties that a teacher may face in aligning these aspects of teaching" (p. 743). Sadler (2013) and others (Postareff & Lindblom-Ylänne, 2011) have also begun to uncover the important role that confidence plays in navigating these difficulties. According to Sadler, as teachers' confidence increased, they sought richer and fuller feedback from students which in turn allowed them to increase congruence between their conceptions, intentions, and teaching strategies. By collecting data from eleven faculty about development in their teaching over a two year period, Sadler's work makes an important contribution to the literature. Although his study focused on the development of new teachers, it has added significantly to the narrative data that reflects the authentic experiences of the teachers' themselves.

The literature reviewed in this section shows how we can gain rich insight into the process of development in teaching practice when we investigate it using the authentic experiences of the faculty themselves. These studies show how experiences of developing towards more student/learning centred teaching practices involve navigating a complex array of interrelated individual and contextual elements. They provide insight into what many of these elements look like from the teachers' perspectives and reveal various influences on this process.

2.1.8 Adding to the post-secondary education, teaching development research

This research study aims to add to the post-secondary education, faculty development literature discussed so far in this chapter in the following four significant ways:

Focus on the interrelated individual, social, and contextual elements of experience using a sociocultural lens.

The research on the individual dimensions of the teaching development process, particularly the cognitive aspects of this process, seem to dominate the post-secondary education literature related to development in teaching practice. Building on the research on conceptions of teaching, the process of expanding awareness in teaching development, the role of reflection in the development process, and the impact of the affective domain on this process, this study will use a theoretical lens and research method that will provide further insight into the many interrelated individual, social, and contextual dimensions of this development process. As was shown by Pickering (2006), Knight, Tait, & Yorke (2006), and Warhurst (2008) a sociocultural lens offers a framework for investigating such interrelationships. This study aims to investigate these dimensions and their interrelationships as they occur throughout the professional learning process.

Focus on the experiences of the faculty themselves using a phenomenological research method.

This study seeks to understand the teacher learning process, as it is experienced by the faculty themselves. Like the single case-study reports of Amundsen et al. (1999) and Walker (2000), it hopes to capture rich accounts of faculty's lived experiences of this process. This is in contrast to research that explores elements of the experience separated from the overall process (Akerlind, 2003, 2004, 2005; Mälkki & Lindblom-Ylänne, 2012). This study will use Giorgi's (2009) descriptive phenomenological research method, to both capture and analyze faculty's experiences. Although Akerlind (2003, 2005) uses a phenomenographic method to investigate faculty experiences and Sadler (2012a, 2013) uses case studies, to date, I have not uncovered any research study that has used the descriptive phenomenological method to investigate development in teaching practice in post-secondary education. Using this method, faculty will be asked to describe their experiences of development as they lived them. Analysis of these descriptions will hopefully uncover a structure of the essences of this experience.

Focus on the experiences of mid-career faculty.

Although several research studies have examined the development experiences of new faculty (Pickering, 2006; Sadler, 20012a; Warhurst, 2008), this study will focus on the experiences of mid-career faculty, a group that is underrepresented in the current research. As discussed in chapter 1, mid-career faculty no longer have the external motivators that exist for novice faculty related to development in their teaching practice. As well, they are the largest group of full time employees that have an impact on enhancing the quality of students' learning. This makes them an important group to study in terms of development in teaching practice.

Gather experiential data from a larger sample-size.

With the exception of Sadler's work, the narrative accounts of the case studies report the experiences of a single person. This research aims to gather accounts from a larger sample size with the goal of proposing a phenomenological structure for the experience of development in teaching practice.

2.2. Teacher Learning in K-12 Education

In this section, I review the relevant empirical literature in the K-12 context that contributes to our understanding of in-service teacher learning, related to development in teaching practice. The K-12 literature is important to this research because it has a long history and it echoes many of the arguments being made in this thesis for a richer and more developmental approach to teacher professional learning. Although the context is different, development in teaching practice, when understood as a practice focused on facilitating deep student learning, has similarities across all levels of education. In particular, I focus on K-12 research that enhances our understanding of the individual dimensions of teacher professional learning and the situated nature of such learning. I draw on this literature specifically to enhance our understanding of how teachers experience the development process and therefore in the following review, I focus on studies that are based on the perspectives of the teachers themselves. I also use Richardson & Placier's (2001) review of the literature on teacher change to situate the selected studies within the broader context of literature on K-12 teacher learning.

In the Handbook of Research on Teaching (Richardson, 2001), Richardson & Placier (2001) review the literature on teacher change. They describe teacher change in terms of "learning, development, socialization, growth, improvement, implementation of something new or different, cognitive or affective change, and self-study" (p. 905). They claim that the term "development", although used in different ways, is prominent in all of the literature. Their review brings together the individual, social, and contextual views of teacher change, views that they say have previously occupied primarily separate literatures. Their review is particularly useful in guiding my examination of the K-12 research related to development in teaching practice because it confirms many of the issues and concerns related to teacher professional learning that I identified in chapter 1 and provides helpful organizational categories for this literature. Richardson and Placier confirm the complexity of teaching and the need to better understand teacher learning as a holistic and developmental process. As well, they support the argument I make related to the importance of examining the interrelationships between the individual, social and contextual dimensions in order to better understand the complex and multidimensional nature of teacher learning processes. Guided by their review and by the goals of this section, I will explore the K-12 research with the assumption that the following three areas of exploration will enhance our understanding of the individual and situated dimensions of teacher professional learning: (i) growth in teaching practice as a developmental process; (ii) development in teaching as a complex individual change process; (iii) development in teaching as situated in complex educational contexts.

2.2.1 Teacher learning as a developmental learning process

For the purposes of this study, understanding development in teaching practice as a developmental learning process is useful because it helps us conceptualize it as a process that takes time and that each individual will experience at his or her own pace. Finally, the developmental lens provides insight into the interrelationship between the individual and contextual dimensions of this learning process. Although stage theories have been criticized for being overly deterministic and unnaturally linear or hierarchical, they offer insight into individual and contextual elements involved in the process of change related to development in teaching practice. Kagan (1992) claims that the only two developmental models related to teacher professional growth that are based on empirical research are Fuller (1969) and Berliner (1988,

1994). These models are discussed in this section because they offer insight into the complex process of development in teaching practice.

Fuller's (1969) classic theory of teaching concerns describes various phases of concern that teachers experience as they develop in their practice. Fuller's research was based on extensive interviews with pre-service and early career teachers. Their first study involved open-ended counseling sessions with 21 student teachers over a semester. The results showed a clear progression from concern with self to concern with students and their learning. Concern with self involved things such as, "concern with self-protection and self-adequacy: with class control, subject matter adequacy, finding a place in the power structure of the school and understanding expectations" (p. 211). Concern with students and their learning involved concerns about student's progress and about finding ways that the teacher could help to facilitate this progress. Fuller compared his results with other studies of experienced teachers and, not surprisingly, found that early career teachers were primarily concerned about survival and that those with more experience were more concerned about student success. Pigge and Marso (1997) built on Fuller's research and confirmed developmental changes in teachers concerns from the commencement of teacher preparation through the first five years of teaching. In their study, they gathered a variety of survey data from 60 teachers over seven years. Their research confirmed that, with experience, concerns about survival and self decreased and concerns about the task and impact of teaching increased.

Berliner's (1986, 1988) studies of novice versus expert teacher cognitive processes also provides insight into the developmental learning process involved in teaching practice. Building on the novice-expert research of Dreyfus and Dreyfus (1986), Berliner set out to determine how the stages of development, which were identified for other areas of expertise, compared to the development of expertise in teaching. In their studies Berliner et al. (Berliner, 1988; Carter, Sabers, Cushing, Pinnegar, & Berliner, 1987; Carter, Cushing, Sabers, Stein & Berliner, 1988) used three groups of subjects: expert, novice, and postulant teachers. The experts were secondary math and science teachers selected based on a nomination process and classroom observations. The novice teachers were first-year teachers who had excelled as student teachers. Postulant teachers were people "who worked in industry as engineers, computer specialists, and scientists [and] who wanted to teach but were not interested in going through the regular teacher education program. These individuals had subject matter expertise but no

pedagogical knowledge or training (Berliner, 1988). This last group was considered the most novice since they had acquired absolutely no formal knowledge or skills related to teaching practice. The inclusion of this last group makes Berliner's studies particularly interesting for this research since most post-secondary faculty begin their faculty careers as "postulants" based on Berliner's definition.

Based on prior research on expertise, Berliner (1986) identified six areas of teaching in which he predicted there would be differences between novices and experts. These included: interpreting classroom phenomena, discerning the importance of classroom events, using routines, predicting classroom phenomena, judging typical and atypical events, and evaluating performance. For each area, a study was designed to elicit differences between novices and experts. For example, in the study focused on interpreting classroom phenomena, participants watched three television screens showing various aspects of the same lesson. Screen one showed the teacher instructing and the students in the middle of the room. Screen two showed the students on one side of the room and screen three showed students on the other side of the room. When showed simultaneously, these three screens were intended to represent the complex visual and auditory environment of a classroom. Study participants were asked questions about their observations and interpretations of the events. As predicted, novices had difficulty making sense of and providing meaningful explanations for their observations. Postulants were even more overwhelmed than the novice teachers and were generally unable to monitor the three screens simultaneously. Experts on the other hand, "responded effortlessly and fluidly" (Berliner, 1988, p. 9) making more comments and offering more detailed and descriptive interpretations than the other two groups. Studies for the other areas involved watching slides of lessons, planning lessons, enacting a homework review, teaching a short lesson, and making predictions based on extensive information about a class they were preparing to take over. Although details about the study participants were not provided in the work that summarizes Berliner's work on the development of expertise in pedagogy (Berliner, 1988), papers by Carter et al. (1987, 1988) on two of the smaller studies cite sample sizes of eight experts, six novices, and six postulants. Berliner and Carter et al.'s series of research studies provides empirical data which confirms that "important qualitative differences exist in the thinking and the performance of novices and experts" (Berliner, 1988, p. 20) and supports the existence of various stages of development going from novice to expert teaching. Berliner describes the novice teacher as someone who needs to label and learn all elements of the tasks

to be performed and learns a "set of context-free rules to guide behavior" (p. 3). Novice teaching behaviour is "rational relatively inflexible, and tends to conform to whatever rules and procedures they were told to follow" (p. 3). Advanced beginner teachers start to recognize similarities across contexts and, through experiences, start to develop a sense of when to follow rules and when to break them. At this stage, although context starts to guide behaviour, teachers are not intentionally accepting personal responsibility for what is happening in their classroom. The competent teacher is able to "make conscious decisions about what they are going to do" (p. 4) and, based on experience, can determine what is important to pay attention to and what they can ignore. Because teachers at this stage have accepted more responsibility for what happens in the classroom, they "have more vivid memories of their successes and failures" (p.4). The proficient teacher, through extensive experience, has developed a sense of intuition and know-how related to the classroom. Teachers at this stage of development recognize patterns which enable them to analyze situations and make decisions without much conscious effort. Finally, according to Berliner, the expert teacher seems to act effortlessly and fluidly as they engage in classroom practice. Much of their practice is automated and as a result, experts may have trouble explaining aspects of their practice to someone else.

Berliner's research and stage theory about the development of expertise in teaching is helpful in our discussion of development in teaching practice because it articulates a theory related to the evolution of teaching practice in several key areas: (a) the recognition of patterns in the classroom; (b) the effort and conscious thought required to manage the complexities of the classroom; (c) the way in which personal experience is used to guide teaching behaviour; and (d) the teacher's focus in the classroom (Kagan, 1992). Research on expertise in teaching has evolved to the point where Berliner (2001) claims that a "validated prototypical set of features of expert teachers" (p. 472) can be defined. Based on "persuasive evidence from more than one research program" (p. 472), Berliner proposes that expert teachers….

- excel mainly in their own domain and in particular contexts;
- develop automaticity for the repetitive operations that are needed to accomplish their goals;
- are more opportunistic and flexible in their teaching than are novices;
- are more sensitive to the task demands and social situations surrounding them when solving problems;
- represent problems in qualitatively different ways than do novices;
- have faster and more accurate pattern recognition capabilities;
- perceive more meaningful patterns in the domain in which they are experienced; and

- may begin to solve problems slower, but they bring richer and more personal sources of information to bear on the problems that they are trying to solve. (p. 472)

Berliner's research on the development of expertise in pedagogy offers insight into the cognitive aspects involved in various stages of development on teaching. This research, however, does not provide much insight into the lived experience of teachers as they move through this professional learning process.

In their review of the literature on teacher change, Richardson & Placier (2001) identify several common themes from discussions in the literature related to formal in-service development programs for teacher change. These themes offer insight into possible reasons that such programs do not result in significant teacher change. The first theme is an emphasis on cognition with several cognitive concepts seen as having a significant influence on the change process. These include teachers' beliefs and perceptions, their predispositions to reframing "puzzles of practice" (p. 913), their images of teaching and learning, and their reflective practices. The second theme is the emphasis in these programs on developing constructivist classroom practices that focus on involving learners in personal meaning making and individual construction of knowledge. However, although significant emphasis is placed on wanting teachers to cultivate constructivist classrooms, most in-service professional development programs are still delivered using a transmission approach rather than a constructivist or meaning-making approach. This disconnect is considered a significant impediment to promoting change in classroom teaching practices. The third theme is the acknowledgement of teaching as a complex endeavor that is significantly influenced by context. They cite Doyle (1979) who identified the following characteristics of the classroom that affect complexity: "multidimensionality, simultaneity, immediacy, unpredictability, publicness, and history" (p. 913). Richardson & Placier acknowledge that "the complexity of teaching and the variability of the context work together to help justify the view of the teacher as a thinking, decision-making, reflective, and autonomous professional" (p. 914). These three themes affirm the argument made in this research that supporting teacher learning related to the development of teaching practice needs to acknowledge and address the many interrelated individual, social, and contextual dimensions of this development process.

2.2.2 Development in teaching practice as a complex individual change process

Development in teaching practice is a complex individual change process that has cognitive, affective, and behavioral dimensions. All of these dimensions need to be taken seriously, thoroughly understood, and properly supported in the development of teaching practice. The K-12 literature is significantly better developed than the post-secondary education faculty development literature when it comes to understanding this change process. Such research provides significant insights into this process.

Early research by Kelchtermans (Kelchtermans, 1993; Kelchtermans & Vandenberghe, 1994) and studies conducted by a group of researchers in the Netherlands (Hoekstra, Beijaard Brekelmans, & Korthagen, 2007; Hoekstra, Korthagen, Brekelmans, Beijaard, & Imants, 2009) provide insight into the professional learning processes of in-service teacher development and change. Kelchtermans (1993) argued that teachers' professional development needed to be understood "as a learning process throughout their career" (p.447) and "as it is experienced by the teachers themselves (Kelchtermans &Vandenberghe, 1994, p. 45). In two studies, these researchers used a biographical approach that involved collecting career stories from 22 experienced elementary teachers' related to their professional development. They emphasize in their discussion that in the biographical approach, "story always implies context" and "human behaviour always results from a meaningful interaction with the environment or context (social, cultural, material, institutional" (Kelchtermans, 1993, p. 444). Their research provided evidence that during their career, teachers "develop a professional self, a personal conception of oneself as a teacher and a subjective educational theory, a personal system of knowledge and beliefs about their job" (p. 444). They identified several aspects of the professional self and one's self-understanding: self-image, self-esteem, job motivation, job satisfaction, task perception, and future perspective. In later work, Kelchtermans (2005, 2009) proposes a "personal interpretive framework", which is made up of the professional self and one's subjective educational theory. He builds on this research and argues that, in the teaching profession, one cannot ignore self-understanding when discussing changes in teaching practice. Teaching, explains Kelchtermans, is an intensely personal profession and requires a level of emotional commitment beyond the technical or instrumental. The contextual ambiguities of teaching make "vulnerability a structural condition" of this profession and the complex nature of the relationships means that "the teacher never has full control over the situation, nor over the

outcomes of his/her actions" (Kelchtermans, 2005, p. 998). Changes in teaching practice, says Kelchtermans, go far beyond "the simple question of changing one set of practices for another" (p. 996). Teachers' actions are deeply rooted in the elements of their personal interpretive framework and cannot be separated from their emotions, or from the "social and cultural forces which help to form them and which are in turn shaped by them" (p. 996).

Based on a conception of teacher change as "growth or learning" Clarke and Hollingsworth (2002) conducted longitudinal investigations of the professional growth of over 70 high school math and science teachers. The primary source of data involved the collection of classroom videotape data and video-stimulated recall interviews. Building on Guskey's (1986) theorizing around teacher change as well as this extensive data, Clarke and Hollingsworth developed their model of interconnected professional growth as shown in Figure 2.3 below.

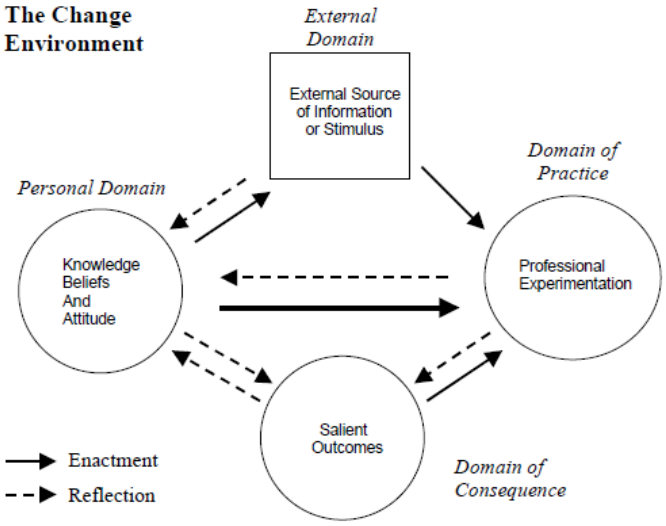


Figure 2.3 The Interconnected Model of Professional Growth. From Clarke & Hollingsworth (2002, p. 951)

Their model shows professional learning in teaching as occurring through multiple pathways between four distinct domains of the teacher's world, and through the mediating processes of reflection and enactment. The four domains identified as interacting for professional growth include: (i) the personal domain (teacher knowledge, beliefs and attitudes); (ii) the domain of practice (professional experimentation); (iii) the domain of consequence (salient outcomes); and (iv) the external domain (sources of information, stimulus or support). The whole system is integrated and non-linear, with all domains influencing each other and

changes in one domain impacting other domains through the mediating processes. The personal domain and the domain of consequence recognize change as emerging from the meaning-making systems of the individual teacher. Clarke & Hollingsworth contribute to our understanding of the interdependent relationship of the four domains by identifying the mediating processes of reflection and enactment. They also identify some of the aspects of practice that afford engagement that results in learning – professional experimentation and external sources of information. As they explain, "change in the domain of consequence is firmly tied to the teachers' existing value system and to the inferences the teacher draws from the practices of the classroom" (p. 953). Their non-linear and interdependent model represents several shifts in conceptions of teacher professional growth. One key shift is from seeing professional change as an event to seeing such change as a complex learning process that involves navigating many interdependent domains. A second shift is related to agency. Teachers experience professional change when they experience ownership and engagement related to this process. Programs in and of themselves cannot influence teacher change. A third shift is towards the recognition of teacher growth and teacher practice as situated and personal. The final shift is related to teacher motivations for professional learning. Teachers were not motivated by a need to "repair a personal inadequacy as a teacher but [rather by the need to] seek greater fulfillment as a practitioner" (p. 948). A powerful contribution of Clarke & Hollingsworth's (2002) model is their differentiation between change sequences and growth networks. They define change sequences as instances where change in one domain leads to change in another domain. Such changes may or may not be lasting and may or may not lead to professional growth. They argue that growth networks are change sequences that arise from changes in more than two of the interconnected domains and that result in lasting change in a teachers' practice or beliefs. Although published in 2002, Clarke and Hollingsworth's conceptualization of teacher growth remains rich in its insights about this complex change process and, surprisingly, dominant conceptualizations and approaches to promoting development in teaching practice still do not reflect their powerful conceptualization.

Hoekstra, Beijaard, Brekelmans, and Korthagen's (2007) work also contributes to our understanding of the learning processes of individual teachers. They observed and interviewed four experienced teachers over the course of a year in an attempt to uncover cognitive, behavioural, affective and motivational aspects of their learning processes. They focused on informal or naturalistic learning, rather than learning connected to a particular professional

development program. By focusing teachers on areas of concern in their teaching and learning activities related to that concern (i.e. planning, deploying strategies that work, experimenting with something new, seeking student feedback), they uncovered the complex interplay between behavioural, cognitive, motivational, and emotional aspects of the learning process. In the learning process, teachers became more aware of their beliefs and assumptions, their actions and the consequences of their actions, and the strength of implicit and previously held beliefs and actions. Although they do not explicitly discuss the interplay between the cognitive, behavioural, affective and motivational aspects, they are apparent in the short interview excerpts. As well, they conclude by saying that their "findings indicate that a theory of teacher learning should take into account that learning during classroom teaching takes place at several levels of conscious awareness, and that activities involved encompass not only cognitive but also behavioural, motivational and emotional aspects" (p. 203).

In a follow-up study with a single teacher, Hoekstra and Korthagen (2011) begin by claiming that, in the study of teacher learning processes and in the design of support for teacher development, a "strong separation between cognition and affect is not possible and is counterproductive". They report on a case study with Nicole, a 55 year old biology teacher with 22 years of teaching experience. Although Nicole showed great willingness to learn and great potential for change at the beginning of the study, she showed no change in her conceptions or behaviours after the larger one year study on teacher learning experiences. As part of this follow-up study, Nicole was offered formal learning support, which included seven supervisory sessions over a six month period. The supervision sessions were conducted using the Onion Model shown in Figure 2.4 below. It is a multi-level learning lens which identifies "six distinct layers in which teacher learning can take place: (a) environment; (b) behaviour; (c) competencies; (d) beliefs; (e) identity; and (f) personal mission" (p. 79).

Figure 2.4 The Onion Model. From Hoekstra & Korthagen (2011, p. 79)

The goal of this multilevel approach to learning, which is an adaption of a neuro-linguistic programming model, is “to connect the outer layers and the inner layers, which means that the teachers’ behaviour in a professional situation is rooted in his or her sense of identity and mission (ideals, calling, inspiration)” (p. 79). This approach acknowledges that processes of change related to teaching practice are not only cognitive, but also emotional and motivational. Through the process, several themes related to Nicole’s professional learning emerged: awareness of a number of inhibiting beliefs and barriers; learning how to learn; awareness that one’s own learning takes time and involves emotions. Nicole identified several beliefs that inhibited her ability to develop in her teaching practice: needing to be liked as a teacher, expecting that change can happen immediately, a tendency to take control of the classroom interaction whenever students expressed uncertainty, a lack of knowledge of modern theories of self-regulated learning, too much focus on trying out different teaching strategies, without taking the students’ perspectives into account, and too high expectations of the abilities of students. The second area of learning that Nicole identified was in the way she reflected on classroom situations. Through the supervision sessions, she moved from action oriented reflection (focusing on whether various active learning strategies “worked” or not) to meaning oriented reflection, which involved processing the learning situation at a deeper level to uncover information about students and their learning. Finally, Nicole learned to be more comfortable with the emotions of learning, both hers and her students. This allowed her to be more open to hearing students’ perspectives in the classroom, a process that has been integral to development in her teaching practice. Identification of these various elements of Nicole’s

learning process contributes significantly to our understanding of the learning process related to development in teaching practice. The interrelationship between behaviour, cognition, and emotion in this process is evident in this account of Nicole's story. Another interesting conclusion of this study is the important role of the supervisor and multilevel learning approach to enabling development in teaching practice. According to Hoekstra and Korthagen their "findings suggest that informal learning may not support the level of awareness necessary to bring about the profound changes needed when teachers are required to adopt new ways of teaching" (p. 88). In this case, the supervisor played an important role in bringing inner cognitive and affective processes into awareness. This study contributes to the evidence that cognitive processing may not always be enough to promote learning related to development in teaching practice; that there are significant emotional and motivational aspects to this process; and that teachers may need safe and supportive environments for exploring feelings of insecurity and frustration in order to experience growth.

To increase our understanding of how teachers learn, Bakkenes, Vermunt, and Wubbels (2010) studied learning experiences of 94 teachers with 3 to 40 years of experience. The minimum of 3 years' experience was based on Berliner's (1988) description of novices to expert stages where teachers generally move beyond the novice and advanced beginner stages after 3 years of teaching. The learning experiences of these teachers were reported through digital logs and analyzed in terms of activities and outcomes. Although they begin their paper by saying that "the scarcity of systematic research on understanding and improving the learning processes of teachers themselves is striking" (p. 533), their study, like others, focuses on activities and outcomes rather than the underlying processes of learning. They do acknowledge the intent to "illuminate the more covert aspects of teacher learning including teachers' thinking processes during learning" (p. 536) and make some contributions in this area. In their digital logs, teachers were asked to describe a learning experience once every six weeks over the period of one year. They could describe any learning experience that had been significant to them, whether positive or negative, whether formal or non-formal. In this study, teachers were trained to describe their learning experiences as small stories that contained seven elements: what they learned, how they learned it, which thoughts, feelings, concerns, or goals were involved, what they saw as the reason for learning, and how others were involved in the experience. Although studying teacher learning from the individual perspective, these researchers recognized the social elements of this process. In their analysis of the learning

logs, Bakkenes, Vermunt, and Wubbels (2010) tried to identify the activities that were linked to changes in knowledge, beliefs or practices and then tried to determine sequences of activities that were connected to learning outcomes such as changes in practices or changes in knowledge and beliefs. Based on analysis of the logs, they identified the following learning activities in which teachers engaged as part of their learning processes: experimenting with new practices; getting ideas from others through observation, conversation, attending a course, reading books, etc.; reflecting on practice; experiencing friction, struggling not to revert to old ways, and avoiding learning. They describe experimenting as a "combination of purposefully trying out something new in practice and some form of reflection about it" (p. 539). Experimenting generally occurred in response to a teaching event – student achievement, external requirement, or classroom event. Considering practice involved various strategies for reflecting on practice. Experiencing friction involved dealing with positive or negative discrepancies between "what [was] expected or wanted and what actually happen[ed]" (p.539). It consisted of noticing the discrepancy and appraising it and was generally accompanied by fairly strong emotions. Experiencing friction was often an incentive for experimenting or reflecting. Although they do not explain much about the activity of avoiding learning, this seems like a very interesting area to explore further.

The types of learning outcomes that were identified in the logs were changes in knowledge and beliefs (which included new ideas), changes in emotions, changes in intentions for practice, and changes in actual teaching practice. Interestingly, "teacher's reported mainly changes in knowledge and beliefs (50% of all instances) followed by changes in emotions (35%), intentions for practice (13.5%), and changes in actual teaching practices (1.4%)" (Bakkenes, Vermunt, & Wubbels, 2010, p. 541). Types of changes in knowledge and beliefs included awareness, confirmed ideas, and new ideas. Types of changes in emotions included positive emotions such as pride, courage, or positive expectations, negative emotions such as irritation, shock, fear, or doubt. Surprise was a category of emotional change that, although often combined with positive and negative emotions, was also frequently reported on its own. Changes in intentions for practice involved either the intention to try something new or the intention to continue a current practice. Teachers "mainly reported changes in knowledge and beliefs and in emotions and hardly any changes in teaching practices" (p. 545). Actual changes in practice were rare and when they were reported either involved adopting a new practice or returning to an old practice. This reinforces the arguments made by McAlpine et al. (2000) and

Kreber (2005) in section 2.1.3 that the links between reflection and development in teaching practice are still poorly understood.

Bakkenes et al.'s (2010) study did not reveal a model for teachers' learning processes and confirmed that such processes are not intentionally planned or consistently sequenced. They did, however, enhance our understanding or the elements of the process and highlight the existence of problematic aspects such as experiencing friction, struggling not to revert to old ways, and resisting learning. They also confirmed that changes in knowledge, beliefs, and emotions do not correspond to actual changes in practice although they suggest that these might be "seen as precursors of change in actual practices" (p.545). Their research confirms the complexity of the teaching development process and highlights many important elements that are part of that process.

2.2.3 Teacher learning as a situated and multidimensional learning process

Teacher learning is a situated and multidimensional learning process and therefore requires a sociocultural approach to understanding and supporting it. Approaches that only consider the individual dimension are not adequate. In a paper that provides an overview of what has been learned about effective professional development and teacher learning, Borko (2004) criticizes current practices related to in-service professional development as being "fragmented, intellectually superficial" (p. 3) and not based on what is known about how teachers learn. Her argument for the application of a situative perspective to both the research and practice of teacher professional learning builds on previous work (Putnam & Borko, 2000) and contends that to understand teacher learning, we must take "into account both the individual teacher-learners and the social systems in which they are participants" (p. 4). This view is also supported by Richardson and Placier (2001). In a more recent review of the literature on teacher professional learning, Opfer and Pedder (2011) argue that a "process-product" logic to professional development has "limited explanatory ability" (p.376) because of the complex interactions between the teacher, the context, and the professional learning activity. They call for a conceptualization of teacher learning that is based on complex systems thinking rather than on the study of activities or events. Opfer and Pedder contend that the many individual dimensions of teacher learning discussed in the previous section, interact in

complex ways with the social and contextual dimensions such as norms, structures, information, communication, processes, and practices. They summarize this interaction as follows:

> To understand and explain why and how teachers learn, we must consider how a teacher's individual learning orientation system interacts with the school's learning orientation system and how both of these systems together affect the activities (and features of activities) in which teachers participate and then are reciprocally affected by the changes that occur from participation in these activities. (Opfer & Pedder, 2011, p. 393-394)

In this section, I will discuss a number of empirical studies that have investigated K-12 teacher learning using a situative, sociocultural, or complexity lens, studies that have tried to address the complex interrelationships between individual, social, and contextual elements of this process.

In the K-12 literature, several researchers have recognized and tried to investigate teacher professional learning as situated learning that occurs in the context of every day practice (Kwakman, 2003; Lohman, 2006). From this perspective, learning is "conceived as an active, constructive, collaborative, and context-bound activity" (Kwakman, 2003, p. 149). Kwakman's investigation of factors affecting secondary teachers' participation in professional learning activities found that schools, as workplaces, did not generally support activities shown to be conducive to teacher professional learning (reading, experimenting, reflecting, collaborating). They identified 21 learning activities in these four categories and surveyed 542 teachers to measure their participation in the various activities. Then, using a variety of other research instruments, they examined the personal, task, and work environment factors that affect participation in professional learning activities. Personal factors included professional attitudes, appraisals of feasibility, appraisals of meaningfulness, emotional exhaustion, and sense of personal accomplishment. Task factors included pressure of work, emotional demands, job variety, autonomy, and perceived influence. Work environment factors included management support, collegial support, and intentional learning support. In their study, the influence of personal factors was much more significant than task or work environment factors. The researchers conclude, however, that this is because schools generally lack the conditions needed to stimulate and support professional learning. Based on several other literature sources they argue that "learning at the workplaces requires an adequate infrastructure for learning" (p. 168). This, they say, is not about learning events organized by staff developers, but about "structural and cultural changes within schools that provide time and stimulus for those

activities that are characteristic of strong professional communities such as interaction and reflection" (p. 168).

Building on the research of Kwakman (2003), Lohman (2006) and others, Hoekstra, Korthagen, Brekelmans, et al. (2009) sought to explore the research question, "What is the relationship between informal workplace learning and [teachers'] perceptions of workplace conditions" (p. 277). Like this thesis study, they argue that, although we have empirical studies that "provide insight into the kind of activities [experienced] teachers report to learn from, they do not give much insight into the mental activities that take place while teachers undertake these activities" (p. 278). Their research involved case studies of two very different experienced teachers, who were a subsample of a larger study involving 32 teachers and were selected based on differences identified in the larger study. These differences included beliefs about teaching and learning, informal learning activities, and perceptions of conditions for workplace learning. The case analysis was based on interviews, learning experience reports and classroom observations. All the data was analyzed through the lens of five conditions for workplace learning, which had been derived from the literature: autonomy, collaboration, reflective dialogue, receiving feedback, experience of shared norms and responsibility. Based on the interview transcripts, the first author created a table which summarized the coded segments in relation to the five conditions identified above. The first two columns of the table served to differentiate between the contributions of the organization related to each workplace learning condition and the contributions of the individual. The final column of the table summarized data from each teacher's learning log and classroom observations that related to the workplace learning condition. They found that the ways in which the two teachers perceived, interpreted, and actively shaped these conditions for learning was quite divergent. For example, one teacher enjoyed the autonomy and was not hindered by "the lack of shared norms" (p. 293) in her work context. She sought out people with whom she could engage in collaboration and reflective dialogue. In the same work context, the other teacher found that the autonomy contributed to a lack of direction, reflective dialogue, and feedback. He did not seek out peer interactions that helped with his professional learning, but rather engaged in peer interactions that reinforced the continuation of existing practices, even though they were not necessarily enhancing student learning. Based on these two very different responses to the previously identified workplace conditions for learning, the authors conclude that, although the conditions for workplace learning that they derived from the literature are relevant for teachers'

informal workplace learning, teachers' individual perceptions of these conditions differ. Teachers are "active interpreters" of their workplace conditions and those interpretations have a significant impact on the learning outcomes of various activities. Knowing that these differences in perception exist is important when considering the interrelationships between the individual and the context in the teacher professional learning process. More insight into the lenses that contribute to such perceptions would be helpful.

In this review of relevant research from the K-12 literature, we have come to better understand teacher learning as a developmental process in which the cognitive, affective, and behavioral dimensions of individual teachers must be acknowledged and supported. As well, we have begun to appreciate the complex interplay between individual, social, and contextual dimensions when trying to understand this situated learning process. Once acknowledged as a situated learning process with these interrelated dimensions, we can appreciate that the K-12 literature, although helpful, remains insufficient for understanding post-secondary teacher learning and for designing and supporting the professional learning of this group of educators.

2.3. Professional Workplace Learning

The professional workplace learning literature is important because it contributes to understanding the interrelationships between individual, social and contextual dimensions involved in professional learning. In this section, I review relevant empirical research from this field that examines professional learning from the perspective of the professionals themselves and that provides insight into the interrelated dimensions of this learning process. The first section examines the individual dimensions of professional learning that emerged from a study conducted by Webster-Wright (2010). The second section examines the work of several researchers (Engeström, 1993, 2001; Eraut, 1994, 2000, 2007; and Billett, 2000, 2004a, 2004b) who studied professional learning as an individual and socially interdependent learning process.

2.3.1 Professional learning based on experiences of professionals themselves

Conceptualizations of professional learning that are based on authentic experiences of the professionals themselves provide important insights into this learning process. Webster-

Wright's (2010) phenomenological study of authentic professional learning (APL) in the allied health professions (occupational therapists, physiotherapists, and speech pathologists) is informative in relation to individual experiences of professional learning. Her findings, based on interviews with 16 professionals, suggest that "professional learning is essentially a self-directed activity, as much about ontology and professional identity as epistemology and professional knowing" (p. 11). Her study resulted in a phenomenological structure of elements of authentic professional learning that were common across the experiences of her participants. This structure included 4 interlinked constituents: understanding, engagement, interconnection, and openness. The first constituent of authentic professional learning is understanding and refers to a change in professional understanding. The transition from prior *understanding* to a changed understanding could involve gaining knowledge about what to do, thinking about what to do, or questioning what is done. The second constituent is *engagement* and refers to some type of engagement in professional practice. This could involve physical engagement or actively doing the practice, emotional engagement through caring about aspects of professional practice, or cognitive engagement such as perceiving uncertainties in practice or perceiving aspects of practice in a novel way. The third constituent is *interconnection*, which refers to the experience of interconnection over time. This could involve the interconnection of multiple experiences in a "circuitous iterative web" (p. 113), the interconnection of the past, present, and future through imagination, or dynamic interactions with others. The fourth and final constituent is *openness* and refers to one's openness to the possibilities offered by professional learning within the professional context. This constituent is attitudinal and involves openness to both the opportunities and constraints of the professional context as well as openness to resolving the tensions inherent in professional learning.

Webster-Wright's study identifies important constituents in a structure of APL and portrays such learning as a multi-faceted process. Her use of phenomenology as both a conceptual and methodological framework for her research allowed her to conceptualize "the experience of professional learning as inextricably interrelated with its lived context" (2010, p. 59) because it focused on extracting an understanding of this phenomenon as it is experienced within the lives of the professionals themselves. For Webster-Wright (2010) the constituents of the structure of authentic professional learning serve primarily to advocate for alternative approaches and models for supporting professional learning in the workplace. Although her arguments related to alternative approaches to professional development seem to be

extrapolated from the study results, as opposed to grounded in that data, they are persuasive and logical, emerging from a deep and impressive grasp of the literature on professional learning as well as her research study. She describes this alternative approach as follows:

> Stakeholders cannot control, regulate, force or coerce a professional into learning. However, they can support, facilitate and provide an environment that enables APL. We need awareness of possibilities for change. An awareness of the ambiguities of being human, uncertainties of learning and constraints of professional socialization and context can lead to inquiry that has potential to transform professional understanding. (p. 221)

Because Webster-Wright identified that all experiences of authentic professional learning involve a change in understanding about some aspect of professional practice and engagement with practice situations that one cared about, this will form one of the criteria for selection of faculty participants for this study – that their experience of development in teaching practice involves a change in understanding (including knowledge, skills, attitudes, or beliefs) related to instructional practice. These two criteria help to put some concrete boundaries on the definition of professional learning for this study. This thesis research aims to build on the work of Webster-Wright by doing a phenomenological investigation of post-secondary teachers' experiences of development in teaching practice, a professional group that was not part of Webster-Wright's study.

2.3.2 Professional learning and interrelationships between individual and social dimensions.

Conceptualizations of professional learning need to be based on a deeper understanding of the interrelationships between individual and social dimensions. The social and contextual dimensions of workplace/professional learning are generally examined through the lens of sociocultural and situated theories of learning (Vygotsky, 1978). Although, as discussed earlier, there is some research based on sociocultural theories in the post-secondary faculty development literature (Gregory & Jones, 2009; Knight, Tait, & Yorke, 2006; Warhurst, 2008), its use is most evident in the workplace literature. Sociocultural and situated theories of learning have sometimes been criticized as privileging the social, at the expense of the individual, however the three researchers discussed in this section, specifically acknowledge the individual and social interdependence, an important component of this thesis study. They include: Engeström (1993, 2001), Eraut (1994, 2000, 2007), and Billett (2000, 2004a, 2004b).

Engeström (1993, 2001) used the lens of activity theory to study health practitioner learning at work. Activity theory is a sociocultural lens that has five core principles: (i) that the activity is the unit of analysis, and that human activities have individual, social, and contextual dimensions; (ii) that an activity system has many "voices" and is always "a community of multiple points of view, traditions, and interests" (2001, p. 136); (iii) that activity systems have a history and can only be understood against this context; (iv) that contradictions or tensions within the activity system are the source of change and development; and (v) that expansive transformations of activity systems occur when the "object and motive of the activity are reconceptualized to embrace a radically wider horizon of possibilities than in the previous mode of activity" (p. 137). Engeström's research in the health care context examined the many dimensions of providing better patient care. His study showed, how such a goal could not be conceptualized or addressed simplistically, such as by offering more training to specific groups of health practitioners (i.e. nurses, doctors, administrators), but that it involved reconceptualizing the interconnected activity systems involved in patient care (health center, hospital, patient's family).

The empirical work of Eraut and his colleagues (Eraut, Alderton, Cole & Senker, 2000, Eraut, 2007a) is based on data collected from the perspective of the professionals themselves. The first major study described in the literature (Eraut et.al., 2000) involved 120 participants from 12 different organizations in the occupations of engineering, business, and healthcare. In this study, the researchers sought to answer the following questions: What is being learned at work?; How is learning taking place?; What factors affect the amount and direction of learning in the workplace?. For their study, Eraut et al. defined learning as "the process by which personal knowledge is acquired" (p. 233). Based on a review of other non-formal learning research and on their past research experience, they decided to collect data using semi-structured interviews in which they asked participants about the nature of their work, the nature of competence/expertise required in their work, and the ways they acquired the necessary expertise, both in the past and on an ongoing basis. As well, they encouraged participants to "elaborate on salient learning episodes or to exemplify general statements about learning" (p. 239).

In response to the question of *what is being learned*, Eraut et al's (2000) research data revealed that this included far more than the propositional knowledge and technical skills

specific to the tasks of the profession. It included many dimensions of understanding - understanding situations and systems, understanding self, strategic understanding; many dimensions of skills - learning skills, interpersonal skills, thinking skills; many types of knowledge resources and how to access them – people in the department, people elsewhere in the organization, professional networks; and many types of judgment – strategic decisions, staff issues, prioritizing. These research results reveal the interdependence of individual, social, and contextual aspects of what people learn in the workplace. In response to the question of *how people learn*, Eraut et al. focused on the contexts and sources of learning. They found that only a small amount of workplace/professional learning occurred through formal education or training (i.e. courses, events, working for qualifications). The majority of learning occurred through non-formal contexts and sources (i.e. consultation and collaboration within and outside the working group, the challenge of the work itself, observing others in action). This research shows how strongly learning "is situated in the work itself and in its social and organizational context" (p. 249). Finally in response to the question of *what affects the amount and direction of learning*, Eraut and his colleagues found that confidence was a significant factor. As they explain, "confidence encouraged more ambitious goal setting and more risk taking, both leading to further learning" (p. 250). Eraut et al.'s evidence supports situated theories of learning and points to several key factors that affect the level and direction of learning. These factors included the organization of work, social relations in the workplace, and the effect of challenge and support on individual confidence, competence and self-efficacy. They acknowledge the difficulties in studying workplace learning processes because much of professionals' learning is implicit and difficult to consciously recall and because professionals are not generally accustomed to talking about their learning. Because of these challenges, they admit that even their approach "could elicit but a small proportion of the learning occurring in the workplace" (p. 240). Despite these challenges, Eraut et al.'s (2000) study significantly expands our conceptual understanding of what professionals learn, how they learn, and what affects their learning.

Building on this first study, Eraut (2007a) continued to investigate learning at work using the same three research questions. His second study, involved interviews and observations of early career nurses, engineers, and accountants over a three year period. The study began with 40 nurses, 36 engineers, and 14 accountants and retained 20, 34 and 11 respectively, until the third year. The results of the study are based on "265 interview transcripts from participants and almost as many field notes from observations" (p. 116). In response to the question, *what is*

being learned, Eraut's additional research led to the bigger question of what counts as knowledge and the position that knowledge has both individual and social dimensions. A review of the data to develop a typology of what was being learned resulted in a "typology of workplace learning trajectories" (p. 119). They identified eight main learning trajectories, each with several subcategories: task performance, awareness and understanding, personal development, academic knowledge and skills, role performance, teamwork, decision making and problem solving, and judgment. He argues that progress along a learning trajectory will be the result of many factors including experience, context, and support. In response to the question, *how people learn*, the challenge continued to be the artificial separation of working and learning. The solution was twofold: first, to classify learning processes according to "whether their principal intention distinction was working or learning" (p.121) and second, to separate shorter learning actions from longer learning processes. The result is a typology of early career learning with three main categories: work processes with learning as a by-product, learning actions within work or learning processes; learning processes at or near the workplace. Their conclusion was that "given favourable conditions, learning in the workplace can be enhanced by improving opportunities for productive engagement in the work processes" (p. 121) that afford learning. Finally in response to the question, *what affects the amount and direction of learning*, this research confirmed their earlier findings of the triangular relationship between challenge, support and confidence. Based on the data in this study, they added elements to each of these: challenge and value; support and feedback; confidence, commitment and personal agency. In this second study, they also added to their understanding of the contextual elements that influence learning. These include the allocation and structuring of work, the relationships with people at work, and the individual's participation and expectations.

Based on this whole body of research, Eraut (2007a) proposes an epistemology of practice that treats sociocultural and individual theories of learning as complementary rather than competing. In his epistemology of practice, the contextual factors identified above are seen as influencing the individual factors. Like others, he notes the importance of personal agency in the learning process as well as the "overwhelming importance of confidence" (p. 417). In the following passage, Eraut offers a description of the complex interrelationships between individual, social, and contextual dimensions of professional learning.

> Much learning at work occurs through doing things and being proactive in seeking learning opportunities; and this requires confidence. Moreover, we noted that

> confidence arose from successfully meeting challenges in one's work, while the confidence to take on such challenges depended on the extent to which learners felt supported in that endeavour by colleagues, either while doing the job or as back up when working independently. (p. 417)

Eraut's work contributes immensely to our understanding of the complex, multidimensional, and situated nature of professional learning. Eraut's work is particularly significant because it focuses on professional learning, because the data is based on the experiences of the professionals themselves, and because it includes a large sample of participants across multiple contexts. As Eraut et al. (2000) identify, one of the challenges in researching workplace learning is that, for most participants, articulating learning is a challenge because people are generally "unaccustomed to talking about learning and may find it difficult to respond to a request to do so" (p. 237). To address this, Eraut suggests that interviewers use specific probing questions grounded in the research and that interviewers try to keep the participants focused on the learning process, rather than the specific project in which the learning occurred or the knowledge/skills that emerged. This challenge is important to acknowledge and plan for in this thesis research. As discussed in section 4.6.2, the phenomenological interview, which focuses participants on describing the raw experience as opposed to attempting to interpret that experience, has proven powerful in overcoming the challenges identified by Eraut. In phenomenological research, the researcher does the work of distilling the meaning expressed in the description through the disciplinary lens that informs the study.

While Eraut's (1994) earlier work investigated the process of developing competence among novice teachers, his studies of professional learning have not included educators. Although he discusses, very briefly, the implications of his research findings for faculty learning in post-secondary education (2007a), these implications are not based on empirical data from this group of professionals. This study, which focuses on the learning processes of mid-career post-secondary educators, extends his work to this domain of professional learning.

Billett's (2000, 2001a, 2001b, 2001c, 2002, 2004a, 2004b, 2006, 2009a, 2009b) extensive body of literature related to workplace learning emphasizes the interdependence between the social context and the individual in the workplace learning process. Billett (2002) views this interdependence as "co-constructive" and describes the relationship as follows:

> [Workplace learning is] a reciprocal process between individuals and the social practice (e.g. workplaces) in which they engage. So learning is a reciprocal and constructive sociogenetic process; it is not socialization or enculturation. Instead it is a process that is constituted through interaction between individuals' social and cognitive experiences. (p.459)

He uses the term co-participation (2004b) to refer to a reciprocal interaction between how the workplace affords access and participation in learning activities and how the individual elects to "engage with what is afforded to them" (p. 190). His research has been conducted with workers in a variety of vocational settings and is unique in how it conceptualizes the interdependence between individual, social, and contextual dimensions of workplace learning. In this section, I discuss two of his empirical studies that contribute to our understanding of this interdependence.

In an effort to better understand how individual, social, and contextual factors interact in workplace learning, Billett (2000) examined the efficacy of guided learning activities in five workplaces over a period of six months. He used critical incident interviews to identify sources of learning and the links between individual learning and guided learning interactions, a social dimension of learning. Billett uses the critical incident technique because he claims that "verbal data have greater validity when founded in actual events and changes in behavior" (p. 276). Billett's study focused specifically on examining the efficacy of various guided learning strategies and confirmed several of his earlier findings, including: the strength of contributions to learning that came through everyday workplace activities, the important role of effective guided learning activities, and significance of individual engagement as a learning factor. Billett (2000) found that the type of learning that ensued in the context of everyday workplace activities was linked to the structure of the work environment and the affordances of the workplace. Referring to the learning that resulted from engagement in everyday work activities, Billet says that

> The effectiveness of these components of the learning curriculum [everyday activities, listening to others, interacting with others] appears to be found in its ongoing, ubiquitous and multi-fold contributions. These contributions are ubiquitous in workplaces and exist in ways and at levels that are probably impossible to replicate through instructional interventions or interludes as they comprise contributions to learning that are embedded in the workplace and in the conduct of work tasks. (p. 282)

The effectiveness of the guided learning activities depended largely on the readiness of the workers and the organization to engage with the activities, their structure, and their goals. It

reinforces Billet's main argument regarding co-participation, which is that "engagement in work and what is co-constructed through work is negotiated between the evolving social practice of the workplace and individual's ongoing development" (2004b, p. 190).

The second study, reported in Billett, Smith, & Barker (2005), further explores the role of individual agency in the workplace learning process. By focusing on individual agency, these researchers do not intend to reduce the significance of workplace affordances or the interdependence between individual and social factors in shaping learning. However, they contend that, at the heart of the interdependency is "individuals' agency and intentionality" (p. 222). This study involved 12 workers - three workers in each of four different kinds of occupations and workplaces (a gym, a restaurant, an IT support department in a university, and a fire station). Using semi-structured interviews, the researchers sought to understand the affordances of the workplaces for learning and the processes of engagement. They found that the individual, social, and contextual elements of workplace learning were "richly connected and intertwined" (p. 233). Billett describes the relationship saying that "the process of engagement in work activities necessarily engages individuals in ongoing and moment-by-moment individual learning" (p. 233). This study, however, reinforced the significant role of individual agency in the learning process because, even in the same workplace, workers engaged differently in learning because of their own intentionality and sense of agency. Billett sums up this finding in the excerpt below.

> The privileging of environments in which to learn is not whether they are sites that promote learning as their key purpose, but the degree by which they provide the inter-psychological experiences of activities and interactions through which knowledge is experienced, accessed, engaged with and constructed. These environments are perhaps most potent when supported by the assistance of another who understands that knowledge, and can work to make accessible what is otherwise inaccessible, and support and monitor that learning. (p. 233)

Billett's research confirms the importance of individual agency and intentionality and therefore the importance of investigating professional learning experiences from the perspectives of the professionals themselves. However, he also shows how such experiences cannot be understood separately from the context in which such learning occurs and the "learning curriculum" that exists in everyday work activities. His research confirms the important role of workplace activities in learning and affirms the validity of grounding self-reported data in actual workplace incidents. Billett's conceptualization of the interrelationship between the individual

and contextual elements in workplace learning is rich and as a result, his theory of co-participation, which is discussed in more detail in the following chapter, will be used as the primary theoretical lens for this study.

2.3.3 Adding to the workplace learning literature

This research study aims to add to the workplace learning literature discussed in this section in the following ways:

Focus on mid-career, post-secondary faculty.

None of the workplace learning research examined in this section focused on the professional learning of mid-career post-secondary faculty. My review of the literature did not uncover any workplace learning research, from a sociocultural perspective, that explored the learning processes of this professional group. Such empirical research will contribute significantly to our ability to promote and support continuous professional learning amongst post-secondary faculty and hence, as argued in chapter 1, contribute to efforts to enhance the quality of post-secondary education.

Focus on learning process.

The work of Webster-Wright (2010) and Eraut (1994, 2000, 2007) focuses primarily on the elements or factors that contribute to the learning process, rather than the process itself, which is the focus on this study. Although these factors will be helpful when examining the findings of this study, it is the process that remains of primary interest in this research. Billett's (2000, 2004a, 2004b) exploration of workplace learning as a process that cannot be understood separately from context but that also acknowledges the significance of individual agency provides a rich theoretical foundation from which to continue investigating this learning process.

Expand understanding of interrelationships.

Both Eraut and Billett have contributed immensely to our understanding of the interrelationships between the individual, social, and contextual dimensions of workplace professional learning. This research hopes to build on their research and expand our understanding of such interrelationships, especially as it applies to the unique context of post-secondary education.

2.4. Chapter 2 Summary

All of the research discussed here, increases our understanding of various elements involved in the complex and multidimensional process of teacher professional learning as it relates to the development of teaching practice and provides a solid foundation for pursuing the research question for this study which is, “How do full-time, mid-career college faculty experience the process of development in teaching practice?”. The literature reviewed has affirmed the importance of considering individual, social, and contextual dimensions when investigating this learning process and has shown how rich the research can be when it seeks to understand the process from the perspective of the professionals themselves and as it occurs within the context of practice.

I believe that this research study will contribute to the existing knowledge in several ways. First, the majority of the existing research focuses primarily on either the individual dimensions (beliefs, conceptions, reflection) or the social dimensions (informal learning, social learning). This study uses a theoretical framework and research methodology that has the potential to increase our understanding of the interrelationships between these dimensions. Second, in terms of the target group, it seems that novice teachers have, to date, been the main target group for studies on post-secondary teacher learning. This study intends to add to the empirical research on mid-career post-secondary teachers, a group that remains under-researched. Third, in the studies that gathered rich narrative data about people’s experiences of post-secondary teacher learning, the sample sizes were generally small (one to four individuals). Phenomenological research will enable the collection of rich descriptions of experience from a larger sample size. Fourth, whereas most studies to date have focused on identifying factors that contribute to effective professional development, this study will focus on uncovering knowledge about the process of professional learning related to teaching practice. The intent is to expand our understanding of the teacher professional learning process within the context of post-secondary teaching practice, an understanding that will better equip us to design and analyze institutional support for continuous professional learning related to this practice.

Chapter 3. Theoretical Orientation of the Study

In situating this study theoretically, I argue that it is important to discuss its orientation on three different levels because of the complex nature of the phenomenon of development in teaching practice. First, it is grounded within the broader philosophical orientations of phenomenology and sociocultural theory. Second, it uses Billett's model of co-participation (2002) as the primary theoretical lens. Third, it draws on several other theories to more deeply understand the interrelated individual, social and contextual elements of faculty professional learning related to development in teaching practice. This rich array of theoretical lenses has informed the formulation of both the research question and research methodology for this study to investigate how full-time, mid-career college faculty experience the process of development in their teaching practice.

3.1. Phenomenology: A philosophical orientation to understanding lived experience

As described by van Manen (1997) and Dowling (2007), the roots of phenomenology come from the philosophical writings of Edmund Husserl, Martin Heidegger and Maurice Merleau-Ponty. Husserl introduced the idea of searching for the central and underlying meanings of experiences. He proposed the idea of studying things by looking at how our consciousness experienced them, an idea from which most of the concepts of phenomenology evolved. Building on the ideas of Husserl, Heidegger emphasized the contextual nature of all experience, both socioculturally and historically as well as the importance of considering the 'being' at the centre of the experience. Merleau-Ponty's work argues for the foundational role of perception in understanding and engaging with the world. He extended Heidegger's idea of 'being' to include the notion of the self as always emerging and hence engaged in a continual 'becoming" through constant mind, body, consciousness, and world interactions. Creswell (1998) suggests the following themes as common philosophical underpinnings for phenomenological research:

> The need to break away from the scientific ways of exploring the world and return to more philosophical ways of searching for understanding.
>
> The need to suspend judgments about what is real and explore the complexities of phenomenon
>
> The need to acknowledge that our perception of reality is based on what appears in consciousness in relation to a particular phenomenon (p. 53)

Phenomenology is the study of phenomena: "appearances of things, or things as they appear in our experience, or the ways we experience things" (Smith, 2008, p. 2). One of the central concepts in understanding how phenomenology examines experience is embedded in Husserl's phrase, 'going back to the things themselves'. From this philosophical orientation, studying phenomenon involves obtaining comprehensive descriptions of individuals' lived experiences with the phenomenon, as they exist in their consciousness. Such descriptions provide a basis for uncovering essences and structures of that experience. A full description of the phenomenological research method used in this study is found in the next chapter. However, at this point, it is important to appreciate that, from a pheneomenological orientation, phenomenon are understood through the descriptions of lived experiences of the phenomenon as they appear in consciousness. In the case of this thesis research, it is the phenomenon of development in teaching practice that is under investigation. The intent is to investigate this phenomenon by soliciting descriptive accounts of faculty experiences from the faculty themselves.

3.2. Sociocultural perspective: A holistic and situated orientation to learning

As well as being oriented philosophically to a phenomenological way of understanding lived experience, this research is also grounded in sociocultural perspectives of learning, and more specifically sociocultural perspectives on learning through work (Fenwick, 2001). As described by Wertsch, del Rio, & Alvarez (1995), "the goal of a sociocultural approach is to explicate the relationships between human action, on the one hand, and the cultural, institutional, and historical situations in which this action occurs, on the other hand" (p. 11). A sociocultural perspective contends that human activities, such as teaching or learning, cannot be understood strictly from a psychological perspective. An understanding of these activities

needs to acknowledge the interdependence between the individual and the sociocultural environment in which it occurs.

Sociocultural perspectives of learning are grounded in the work of Dewey (1938) and Vygotsky (1978). In *Experience and Education*, Dewey argued that the content of education could not be separated from the context. This included both one's personal context and the sociocultural context. In *Mind in Society*, Vygotsky explores how the activities, tools and symbols that exist in one's environment play a significant role in the development of higher psychological processes. He extends the understanding of the sociocultural context to include a socio-historic context, maintaining that many aspects of thought and action are not only influenced by the immediate context, but also by the historical context. In Fenwick's (2001) edited volume, titled *Sociocultural Perspectives on Learning through Work*, she describes this perspective as follows:

> Sociocultural perspectives understand learning to be fundamentally rooted in activity, tools (including language), relationships, and communities of practice. They look carefully at how learning is interrelated with the systems in which people work: the cultural, political, economic, and social dynamics of particular groups and contexts. (p. 1)

Fenwick goes on to describe how massive contextual changes in the workplace, influenced by many factors described in chapter one (i.e. technology, globalization, economic pressures, sociological changes), are challenging traditional models and practices related to workplace learning. She claims that "concerns about knowledge embedded in action, interrelation of contexts and identities, the dynamics of difference and continual change, politics and power relations, ecology and ethics and knowledge processes in work and organizations" are all aspects of workplace learning that are pushing scholars and practitioners in this field to think and act in new ways. Because faculty professional learning, related to teaching practice, involves a complex interplay between individual, social, and contextual elements, the sociocultural perspective offers a meaningful lens for investigating this phenomenon.

3.3. Billett's theory of Co-participation

One of the few sociocultural theories to stress the salience of the interrelationships between the individual, social, and contextual elements and to place equal emphasis on

individual agency as on social and contextual influence is Billett's (2002, 2004b, 2006, 2009a) theory of co-participation. Research, focused on the individual dimensions of learning, tends to dominate the literature related to faculty development in teaching practice. Most of this research results in theoretical models that do not acknowledge the importance of the social and contextual elements of this practice. Research focused on the social context tends to view learning in this sphere as non-formal, a view that Billett (2002, 2004a, 2004b) argues continually against, saying that it is an imprecise and unhelpful way of conceptualizing the workplace learning environment because individuals' engagement in work activities is neither unplanned or unstructured; it is, in fact, highly structured and intentional. He points out that workplace learning is "formalised and structured by the goals, activities and culture of the work practice" (2002, p. 460) and that "this structuring has legitimate pedagogical purposes because participant learning is central to the continuity of the social practice that constitutes the work practice, and workplaces afford opportunities explicitly to develop capacities to support that sustainability" (p. 460). For these reasons, I have selected Billett's theory of co-participation as the primary theoretical lens for investigating faculty experiences of development in teaching practice and for attempting to better understand this professional learning process.

Billett (2002) proposes co-participation as the bases for understanding workplace pedagogic practices suggesting that such practices "comprise the reciprocal process of how workplaces afford participation and how individuals elect to engage with the work practice" (p. 457). He argues that co-participation offers a conceptual framework for "illuminating relations between the social world and the mind" (p. 468) by "delineating and identifying the invitational qualities of the workplace and how individuals elect to engage in social practice" (p. 457). Like Billet (2004b), I contend that the "concept of co-participation at work aims to advance a more relative and interdependent view of learning through working life" (p. 202). I believe that a richer understanding of the interrelationships between the individual and contextual aspects of learning, especially as it concerns faculty professional learning related to development in teaching practice, is essential if we want to address the issue of learning quality in post-secondary education.

Billett's conceptual framework (2004b), shown below, depicts the work practice as part of an evolving social context on the left hand side and the individual's ways of knowing as part

of an evolving personal history on the right hand side. Learning occurs at the intersection of work practice affordances and individual engagement.

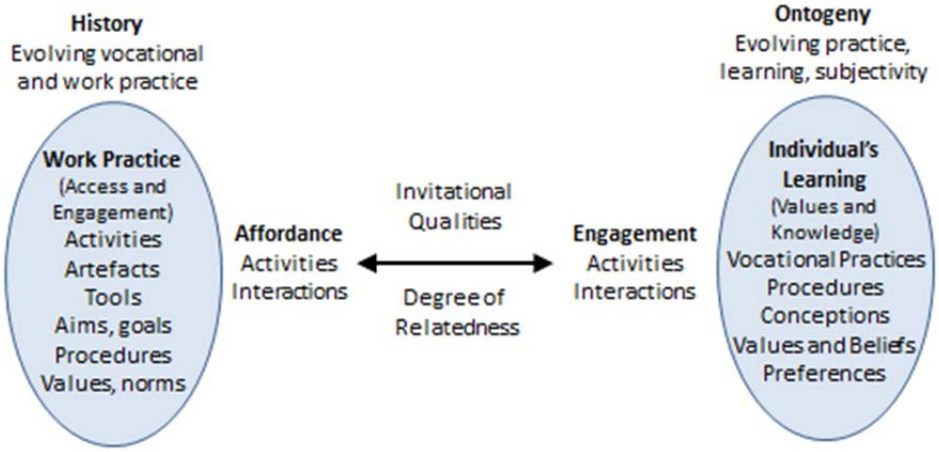


Figure 3.1 Co-participation at Work. From Billett (2002, p. 467)

Billett (2002) describes the interactions between the individual and contextual dimensions as follows:

> The work practice gives individuals access to knowledge through its affordance of activities and guidance. The nature of that knowledge and its access to particular individuals or cohorts of individuals are constituted in and distributed across the workplace in terms of the tasks, support, guidance, artifacts and the kinds of goals, norms and values that are represented in the workplace. These are shaped by historical factors (e.g. evolving knowledge of the vocation), sociocultural needs (i.e. changing requirements for the vocation in the particular cultures in which the workplace is situated) and situational factors (e.g. division of labour, workplace cliques, bases for employment, etc.)… Similarly, the individual's ways of knowing (thinking and acting) are not fixed and evolve over time and in different ways as they engage with and resolve their interactions and tasks. Ontogenesis evolves through engagement in different kinds of social practice and in different ways throughout a life history. Individuals' values, beliefs, conceptions and competence shape this life direction and the kinds of interactions they engage in. (pp. 466-467)

Learning, says Billett, occurs through a process of co-participation, where both individual elements and social elements contribute the nature of the interaction and the type of learning that emerges. Billett argues that a better understanding of co-participation will enhance workplace pedagogic practices. In the individual dimension, Billett identifies elements such as conceptions, values and beliefs, ways of knowing, personalities, subjectivities, and preferences

as influencing engagement in learning at work. He argues that individuals ultimately exercise agency in how they engage in workplace activities and that individual goals and intentionalities powerfully direct participation. Individuals are more likely to engage when they perceive a meaningful relationship between the workplace goals and their individual goals. Billett goes on to explain that individuals' goals, values, and intentionalities are largely influenced by their life histories or ontogenies. These life histories are "likely to result in unique dispositions, ways of construing social experience and degrees of interdependent participation" (2004, p. 202). In the social dimension, Billett emphasizes the importance of recognizing workplace learning as a socio-historic practice that is "situationally constituted" (2004, p. 199). This means that work practices have evolved over time based on socio-historic contributions and that the aims and goals, norms and values, practices, tools, and artefacts in each particular work situation will strongly influence how it affords engagement in learning. These elements will influence things such as how knowledge is constructed; how problems are presented, framed, and solved; and the kinds of expertise, support, and guidance available.

In his discussions of co-participation, Billett (2004b) also conceptualizes the reciprocal processes of workplace learning as ongoing and evolving. As he explains, both the individual and social and contextual elements of the workplace are constantly evolving. He refers to the individual process of ongoing development as ontogenetic development, a process of becoming based on all aspects of the individual dimension discussed above. He refers to the evolving social practices as social genesis and argues that these too are constantly developing based on how a variety of factors including how individuals engage with the social practices and other brute forces (Billett, 2009). In a study of mid-career faculty experiences of development, this notion of workplace learning as ongoing and evolving is important because it aligns with the concept of development as a process of continuous professional learning and highlights the need to consider how institutions support and promote such learning throughout the faculty career. Although Billett's model emerges from studies of workplace learning in vocational settings, such a lens can enable a richer understanding of faculty professional learning processes related to development in teaching practice. I conclude this section by highlighting several ways that Billett's framework is unique in its conceptualization of workplace learning, and explaining why I believe it offers a particularly powerful lens for this thesis research.

Billett's (2002) theory of co-participation is unique in several ways, making it a particularly powerful lens for this thesis research. First, it focuses on trying to understand the relational interdependence between the social and personal dimensions of workplace learning. It acknowledges that each of these dimensions plays a role in the learning process, but that learning "is a process that is constituted through interaction between individuals' social and cognitive experiences" (2002, p. 459). Second, it views workplace pedagogic practices as the result of all participatory practices and conceptualizes workplace learning as "the product of participation in and engagement with [all] goal directed activities [in the workplace]" (2002, p. 460). Third, it acknowledges the socio-historic and sociocultural dimensions of both the individuals' ways of knowing and the work practice. No other model accommodates the notion of development as something that has a historical dimension for both the individual and the workplace practices, a notion that seems particularly relevant in the case of post-secondary education. Fourth, rather than just considering the cognitive or professional identity dimensions of the individual, Billett's model acknowledges learning as a process involving "individuals ontogenetic development" (2009a, p. 41) or development that implicates everything that makes up ones' being - their unique personal histories, their sense of self, personalities, values and beliefs, intentionalities, etc. Billett explains how ontological security or the need for individuals to maintain a coherent sense of self is important to consider. Fifth, although Billett's model acknowledges the important role of social and contextual influences it also emphasizes individual agency and argues that individuals ultimately "construe what they experience and construct a response that has legacies for both the individual (i.e. learning) and the workplace (remaking of practices)" (2008, p. 53).

3.4. Other Theoretical Models that Enhance Understanding of Co-participation

Despite selecting Billett's (2002) conceptual model of co-participation as the primary theoretical lens, I find that several other theoretical models add significantly to our understanding of various individual, social, and interrelated aspects. Theoretical models that enhance our understanding of the individual dimensions of co-participation include: Kegan's (1982) constructive developmental theory; McAlpine and Weston's (2000) model of reflective processes in the development of teaching practice; and Akerlind's (2003) hierarchy of expanded awareness related to the phenomenon of learning as it occurs in the classroom context. A

theoretical model that enhances our understanding of the social dimensions of co-participation is Wenger's (1998) conceptual framework for a social theory of learning. Theoretical models that enhance our understanding of the interrelationships between individual and social dimensions include: Engeström's (2001) activity theory; Eraut's (2007a) model for an epistemology of practice; and Clarke & Hollingsworth's (2002) interconnected model of professional growth. These models are discussed briefly in this section in terms of how they contribute to a richer understanding of co-participation.

3.4.1 Theoretical models that enhance understanding of individual dimensions of co-participation

(i) McAlpine and Weston's (2000) model of reflective processes in the development of teaching practice.

Building on the ideas of Dewey (1938) and Schön (1983), McAlpine and Weston (2000) consider teaching development a conceptual change process in which the "ongoing use of the process of reflection serves as a mechanism for turning experience into knowledge about teaching" (p. 364). Their model enhances our understanding of the intentional cognitive processes that post-secondary faculty engage in when interacting with the immediate and most salient dimension of the teaching context - classroom experience. From the perspective of co-participation, understanding interactions between social and cognitive experiences in this context is a crucial component to understanding teacher professional learning processes. In an overview of their model, McAlpine and Weston (2000) describe the metacognitive processes of reflection as involving four main components – action, monitoring, knowledge, and decision-making:

> Reflection as we define it is anchored in experience, in teaching action. Teaching actions are monitored in terms of external cues in order to track the achievement of goals, prior to, concurrent with and retrospective to instruction. Monitoring may lead to decision-making, decisions to modify teaching actions, dependent on where cues fall in relationship to the corridor of tolerance a mechanism for explaining why only some cues lead to decisions to change. Ongoing use of the processes of monitoring and decision making are essential for building knowledge. (p. 366)

Their model offers a framework for recognizing the types of cognitive activity that individuals engage in as they interact with their work practice. As well, the model reveals how reflection operates as a metacognitive activity in the learning process related to development in teaching.

It deepens our understanding of this reflective process in several ways. First, it identifies the centrality of goals in teacher reflection and action. This links to Billett's emphasis on intentionality as a driver of learning. Second, it identifies the existence of the "corridor of tolerance" (p. 366), a zone within which the individual is comfortable with the current practices. Although they acknowledge that this notion requires further research, it contributes to our understanding of faculty decision-making related to modifications to their teaching practice. The notion of "a corridor of tolerance" helps to explain, from the perspective of post-secondary faculty, the relationship between individual agency and learning related to teaching practice. As Billett points out, individual engagement in problem-solving and hence learning will always be person dependent, with the individual ultimately determining which problems are worth solving. Finally, McAlpine and Weston also identify different "spheres" of reflection, each with a distinct nature – practical, strategic, and epistemic and describe these as follows:

> practical reflection focuses on improving actions in a particular course or class. Strategic reflection involves an attention to generalized knowledge or approaches to teaching that are applicable across contexts. Epistemic reflection represents a cognitive awareness of one's reflective processes, as well as how they may impede reflection and enactment of plans. (p. 364)

In the description of these four spheres, we see evidence of how participation over time, in the social practice of teaching, leads to individual development. This development is not just in terms of individual actions, but in terms of how one thinks about the practice in terms of one's identity and subjectivities. This aligns with Billett's (2006) view of individual development in the context of work practice, whereby the individual, through intentional engagement with work practices, is shaped into new ways of being throughout their working life (ontogeny).

(ii) Akerlind's (2003) hierarchy of expanded awareness.

Although Akerlind's complete body of work is described in the literature review, her theoretical notion of a hierarchy of expanded awareness related to conceptions of teaching is particularly helpful in conceptualizing the individual dimension of faculty professional learning. It offers a model for conceptions of teaching that views the individual teacher learning process related to conceptions as one of expanding awareness rather than treating conceptions as a fixed system of beliefs (Kember, 1997; Samuelowicz & Bain, 2001). Like other researchers, she identifies several variations in teachers' conceptions. However, the difference in her model is

that “the either/or relationship between conceptions of teaching ….is reconceived as an “and” relationship” (2003, p. 388). She describes the essence of this view as follows:

> From an inclusive perspective, academics with a student learning focused understanding of teaching are not seen as focused on students’ learning and development to the exclusion of a concern with student engagement, teacher– student relations and information transmission. Rather, the different conceptions of teaching are seen as linked in a hierarchy of expanding awareness of the range of aspects which constitute university teaching. Thus, someone experiencing a student learning focused understanding of teaching is also aware of more teacher-focused aspects of teaching, but not vice versa. (p. 387)

Like Billett (2002), Akerlind suggests that the interactions between the individual and the context of learning can play an important role in supporting and guiding the professional growth of teachers. Akerlind’s model offers a possible lens for understanding a developmental process related to conceptions of teaching and, unlike other work on conceptions, suggests that through social and contextual interactions, focused on expanding awareness, individuals can deepen their understanding of teaching. If, as Billet suggests, the structure of activities, goals, tools, and artifacts in the workplace have inherent pedagogic properties and form the curriculum of the workplace, it would be meaningful to understand more about how individual faculty interact with the various aspects of their social and contextual environments in the process of expanding their awareness of teaching and developing their teaching practice.

(iii) Kegan’s constructive developmental theory.

Given that the focus of this research is faculty experiences of development in teaching practice, and that this development process has been defined as involving change, it seems appropriate to include at least one theoretical lens related to adult development as a change process. Although a full discussion of adult development theory is beyond the scope of this thesis, I have selected Kegan’s (1982), constructive developmental theory as a lens to enhance our understanding of this aspect of the individual dimension because, similar to Billett (2009a, 2010), it is grounded in the ontological view that human beings are engaged in a constant process of adaptation and growth, or becoming. Kegan’s work adds to this by identifying five shifts in consciousness that he has observed in studies of adult development and by acknowledging that the developmental process is one of endless motion where individual’s experience a constant need for rebalancing to maintain equilibrium, both internally and externally, both ontologically and epistemologically. Kegan builds on the work of Piaget and his

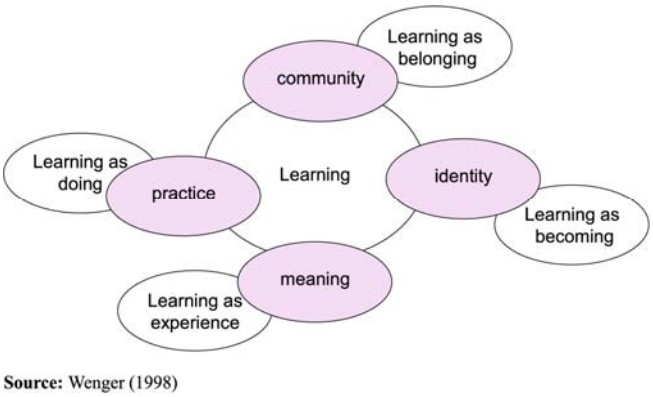
notion of “equilibration”, which he describes as “the ongoing conversation between the individuating organism and the world, a process of adaptation shaped by the tension between the assimilation of new experience to the old “grammar” and the accommodation of the old grammar to the new experience” (p. 43). Although Billett (2010) talks about the “sense of self that guides the degree and intentions of our conscious thinking and acting strategically in seeking ontological security” (p. 7), he does not discuss fundamental shifts in consciousness that occur throughout adult life. According to Kegan, each shift in consciousness represents a qualitatively different and more sophisticated way of perceiving and being in the world. Kegan suggests that there is a constant internal conflict between external pressures for growth and internal desires for maintaining equilibrium in the self-system. He argues that earlier models of development focused “more upon the energy system in us than the energy system in which we are” (p. 7) and builds on a central conviction that “development occurs in the context of interactions between the organism and the environment, rather than through the internal processes of maturation alone” (p. 7). He sees people as meaning-making organisms who are constantly undergoing “the experience of defending and surrendering the balances” (p. 114) of who they are, who they have been and who they are becoming. He argues that meaning-making is much more than a cognitive process (epistemological); that it is a process of being and becoming that occurs within a context of everything that comprises a person’s existence (ontological), including things such as feelings, experiences, thoughts, perceptions, and purpose.

Kegan views development as a development in consciousness where one’s relationship with others and the external world is fundamentally changed. Although he sees each subsequent shift as developmentally more advanced, he does not necessarily consider one better than the other. Since, for development in teaching practice we are generally asking teachers to shift to more sophisticate conceptions of teaching and of teaching practice, Kegan’s insights into this process are relevant. In examining individual growth, Kegan focuses our attention on the powerful constructs that exist in an individuals’ meaning-making framework and suggests that efforts to foster growth must consider the strong human need for equilibrium in that framework. He argues that any activity is experienced by a dynamically maintained ‘self’, an entity that is constantly wrestling with the “rhythms and labors of the struggle to make meaning, to have meaning, to protect meaning, to enhance meaning, to lose meaning” (p. 12) and in the process maintain a coherent ‘self’. He goes on to suggest that we must recognize

the point of view of the 'self' in the development process and recognize that "what is at stake in preserving any given balance is the ultimate question of whether the 'self" shall continue to be' (p. 12). This notion of an evolving self that strives to make sense of the world and create a coherent internal meaning-making framework that aligns with one's evolving understanding and perception of the world is not discussed in Billett's theory of co-participation and adds an important aspect to the individual dimension of co-participation. As well, the epistemological and ontological impact of conceptual change in the development process, as revealed in Kegan's work, are not discussed in any of the faculty development literature and I believe needs to be acknowledged as a significant aspect of the process. 3.4.2 Theoretical models that enhance understanding of social dimensions of co-participation

(i) Wenger's (1998) conceptual framework for a social theory of learning.

Wenger's (1998) social theory of learning views the social context, or community of practice, as the primary driver for learning. Although Billett criticizes Wenger's model as favouring social determinism and ignoring the role of human agency, we learn a significant amount about the social context of workplace learning from Wenger's work. Wenger's framework, shown in Figure 3.2 below, characterizes the professional learning process as occurring through social participation and involving continuous interaction and interconnection between four components.



Source: Wenger (1998)

Figure 3.2 Components of a Social Theory of Learning. From Wenger (1998, p. 5)

The components are described by Wenger as follows:

Meaning: a way of talking about our changing ability – individually and collectively – to experience our life and the world as meaningful.

> **Practice**: a way of talking about the shared historical and social resources, frameworks, and perspectives that can sustain mutual engagement in action
>
> **Community**: a way of talking about the social configurations in which our enterprises are defined as worth pursuing and our participation is recognizable as competence
>
> **Identity**: a way of talking about how learning changes who we are and creates personal histories of becoming in the context of our communities (p. 5)

In the context of professional learning, meaning emerges from learning as experience and encountering both individual and collective meaning in relation to practice. Practice emerges from learning as doing and developing competence in one's professional domain. Community emerges from learning as belonging and negotiating the social configurations of the community of practice. Identity emerges from learning as becoming and defining one's self in relation to the social context of practice. Like Wenger (1998), Billett also contends that analyzing the social context of work practices is key to understanding workplace learning. In both models, the social context (i.e. norms, practices, and goals) influences the nature of individuals' participation in that workplace and the affordances (i.e. problems to be solved, support and guidance available) for learning. Billett, however, contends that learning is the result of "the negotiated and relational interdependence between contributions to learning afforded by the workplace (the social experience) and also how individuals construe (the cognitive experience) and subsequently elect to participate and act in those practices" (2004b, p. 191). In seeking to better envision the social dimensions of faculty professional learning in relation to development in teaching practice, we might consider what affordances for learning (tools, guidance and support, artefacts, processes) are contributing to teachers' development as they engage in making meaning from classroom experience, develop competence in the practice of facilitating learning, participate in various educational communities (discipline, department, institution), and define their identity as educators.

(ii) Engeström's (2001) activity theory.

Engeström's (2001) cultural-historical activity theory, which was developed based on the work of Vygotsky and others, is closely related to Billett's model of co-participation. Both models emphasize the mutual interdependence of multiple dimensions in human activity, and in this case workplace learning activity. In fact, Billett refers frequently to the work of Vygotsky (1978) and Engeström (2001). Engeström's model (2001, p. 135) identifies various elements of

the activity system that influence the subject's movement towards the intended outcome of the activity: tools and signs, rules and norms, community, and division of labour. The focus for Engeström is on better understanding the interactions between and influences of these various elements on the activity. Although Billett (2008) critiques activity theory for failing to adequately acknowledge individual agency, Engeström's model contributes in several ways to our conceptualization of the social and contextual dimensions of professional learning processes. First, it emphasizes the significance of tools and artefacts as "culturally derived mediators operating as intermediaries" (Billett, 2004b, p. 193) between the individual and the environment and expands on Vygotsky's (1978) important ideas regarding the influence of mediating artifacts such as language and other cultural objects on thought and action. Second, the activity theory model depicts many complex interrelations between individuals and the elements of the system in which the activity occurs. It offers specific terms and examples of ways that these elements and interactions influence workplace learning. Although Billett emphasizes continually the importance of acknowledging the relational interdependence between the social and individual dimensions of workplace practices, he does little to explain the specific nature of the interrelationships. Third, Engeström points to the "multivoicedness of activity systems" (Engeström, 2001, p. 136). This refers to the idea that "an activity system is always a community of multiple points of view, traditions, and interests" (p. 136). This adds to Billett's ideas of co-participation by addressing more deeply the multilayered nature of the interactions that comprise the learning system. A fourth contribution of activity theory is Engeström's explicit acknowledgement of the socio-historical and sociocultural nature of activity, a dimension that Billett (2004b) has integrated into his conceptual framework. Engeström argues that the boundaries of a learning community are too narrow for adequately understanding professional learning and contends that the notion of situatedness should be extended to include both a historical and a cultural dimension. Acknowledging the socio-historical and sociocultural dimensions of activity is especially relevant to work practices, such as teaching, that have developed over generations because "the way interactions and communications occur and how the tools and artefacts of the…practice are developed and deployed, are…socially and culturally constituted" (Billett, 2004b, p. 193). I believe these are important dimensions to consider when conceptualizing development in teaching practice. What we get from Billett's model, which we don't get as clearly from Engeström, is the acknowledgement of the individuals' sociocultural and socio-historical context as equally important when considering the interdependent

relationship between the social context and the individual in workplace learning. Billett (2004b) describes this dimension of workplace learning as follows:

> Ontogenetically, individual development across a working life can be conceived as the history of individuals' thinking and acting through a continual stream of conscious thought (Meade, 1934), with those processes being shaped, mediated and transformed through their participation in socio-historically derived activities (Scribner, 1985), such as paid work. …. Linking ontogeny with history suggests purposeful relations among socio-historical and sociocultural transformations, cultural mediation and individual development. (p. 194)

Finally, Engeström specifically acknowledges the role of contradictions in the system as "sources of change and development" (Engeström, 2001, p. 137). Engeström explains that contradictions are not the same as problems or conflicts, but are "historically accumulating structural tensions within and between systems" (p. 137). Engeström's notion of contradictions in the system as the source of learning adds depth to our understanding of the social dimension of co-participation since this is an aspect of workplace learning that is not discussed in Billett's work.

3.4.3 Theoretical models that enhance our understanding of the interrelated dimensions of co-participation

(i) Eraut's (2007a, 2007b) epistemology of practice.

After extensive research into professional learning at various career stages, Eraut and his research team have concluded that treating formal and informal learning or cognitive and social learning as dualistic rather than dialectic is inadequate for understanding professional learning. They found that, at all career stages, professionals learned through formal and non-formal, individual and social means. He proposes an epistemology of practice that

> treats sociocultural and individual theories of learning as complementary rather than competing. The cultural perspective on knowledge focuses on knowledge creation as a social process whose outcomes may take the form of codified/reified knowledge and/or shared meanings and understandings that have not been codified or translated into mediating artifacts." (Eraut, 2007b, p. 405)

Although Billett argues that it is misleading to categorize workplace learning as formal and non-formal since both are participatory practices that require engagement and result in learning

(Billett, 2004a), Eraut's conclusion regarding the interrelationships between the various dimensions in workplace learning is at the center of Billett's model as well.

Eraut's Two Triangle Model of the factors affecting learning at work (2007b, p. 418), identifies individual, work, and relational dimensions for both learning and context that emerged from his research. The learning factors included: confidence and commitment/personal agency (individual dimension); challenge and value of the work (work/social dimension); and feedback and support (relational/social dimension). The context factors included: individual participation and expectations of performance and progress (individual dimension); allocation and structuring of work (work/social dimension); and encounters and relationships with people at work (relational/social dimension). Whereas Billett discusses the affordances of workplace practices for learning more generally (activities and interactions), Eraut articulates more specifically what those affordances entail. In his model, we see several examples of activities and interactions that contribute to both individual engagement in learning as well as work practice affordance of learning. As well, because Eraut's model is based on research with health professionals, it adds a professional learning lens to Billett's model which evolved primarily through the investigation of vocational work practices.

(ii) Clarke & Hollingsworth's (2002) interconnected model of professional growth.

Another important contribution to our understanding of the interdependent dimensions of co-participation, as it relates to teaching, comes from Clarke and Hollingsworth (2002), and their Interconnected Model of Professional Growth based on studies of high school teacher development, shown in Figure 3.3 below. Like Billett's model of co-participation, Clarke and Hollingsworth's model also shows interrelationships between individual factors and factors related to the work practice – in this case, the practice of teaching.

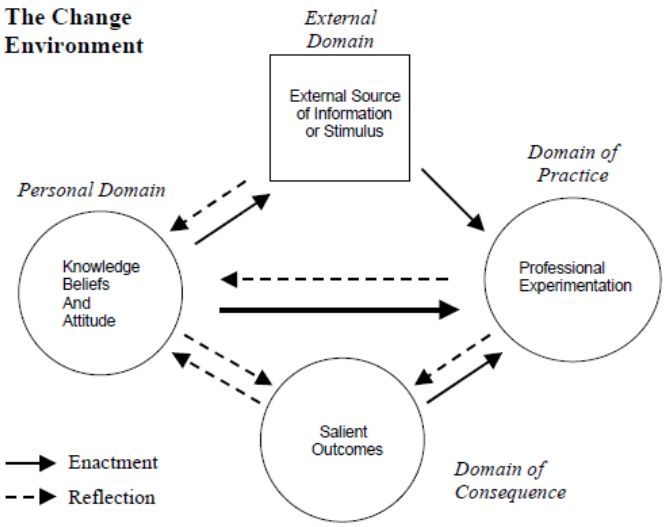


Figure 3.3 The Interconnected Model of Professional Growth. From Clarke & Hollingsworth (2002, p. 951)

When comparing Clarke and Hollingsworth's (2002) model with Billett's conceptual framework of co-participation, we see several similarities. There is, of course, the ongoing interaction between the personal domain and the domain of practice that supports the notion of learning as an ongoing and evolving process. As well, both models acknowledge the central influence of individual intentionalities and goals in the learning and development process. Their emphasis on teachers' values and beliefs as central to the change process, reinforces the importance of investigating development in teaching from the perspective of the teachers' themselves. This aligns with Billett's argument that, although we can't ignore the relational interdependence between the individual and the context of practice in workplace learning, personal agency and intentionality play "key roles in the process of learning" (Billett, 2008, p. 40). According to Billett, it is the individual's sense of self (identities, personalities, subjectivities), which is developed throughout their working life, that ultimately determines what will emerge from interactions with the social world and the experiences afforded by that social world.

3.5. Chapter 3 Summary

In this chapter, I began with an overview of phenomenology and sociocultural theories of learning as the philosophical orientation and learning theory orientation respectively for this

thesis. I presented Billett's (2004b) conceptual framework of co-participation as the primary theoretical lens for examining the multidimensional nature of teacher professional learning and argued that this model offers a rich conceptualization of the interdependent elements of workplace learning as it occurs over time. I then discussed various other theoretical models and how they enhance our understanding of various individual, social, and interdependent dimensions of teacher professional learning, offering comparisons with Billett's framework of co-participation.

Chapter 4. Research Methodology

4.1. Rational for Selecting a Phenomenological Approach

Various approaches to phenomenological research have emerged from phenomenology, a philosophical orientation based on the writings of Husserl, Heidegger, and Merleau-Ponty (Creswell, 2007; Valle, King, & Halling, 1989). Several of the foundational ideas of these philosophers were discussed in the previous chapter. Although this thesis research follows the descriptive phenomenological research method, as described by Giorgi (1997, 2006, 2008, 2009), it also draws from the writings of other phenomenological researchers who link their approach to the philosophical ideas of Husserl, in order to explain the phenomenological underpinnings of this research method. These include Dahlberg, Dahlberg, & Nystrom (2008), Moustakas (1994), and Van Manen (1997).

4.1.1 Phenomenological research question

The focus of phenomenological research is to study lived experience of a phenomenon from the perspective of those who have experienced the phenomenon (Cresswell, 2007; Finlay, 2009; Valle et al., 1989). Thus, the central research question for this study, "How do full-time, mid-career, college faculty experience the process of development in teaching practice?" is essentially a phenomenological question. A phenomenological research method seems particularly suitable for this thesis research because its epistemological assumptions align with sociocultural perspectives on learning including Billett's theory of co-participation. It is a social constructivist research approach that acknowledges the contextualized nature of human experience and knowledge. As Valle et al. (1989) explain, phenomenological research views the individual and their world as existing in "indissoluble unity [where] the person is viewed as having no existence apart from the world and the world as having no existence apart from persons. Each individual and his or her world are said to *co-constitute* one another" (p.7). In

describing the philosophical underpinnings of phenomenological research, Valle et al. go on to say to that

> It is through the world that the very meaning of the person's existence emerges both for himself or herself and for others. The converse is equally true. It is each individual's existence that gives his or her world meaning. (p.7)

Similarly, Billett (2001b) describes knowing in practice as the result of "reciprocal and interpretative construction arising from individuals' engagement in social practice rather than being abstracted from disciplinary knowledge or disembedded sociocultural tools" (p. 431). Throughout the literature review and theoretical orientation discussions in this thesis, the argument has been that experiences of development in teaching practice need to be better understood from the perspective of the faculty themselves and in a way that acknowledges the interrelationships between individual, social and contextual dimensions of these experiences. I contend that a phenomenological research method is the most appropriate research method for achieving a better understanding of faculty professional learning experiences related to development in teaching practice in such a way.

In addition to being philosophically aligned, the research question for this study also seems to fit the characteristics of phenomenological research questions as described by the phenomenological researchers that I am using to inform my approach. In his seminal work, Moustakas (1994) identifies five characteristics of a phenomenological research question. These offer a useful lens for evaluating the appropriateness of this research methodology for empirically investigating the question identified for this thesis study. They are as follows:

- It seeks to reveal more fully the essences and meanings of human experience
- It seeks to uncover the qualitative rather than the quantitative factors in behaviour and experience
- It engages the total self of the research participant, and sustains personal and passionate involvement
- It does not seek to predict or determine casual relationships
- It is illuminated through careful, comprehensive descriptions, vivid and accurate renderings of the experience (p. 105)

According to Van Manen (1997), to question something phenomenologically is to address the question of what something is really like, asking ourselves, what is the nature of the experience in all its appearances. Giorgi (1997) argues that phenomenological research "offers a method for accessing the difficult phenomena of human experience" (p. 238). Finally, phenomenological inquiry seems appropriate for this study because it bases its investigation in human beings experiential reality of the phenomenon, thereby addressing critiques about fragmented and decontextualized approaches to research on faculty learning (Akerlind, 2005, 2008; Dall'Alba, 2005; Webster-Wright, 2009; Wideen, Mayer-Smith & Moon, 1998).

4.1.2 Phenomenological research embraces the dialectics of human experience

Besides its focus on human experience, the phenomenological research method seems appropriate for pursuing the research question because it offers an empirical method and philosophical orientation that is able to deal comfortably with the dialectics of complex human experiences such as the development of teaching practice. Phenomenological research enables one to explore a particular phenomenon in a way that acknowledges both the subjective and objective nature of the phenomenon and that validates the individual experience in the pursuit of better understanding the universal experience. When I first read the following passage from van Manen (1997), I immediately resonated with the phenomenological orientation to investigating human experience.

> Human science is rationalistic in that it operates on the assumption that human life may be made intelligible, accessible to human logos or reason, in a broad or full embodied sense. To be rationalist is to believe in the power of thinking, insight and dialogue. It is to believe in the possibility of understanding the world by maintaining a thoughtful and conversational relation with the world. … But a human science perspective also assumes that lived human experience is always more complex than the result of any singular description, and that there is always an element of the ineffable to life. However, to recognize that life is fundamentally or ultimately mysterious does not need to make one a scholarly mystic. (van Manen, 1997, p. 16)

Phenomenological research accepts the paradox of subjective relativism and rational objectivism in inquiry related to human experience. As van Manen (1997) explains, objectivity means "that the researcher is oriented to the object, that which stands in front of him or her, … [and] that the researcher remains true to the object" (p. 20). In phenomenological research, knowledge is correlated with consciousness and the "object" is the experience of the

phenomenon as it appears in consciousness (Giorgi, 2009, pp. 9-11). Subjectivity, says van Manen, means that one "needs to be as perceptive, insightful, and discerning as one can be in order to show the object in its full richness and in its greatest depth" (p. 20). Embracing both the subjective and objective aspects of knowing in this way means that we can achieve a better understanding of human experience without claiming to 'know it' in an absolute way. Phenomenological research recognizes that we can understand elements of experience and still accept that there is much more to know.

Phenomenological research allows for an understanding of experience that includes both individual particularity and universal essence. On one hand, it recognizes that the experiences of each individual are unique, but it also accepts that there are aspects of human experience that are universal. It seeks to understand the nature of a particular type of experience by examining how that experience is encountered in the lived experience of multiple individuals. It examines the particular of the individual in order to better understand the universal human experience. Because phenomenology can simultaneously embrace these dialectical notions, I believe that it offers a way to gain meaningful insight into the complex nature of an educational phenomenon such as the development of teaching practice.

4.2. Key Philosophical Notions that Guide Phenomenological Research

There are several philosophical notions in phenomenology that are important for understanding the conceptual landscape of phenomenological research. First are the phenomenological attitude and the épochè or bracketing process. Second are phenomenological reduction and imaginative variation. Third are universal essences and intentionality

4.2.1 Phenomenological attitude and the epoché

According to Smith (2008), phenomenology is the study of phenomena: "appearances of things, or things as they appear in our experience, or the ways we experience things" (p. 2). This forms the basis for the phenomenological attitude, an important notion in how the researcher orients him/herself in relation to descriptions of lived experiences. Giorgi (2009)

contrasts the phenomenological attitude with the natural attitude where "we are constantly evaluating our present experiences in terms of our past experiences" (p. 91). One of the central concepts in understanding the phenomenological attitude is embedded in Husserl's phrase, 'going back to the things themselves'. According to Moustakas (1994), this phrase suggests that the exploration of a phenomenon should involve obtaining comprehensive descriptions of the raw elements of the experience such as thoughts, actions, feelings, sensory impressions, words, images. Such descriptions provide a basis for uncovering universal essences of that experience. As Moustakas (1994) points out, "the challenge facing the human science researcher is to describe things in themselves, to permit what is before one to enter consciousness and be understood in its meanings and essences in the light of intuition and self-reflection" (p. 27). As suggested by Sokolowski (2000), the phenomenological attitude, asks us to become like "detached observers of the passing scene or spectators at a game" (p. 48), to look at the world from the outside and consider the many ways it reveals itself to us and to others.

Because phenomenology strives to let the phenomenon as it appears speak for itself, Moustakas (1994) emphasizes how important it is that researchers make a significant effort to set aside their "prejudgments, biases, and preconceived ideas about things" (p. 85). The term for this in phenomenology is the epoché. Epoché is a Greek word meaning to refrain from judgment, to abstain from or stay away from the everyday, ordinary way of perceiving things. This notion is also referred to in the literature as bracketing and can be a difficult process because it is natural for human beings to hold knowledge judgmentally and believe that their experience of something is truer than others' experiences of it. However, as Giorgi (2009) explains, the epoché process is important for arriving at new knowledge because it allows the researcher to see phenomenon anew, as if for the first time and be open to the full spectrum of its appearances. In the passage below, Moustakas offers an inspiring description of the ultimate goals of this process.

> The epoché gives us an original vantage point, a clearing of mind, space, and time, a holding in abeyance of whatever colors the experience or directs us, anything whatever that has been put into our minds by science or society, or government, or other people, especially one's parents, teachers, and authorities…Epoché includes entering a pure internal place, as an open self, ready to embrace life in what it truly offers. From the epoché, we are challenged to create new ideas, new feelings, new awarenesses and understandings. (1994, p. 86)

Adopting a phenomenological attitude means that the researcher only makes claims about the phenomenon as it is described by the participant. No claim is made that the event "really exists in the way that it is appearing" (2008, p. 3). Giorgi (2009) describes these aspects of phenomenological analysis as follows:

> Everything in the raw data is taken to be how the objects were experienced by the describer, and no claim is made that the events described really happened as they were described. The personal past experiences of the researcher and all his or her past knowledge about the phenomenon are also bracketed. This bracketing results in a fresh approach to the raw data. (p.100)

The challenge of this process is to see things as they are rather than as we think they should be or might be. The belief is that the essential nature of the phenomenon will become clearer as the descriptions are considered again and again, and that any illusions or misconceptions will be undone when the descriptive data related to the phenomenon is approached repeatedly.

One of the criticisms of phenomenology is that it is naïve to believe that researchers can actually do this effectively and that by presuming to bracket out personal beliefs and preconceived ideas, researchers may present phenomenological research results as less subjective than they actually are. Both Giorgi and Moustakas acknowledge that it is a difficult process that requires practice and integrity. As Tufford and Newman (2010) explain, part of its difficult comes from the lack of clarity and specificity as to how to go about it.

Despite these criticisms, I consider it a strength of phenomenological research that addressing personal histories and biases related to the phenomenon is identified as part of the research process and that there is an expectation that researchers make some type of intentional effort related to this. Based on the notion of epoché, and without much methodological guidance, I did make an effort, in the research process to make explicit my own understandings, beliefs, biases, assumptions, presuppositions, and theories related to development in teaching practice. In many ways, the PhD academic program promoted the bracketing process, helping me develop a much deeper awareness of my biases and assumptions by continually asking me to make them explicit. In order to try and bracket personal biases that I might be bringing into the research study, I wrote a description of one of my own experiences of development. This is discussed more in section 4.7.1. I also believe that the writing required throughout this academic process and the ongoing dialogue with my

supervisors have been an essential part of the bracketing process. Van Manen (1997) explains that the purpose is not to pretend that we approach the research situation in an unbiased way because that is simply not true. The purpose is that we can become intentional about holding our own views at bay and then "turn this knowledge against itself, exposing its shallow or concealing character" (p. 47).

4.2.2 Phenomenological reduction and imaginative variation

Phenomenological reduction and imaginative variation are the key philosophical notions that guide data analysis in descriptive phenomenological research. Phenomenological reduction is an attitude that guides the researcher in his or her interactions with the descriptive data related to the phenomenon. It is an extension of the phenomenological attitude that enables one to reduce descriptions of experience to their essential elements. As Giorgi (2009) explains, in engaging in phenomenological reduction, "everything in the raw data is taken to be how the objects were experienced by the describer, and no claim is made that the events described really happened as they were described" (p. 99). This is an important element of the truth claims of phenomenological research.

Imaginative variation extends the phenomenological reduction through the adoption of a disciplinary lens for the analysis. Through the disciplinary lens, the researcher tries to articulate more precisely what is contained in the units of description related to the experience, in ways that have disciplinary meaning. As Giorgi (1997) explains, free imaginative variation enables the researcher to move towards the essential structure of the "concrete lived experience from the perspective of the discipline" (p. 247). It "brings the proper sensitivity to the analysis and provides a perspective that enables the data to be manageable" (Giorgi, 2008a, p. 2). The researcher is obliged, in phenomenological research, to remain true to the descriptions as they are presented without adding to the experience "with the help of some nongiven factor, such as an assumption, hypothesis, or theory" (Giorgi, 2009, p. 89).

4.2.3 Universal essences and intentionality

The notion of essences in phenomenology is different from essentialism, which suggests that there is single absolute truth related to phenomenon. The phenomenological view is that

there are many essences, depending on how consciousness is directed at a phenomenon. Sokolowski (2000) explains that, rather than adopting the modernistic view of single truths or the postmodern view of no truths, phenomenology suggests that truth is made up of many parts, all contributing different pieces to the whole. Each part of that truth is considered an appearance and because there are many ways a phenomenon can appear (in pictures, in memory, in discourse, in writing, etc.), there are multiple essences that contribute to a complete knowledge of the phenomenon. The belief, however, is that essences are universal and when examined together, reveal the underlying structures of a phenomenon. The goal in descriptive phenomenological research is to uncover universal essences of a phenomenon through examining individual experiences and then to use these essences to describe underlying structures. It is based on the assumption that "most phenomenon can be typically described, even though they appear to be univocally [or individually] lived" (Giorgi, 2009, p. 131). Giorgi (2009) describes this as follows:

> Within the phenomenological perspective, what matters is the discovery of an identical sense that covers multiple factual variations. Everyone knows that particular situations contain numerous contingencies, not all of which are critical for a true understanding of what is typical about such situations….the phenomenologist approaches such situations in terms of discovering and essence – or invariant structure – that can comprehend multiple situations. (p. 84)

The concept of intentionality is at the core of appreciating how different instances of a phenomenon come together to contribute to a universal understanding. In phenomenology, intentionality refers to the way consciousness is directed or intended towards a phenomenon. Consciousness is always consciousness of something so the belief is that different appearances of a phenomenon are intended differently by our consciousness, hence revealing different essences of the phenomenon. For example, when I read about something, my consciousness interacts differently (or intends differently) with the phenomenon than when I see a movie about it or talk to someone about it. In exploring many types of intentionality towards a phenomenon, its many essences are revealed and hence a fuller knowledge of the phenomenon is achieved. This notion of intentionality expands the view of consciousness as being something that only exists inside of us to something that exists in dynamic interaction with the external world. It offers a refreshing way to address the many ways of knowing: those that are more internal and those that are more external; those that are more rational and those that are more relational; those that are more structured and those that are more organic; and those that are more

individual and those that are more contextual. If each of the ways of knowing is viewed as a different type of intentionality, then knowledge gained through different intentionalities can be interwoven to form a more complete understanding of human experiences with a particular phenomenon.

Different intentionalities result in different ways of knowing something. In phenomenology, each of these knowings is called an appearance. The belief is that the identity or true essences of a phenomenon are grasped from examining "manifolds of appearance" (Sokolowski, 2000, p. 4) or many appearances. Because things can always "be presented in more ways than we already know, the thing will always hold more appearances in reserve" (p. 28). This can be wonderfully freeing in the study of complex phenomenon because it allows that you may understand certain aspects of it, but there will always be more to understand. Sokolowski explains that an appearance can be well known, but identity remains elusive because it can never be reduced to one or more of its appearances. In other words, you cannot pin something down and say that 'this is the way it is' because that explanation is based on a limited number of appearances. There are always more appearances, many of which we may not even be able to anticipate. Mystery will always remain in the phenomenon we try to understand. In studying development in teaching practice, I see this concept as incredibly relevant. It acknowledges the complexity of any aspect of human experience and explains why research results related to human experience should only be considered descriptive and never prescriptive.

My hope is that this research study will uncover structural essences of the experience of development in teaching practice. I believe that uncovering such structural essences would considerably enhance the capacity of institutions to promote and support this professional learning process, ultimately resulting in enhancements in the quality of student learning. I realize, however, that this research may also reveal that experiences of this phenomenon are quite idiographic or that there are both idiographic elements and general essences. I remain open to all these possibilities.

4.3. Distinctive Notions of the Descriptive Phenomenological Research Method

One's approach to phenomenological research is ultimately tied to ones' philosophical orientation to human experience. As with most other research methods, there are several variations of phenomenological research. Although most of the phenomenological ideas discussed to this point are applicable to all variations, key differences arise in the methodological execution of data analysis. Following Giorgi's (2009) advice to select a particular method and follow it, as opposed to drawing methodologically from several approaches, I read several studies and methodological overviews in order to understand the differences between the various phenomenological approaches (Dahlberg, Dahlberg, & Nystrom, 2008; Giorgi, 2009; Moustakas, 1994; van Manen, 1997). In the end, I selected Giorgi's descriptive phenomenological method for several reasons. First, Giorgi's writing presents a coherent and understandable connection between the philosophical underpinnings of phenomenology, the methodological approach, and the overall goals of the research endeavor. Second, Giorgi's body of work (1985, 1997, 2006, 2008a, 2008b, 2009) provided the most methodological guidance for a novice researcher. Third, his extensive writing about this research method has a long history, beginning in 1985 and continuing into the present. Fourth, his articles offer clear explanations of how the philosophical terms of phenomenology inform and apply to the research method. Finally, several of his articles compare different approaches, helping a novice researcher, such as myself, explain methodological decision making. Two of the most significant methodological variations that Giorgi (2006) discusses are the researchers' approaches to the tension between description and interpretation in the data analysis process, and the degree to which research participants are involved as co-researchers.

4.3.1 Description versus interpretation

Among phenomenological research approaches, there are different views of the relationship between description and interpretation. Giorgi's approach considers phenomenological research to be based purely on description. Others, such as van Manen (1997) would argue that "all description is ultimately interpretation" (p. 25) because it is "mediated by expression" (p. 25). Still other researchers "see description and interpretation as a continuum where specific work may be more or less interpretive" (Findlay, 2009). In this

research, I followed Giorgi's (2009) method and therefore entered the project aligning with his position that,

> within the descriptive framework, the essence is not interpreted, but precisely described. Interpretation in this context implies bringing in a nongiven factor (such as hypothesis, theory, assumption) to help account for the essential presence. The descriptive phenomenological attitude neither adds to nor subtracts from what is given, regardless of how it presents itself. (p. 77-78)

Giorgi contends that, through disciplined practices, the researcher can remain true to the experiences as they appear in the descriptions provided by each individual. He offers significant methodological guidance to assist researchers in remaining true to the descriptions of experience, as they are shared by participants. This includes a clear step by step process, as well as several examples, for how to approach phenomenological reduction and how to use the results of this reduction as the basis for generating the general structure of experience. These processes are described in more detail in section 4.7.

Although I must admit that the line between description and interpretation is still not completely clear, Giorgi's (2006) discussion of variations in the application of the phenomenological method shows that other phenomenological researchers also struggle to navigate this distinction. Giorgi argues that as long as one "neither adds to nor subtracts from what is given" (2009, p. 78), one adheres to the descriptive approach. In this thesis study, I intend to follow Giorgi's methodology (2009) in order to obtain rich descriptions of faculty experiences during the interview process, and to remain as true as possible to the participants' meaning in the data analysis process. On the other hand, I fully acknowledge that in the process of conducting the data analysis using this process, some degree of interpretation is unavoidable.

4.3.2 Validating the structure of experience

In his article discussing variations in the application of the phenomenological method, Giorgi (2006) explains why he advises against involving participants in validating the structure of experience that emerges from the data analysis. As Giorgi (2009) explains, "participants are surely privileged when it comes to *what they experienced,* but not necessarily concerning the *meaning of their experience*" (p. 6). He goes on to say that, because the overall goal of the

phenomenological analysis of the data is a structural essence of the phenomenon rather than the experience of each individual, it would actually compromise the validity of the phenomenological method if one participant's feedback on the end results were to result in changes to the structural essence. In terms of bringing the results of the analysis to participants for confirmation, Giorgi offers two theoretical reasons for not doing this. The first theoretical reason is that participants' experiences are from the natural attitude and since the phenomenological attitude required for analysis is quite different, it requires training which they do not have. As a result, although they can review the descriptive data, they are not in a position to provide feedback on the results of the analysis. As Giorgi reminds us, this research method is interested in "the phenomenon being experienced and not so much in the particular individual who is experiencing the phenomenon" (p. 318). The second theoretical reason is that "there is a difference between the lived experience and the meaning of that experience" (p. 311). Without the lens of the disciplinary attitude that the researcher brings to the study, participants are "not necessarily the best judge[s] of the meaning of [their] experience" (p. 311). In the descriptive phenomenological method, says Giorgi, the safeguards for validity are built into the method.

In terms of involving other researchers in establishing validity of the analysis, Giorgi (2006) argues that this is also not appropriate unless that researcher engages in the complete and lengthy process of phenomenological data analysis and approaches the analysis with a similar disciplinary attitude. If not, says Giorgi it is unrealistic to expect that the same essences would present themselves to both researchers. This is unfortunately an unrealistic expectation for this study given people's time constraints.

Both of Giorgi's (2006) arguments related to validating the structure of experience are based on the philosophical truth claims of phenomenology. It does not make claims on reality but on how the phenomenon appears to the consciousness of those who experienced the phenomenon and subsequently, through phenomenological reduction, to the researcher. He suggests that "phenomenological studies can be tested by replications, but not by utilizing judges" (2006, p. 310). Although it is obvious from Giorgi's discussion that not all phenomenological researchers would share his beliefs, I was comfortable with them when I began this study and appreciate them even more after applying his method because of the time spent on the reduction of each interview transcript and on the ongoing synthesis of meanings

from each experience in order to arrive at the higher invariant essences for the structure of experience related to the phenomenon. That said, I would love to partner with another researcher in a future study and have us both work through the analysis process and compare the essences for the structures that emerge.

4.3.3 Phenomenological research versus phenomenography

To conclude this section on selecting a phenomenological research method, it is important to clarify the difference between phenomenological research and phenomenography (Bowden & Green, 2005; Entwistle, 1997; Marton & Booth, 1997) since much of the post-secondary education research related to faculty development adopts phenomenography as the research method. Although both research methodologies aim to better understand human experience related to a particular phenomenon, phenomenography deliberately disassociates itself from the philosophical roots of phenomenology. Phenomenography emerged as an approach to educational research through the work of Marton (1986) and Marton & Booth (1997) and is the methodological approach adopted by several faculty development researchers (Akerlind, 2003, 2005; Dall'Alba & Barnacle, 2005; Prosser, Martin, Trigwell et al., 2005). Whereas the methods of phenomenological research lead researchers to a structural essence of a particular phenomenon, phenomenographical methods lead researchers to the "architecture of variation in terms of the different aspects that define the phenomenon" (Marton & Booth, 1997, p. 117). As Akerlind (2005) describes, the aim of phenomenographic research is to "investigate variation in the underlying meaning of, or ways of understanding a phenomenon" (p. 6). Phenomenographic methods (data collection, data analysis) are not grounded in the philosophical ideas of phenomenology, as discussed earlier and therefore tend to reflect general methods of qualitative research (semi-structured interviews, iterative thematic coding). Akerlind (2005) describes her data analysis process saying that she analyzed the interview data for "key meanings, dimensions of variation and relationships within the data" (p. 10). The result of her study was "six categories of description, representing key aspects of the variation in meanings and experience" of growth and development as a university teacher. This differs significantly from the research processes of phenomenological researchers which involve gathering data using phenomenological interviews (interviews grounded in the philosophical notions of intentionality, phenomenological attitude, and epoché) and proceeds with data analysis using

specific methods designed to lead the researcher to a general structure of the experience under investigation, based on the descriptions of the participants.

4.4. Overview of Pilot Study

In the summer of 2009, as part of an advanced qualitative research course, I completed a small pilot study in order to get a sense of what it was like to conduct phenomenological research and to see whether this type of research would lead to meaningful insights regarding faculty experiences of the process of development in teaching practice. The pilot study involved three mid-career faculty participants from two colleges and a technical institute in British Columbia, a sample size considered appropriate for phenomenological research (Giorgi, 2009). Through this exploratory pilot study I found that soliciting faculty descriptions of experience using phenomenological interviews elicited research data that offered rich insights into their process of development in teaching practice. Through the analysis of that data several essences of that experience could be identified across all three participants' experiences. The pilot study confirmed that the process of development was complex and multidimensional. It also validated phenomenological research as an appropriate and meaningful methodology for investigating faculty experiences of development in teaching practice and helped to inform the methodological approach for this larger thesis study. As well, from the perspective of a faculty developer, it was rewarding to hear from all three participants how they gained insight into their teaching practice through the process of describing their experiences of development.

4.4.1 Pilot study method

For this pilot study, I used van Manen's (1997) approach to phenomenological interviews, which is described more fully in section 4.6. The interview questions asked participants to describe in as much detail as possible, their experiences of development in teaching practice. Depending on the time, participants described two or three experiences of development. Specific questions focused on asking them what they felt were the catalysts for development in teaching and how they would describe their process of development. Interviews with each of the three participants were between 60-90 minutes in length and were recorded and transcribed. After each interview, I wrote up a contact summary form as described by Miles and Huberman (1994). The purpose of this form was to identify the main concepts, themes,

issues or questions that resonated in the research contact. For each participant, I identified these things generally and then in relation to catalysts for development and the process of the development. As well, following the template offered by Miles and Huberman, I identified any other salient, interesting, illuminating or important points that came out in the contact and any new questions or issues that arose.

At the time, I had not yet come across a clearly articulated approach to data analysis for phenomenological research so I was informed by van Manen's general ideas for conducting thematic analysis in phenomenological research. According to van Manen, "when we analyze a phenomenon, we are trying to determine what the themes are, the experiential structures that make up that experience" (p. 79). He goes on to say those themes give shape to the phenomenon under investigation and help make sense of it. However, as with other phenomenological researchers, he acknowledges that "no thematic formulation can completely unlock the deep meaning, the full mystery, the enigmatic aspects of the experiential meaning of a notion" (p. 88). As a novice researcher, I found it difficult to know how to begin such a data analysis so I adopted Weston, Gandell, Beauchamp et al.'s (2001), guidelines and iterative method because it offered more specific direction on how to proceed. Although their approach is not specific to phenomenological work, it provided a step by step process for uncovering themes. Following their model, I used MaxQDA software to identify descriptive phrases related to the process of development in teaching practice. These phrases were organized into themes, which were then used to re-analyze the data. Slight changes were made to the themes to better reflect the emerging essences. This approach to the data analysis seemed useful and rewarding at the time. However, when I tried to submit an article on the study for publication, a consistent critique was the lack of coherence and clarity in the explanation of the data analysis. This prompted a re-evaluation of the data analysis process for the larger thesis study.

4.4.2 Pilot study findings

The structure of the experience of development in teaching practice that emerged included three themes related to the catalysts of development and three additional themes related to the overall process.

The themes related to the catalysts included values, disturbances, and vision. Experiences of development seemed grounded in an individual's values and were further

prompted by a disturbance as well as a vision for something different. The two variations that emerged in values were related to teaching and learning and to professional practice. Teaching and learning values were focused on a concern for students' learning and professional practice values were focused on professional or social commitments to continuous improvement. Disturbances could be characterized as either internal or external. Internal disturbances were some type of feeling of dissatisfaction related to what was happening in the teaching and learning interaction. External disturbances were either in the form of negative feedback from students or changes in broader educational environment. The third theme, a vision for an alternative, came from a variety of places including discussions with other teachers, observations of other classrooms, literature on learning, or student conversations. These themes revealed that there are a variety of individual, social, and contextual elements that interact to prompt development in teaching practice.

In the process of development in teaching practice, implementation stood out as quite separate from the catalyst phase. Three implementation themes that emerged were making connections between their individual feelings, observations, and the vision of what they were trying to achieve; expanding their understanding of the teaching and learning endeavor; and increasing their own comfort level with the implications of any developmental change. Under the theme of making connections, there were several aspects that emerged. These included the salience of teacher's goals for student learning, the importance of their disciplinary context in terms of directing their ideas about those goals, and the importance of their exposure to learning literature in making new connections. The theme of expanding understanding of teaching and learning had many variations in terms of how it was experienced. The faculty in this study experienced expansion in their understanding through observations, discussions, reading, reflection on experience, and coming to see things from a learner's perspective. All three teachers in this study experienced a process of increasing comfort as part of developing in their teaching and acknowledged several challenges of change. Some of the variations in this process included achieving authenticity, struggling with changing habits, and dealing with the discomfort related to lack of control or unpredictable student responses. From this discussion of the themes that emerged, we see that experiences of development in teaching practice are complex and multidimensional.

4.4.3 Pilot study implications for thesis research

Because this was a pilot study, there is no intent to suggest that these themes have explanatory power beyond the scope of the pilot study. As described above, phenomenological research provides insights in to a phenomenon based on an appearance. In the case of the pilot study, the appearance is the self-reported descriptions of three mid-career faculty members at educational institutions in BC, all three of whom were pursuing graduate degrees at the institution where I was also studying. The results of this pilot study, however, confirmed for me that the process of development in teaching practice was multidimensional and involved interrelationships between individual, social, and contextual elements. It also confirmed that rich insights into the process of development in teaching practice could be derived using phenomenological interviews. In terms of the outcomes of this pilot study biasing the thesis research study, I was intentional about letting the data from the thesis study speak for itself. Once I began the data collection for the thesis research, I did not look at the pilot study results again until the analysis and discussion were completed.

In terms of the implications of the pilot study for this thesis research, I paid significantly more attention to the data analysis process, and have applied some things I learned in the interview process in terms of keeping the participant focused on their experience of development. In this thesis study I have followed a documented phenomenological approach (Giorgi, 2009) for the data analysis, which I believe has added significantly to the robustness of the results. Interviews with each participant were limited to 60 minutes and focused on one experience of development in teaching practice. As well, based on the pilot study, I specifically requested experiences from mid-career (i.e. not from the first five years of teaching), since I realized that the goal of my research was to uncover mid-career experiences and that if I did not specify this, faculty seemed drawn to salient experiences early in their career as particularly formative.

4.5. Recruitment Process for Thesis Research Study

This study sought to understand the experience of development in teaching practice of mid-career college faculty. As mentioned in chapter 1, mid-career faculty are defined as those

with 6-20 years of full time post-secondary teaching experience, which is also how Baldwin, Lunceford, and Vanderlinden (2005) define mid-career faculty.

4.5.1 Recruitment process and protocols

Participants were recruited from four mid-sized Ontario colleges. These colleges were selected because they were similar in the size of their student body and similar in their geographical locations (outside metropolitan Toronto). A purposive, criteria-based, self-selection sampling method was used. The following recruitment protocols were followed in order to ensure participant confidentiality and to mitigate any possibility of coercion in the recruitment process.

Recruitment communication

I began the recruitment process by phoning directors in teaching support units at the four targeted institutions and explaining the research study. I asked them to assist in the distribution of recruitment communication to the target group. They were specifically asked not to add any personal message to the recruitment communication (See Appendix A: Recruitment Message). Directors were told that participation in the study must be completely voluntary and that no strategies of persuasion or coercion were to be used in communication with potential participants. The recruitment communication included information regarding the study, an explanation of the research question, an explanation of the voluntary nature of the study and the steps taken to ensure confidentiality.

Unfortunately, it proved quite difficult to recruit participants from colleges other than my home college where faculty knew me and had a high regard for the faculty development work that I had done at the college over the years. I interviewed 7 faculty members from my home college. In the other colleges, where I was not known by faculty, there was limited response. The recruitment message was sent out several times during the 2012-2013 academic year and revised a couple of times, in collaboration with my supervisor, to make it shorter and presumably easier to read and respond to. In the end, I invested significant time and energy to build credibility at one of the other colleges and was able to recruit 5 additional interview participants from that college. The third college that I had targeted underwent significant political and leadership changes and the climate was not conducive to building such credibility.

At the fourth college, retirements made it difficult to develop a strategy for building credibility. Although the data collected was sufficient for a meaningful and valid phenomenological study, it was disappointing not to be able to gather data at all four colleges. I intend to continue efforts to build credibility at all of these colleges in order to pursue future studies related to faculty experiences of development in teaching practice.

Online consent form

The recruitment communication invited full-time, mid-career faculty to complete an online survey that was made up of open-ended questions about an experience of development, for which the link was provided that took them to the Online Consent Form (See Appendix B: Online Consent Form). The online consent form re-explained the study, research question, voluntary nature of the study and steps taken to ensure confidentiality. At the bottom of this form, participants had the option to select one of two buttons: either a) an exit button, which they would select if they did not want to participate in the study and would close the page or b) a "Continue" button, which would take them to the online survey.

Interview consent

The final item on the survey asked participants if they were willing to participate in a face to face interview. If so, they were prompted to provide contact information. I provided my e-mail address and contact phone number in the recruitment communication so that participants could contact me with any further questions. They were told that the contact data would be separated from the rest of the survey data prior to any analysis and that it would not be possible to associate identifiable information with the rest of the survey data. From those who provided contact information, indicating their willingness to participate in an interview, I followed up with seven faculty from my home college and five faculty from another college. As I mentioned earlier, I was not able to solicit participation from the other two colleges. Once an interview date was set, I sent participants an Interview Consent Form (See Appendix D) and an outline of the interview protocols (See Appendix E).

4.5.2 Overview of study participants

The 24 survey participants were made up of 10 from Business programs, 7 from Health Science programs, 5 from Liberal Arts and Social Science programs, and 2 from Science and

Technology programs. The 12 interview participants, who were a subset of the survey respondents, came from the following program areas: Drew from Graphic Design; Frank from Technology; Krista, Anne, Matthew, and Lucy from Health Sciences; George, Mac and Casey from Social Sciences; and Steven, John and Emma from Business. Of the 24 survey responses, 2 were not used because the experience described was the same as in the interviews and one was not used because no specific change related to development in teaching practice was described, leaving a total of 21 survey responses that were analyzed as part of the results. The interview transcripts provided the main data source for analysis. The survey data was used after the analysis of the interview transcripts to enhance the understanding of the structural essences. The reasons for this are explained in section 4.7.6, where the survey data analysis process is fully described.

4.6. Research Process and Data Collection

Because phenomenological research orients itself to the phenomenon under investigation Giorgi (2006) and others (Dahlberg et al, 2008; van Manen, 1997) say that data yielding descriptions of the phenomenon can potentially be collected from a variety of sources including: narratives of personal experiences, experiences elicited through semi-structured interviews, written anecdotes, observations, artistic expressions communicating aspects of experience, biographical writing, journals/diaries Based on this idea, we decided for this study, to collect data about faculty's experiences of development in teaching practice through both an open-ended online survey and face to face interviews. The idea was that, by targeting four colleges with the survey, we would be able to gather more instances of the phenomenon under investigation, thereby increasing the small sample size from which we gathered narrative data.. The face to face interviews were intended to allow for more in-depth probing of experiences resulting in richer descriptions of experiences upon which to draw from in order to develop the essential structure.

4.6.1 Phenomenological data collection

Phenomenological interviews are the most common source of data in the descriptive phenomenological approach. The goal of the data collection process is to solicit rich descriptions about specific experiences related to development in teaching practice. Because

the researcher strives to solicit pre-reflective descriptions of the phenomenon, it is important to allow the experience to flow in the language of the participants without trying to impose a more theoretical language on those descriptions. Descriptions are probed for as much experiential detail as possible (thoughts, feelings, actions, sensory impressions, etc.). Although the limitation of drawing data based on people's recollection is recognized as a vulnerability in qualitative research (Giorgi, 2009), both van Manen (1997) and Giorgi argue that in phenomenology, the appearance of the phenomenon in the consciousness of the describer is more important than the factual accuracy of the description. Although recollections of experiences are transformations of those experiences, they offer material through which the essences of the phenomenon might be better understood.

Van Manen (1997) suggests that when asking others what an experience is like, it is helpful to be very concrete… and to try to have the person tell a story of a "specific instance, situation, person, or event" (p. 67). From there, the researcher can go on and explore the whole experience to the fullest. Some suggestions van Manen offers for leading participants to full descriptions of the lived experience include asking them to describe the following:

- an example of the experience which stands out for its vividness
- the experience as they lived through it, avoiding causal explanations, generalizations, or abstract interpretations
- the experience from the inside – feelings, mood, emotions
- the sensory dimensions – how the body felt, how things smelled, sounded, etc. (p. 64)

The guidelines of van Manen and Giorgi (2009) regarding phenomenological data collection guided the formation of questions that were used to elicit rich descriptions for both the open-ended online survey and the face to face interviews. Broad, open-ended questions were used to initiate the data collection process. They were designed to lead participants into a description of actual experiences related to the phenomenon. Possible probing questions were also identified to elicit additional descriptive details related to the experience of the phenomenon. The goal was to move the participants from general statements to rich and detailed description of their experiences. These questions were tested during the pilot study interviews. As already mentioned, the central research question identified for this study is, "How do mid-career, college

faculty experience the process of development in their teaching practice?" The questions developed for the open-ended online survey and the phenomenological interviews were designed to solicit phenomenological data that would provide insight into the essences of this experience.

4.6.2 Data collection from an open-ended online survey

The online survey was conducted using a secure, Canadian-based online survey tool (FluidSurveys). The complete content of the survey is found in Appendix C. As discussed above, the survey questions were open-ended and focused on eliciting detailed, rich descriptions of one specific experience of development in teaching practice, as experienced by the faculty themselves. The survey used questions similar to those developed for the face to face interviews. Through written responses to open-ended questions, participants were encouraged to provide as much detail as possible about their thoughts, feelings, attitudes, actions, interactions, and beliefs in relation to the experience. As well, they were asked explicitly about social and contextual influences on their experience of development in teaching practice. The final item on the survey asked participants if they were willing to be interviewed.

The data that was collected through the open-ended surveys was disappointing because most of the survey results did not offer a complete or cohesive description of development in teaching practice and the descriptive passages were often general and vague. These limitations of the survey data are discussed in more detail in section 4.7.6. After analyzing the data, I suspect that the structure of the survey was partly to blame since it did not explore the experience using a process structure but asked participants to describe the various elements of the experience (thoughts, feelings, actions, influence of social elements, and influence of contextual elements).

4.6.3 Data collection from phenomenological interviews

The interview questions identified below were adapted as the interviews unfolded, in order to better elicit details related to the central research question. I explained the purpose of the study clearly to participants and provided them with a written copy of the main questions and the consent form before the interview. In line with the descriptive phenomenological method, I

resisted temptations to analyze or engage in explanations during the interview. I intentionally directed efforts at soliciting descriptions that reflected, as authentically as possible, the lived experience of the participant as it was originally encountered. Interviews were audio-taped and then later transcribed.

Interview Question 1.

If we think of development in teaching practice as changes in knowledge, skills, attitudes, or beliefs that result in improvements in student learning from the teacher's perspective, can you think of and describe for me, in as much detail as possible, a time when you felt you experienced development in your teaching practice?

What was the context of the specific teaching situation (i.e. when, where, what course, description of the course, description of the students, goals of the course)

What was the change in knowledge, skills, or attitudes that resulted in improvements in student learning? Please describe both the change and the results from your perspective.

What were the specific changes in your knowledge, skills, actions, attitudes and/or beliefs?

What was the nature of the change in students' learning that resulted?

What happened to prompt this change in your knowledge, skills, attitudes, or beliefs?

What did your experience of the process of development involve (please provide as much descriptive detail as possible)?

What were your actions/behaviours through the process? (i.e. What did you do?)

What types of interactions with students, colleagues, or others were involved in the process? How did you experience those interactions?

What were your thoughts through the process? How did your thoughts relate to your actions and interactions?

What were your feelings through the process? How did your feelings relate to actions, interactions, and thoughts?

Interview Question 2.

Social aspects of your experience

What was the influence of others (internal to the organization) in the experience you describe (students,

colleagues, mentors, supervisors, administrators?

What was the **influence of others (external to the organization)** in the experience you describe (i.e. external colleagues, experts, authors, friends, family, etc.)?

Environmental aspects of your experience

How did other things in the **internal teaching environment** influence your experience (i.e. curriculum, policies, leadership decisions/directives, internal professional development initiatives, etc.)

How did other things in the **external education environment** influence your experience (i.e. provincial mandates, external bodies, professional bodies, external professional development, social changes, political changes, etc.)

Interview Question 3.

Other aspects of experience.
Are there any other personal, social, or contextual aspects of this experience that you think are relevant to understanding your experience of development in teaching practice?

After the interviews, each one was transcribed by someone with specialized skills in this area following the confidentiality protocols set out for this study. After receiving the transcribed file, I listened to the recording of each interview and made any needed corrections to the text. Transcribed files were sent to participants for review. Participants were given one month to make any corrections, additions, or deletions to the file. According to Giorgi (2008a), this is the only point that participants ought to be given the opportunity to provide additional input to the data.

In most cases, participants did not make any changes to the transcripts. In a few cases, participants made some grammatical changes. In one case, the participant made significant changes to the text, but upon review of these changes, they were still primarily related to the narrative flow and grammatical expression rather than the meaning. I adopted any revisions that participants made in the analysis file.

4.7. Descriptive Phenomenological Data Analysis Process

In this section, I outline the data analysis process followed in this research study. The process is based on the steps described by Giorgi (2009). Both the survey and interview questions focused on gathering descriptive detail about a specific experience related to development in teaching practice. For both forms of data collection, the participants were encouraged to provide as much detail as possible about their thoughts, feelings, attitudes, actions, interactions, and beliefs related to the experience and well as the social and contextual influences.

In a phenomenological study, rich descriptions of lived experience provide the data or material with which to work but they are not, in and of themselves, the results. Analyzing the descriptive data to achieve a meaningful description of the core essences of a phenomenon involves several steps that are designed to ensure validity of the structural essence that emerges from the data. The purpose of analysis is to "attempt to understand the meaning of the description based solely upon what is presented in the data" (Giorgi, 2009, p. 127). Giorgi differentiates the descriptive approach from an interpretive approach saying that the researcher "does not try to resolve ambiguities unless there is direct evidence for the resolution in the description itself" (p. 127) but does not go beyond what is given in the data. Following Giorgi's method of data analysis, my goal was to stay as true as possible to the descriptions of experience provided by the participants as I worked through the data analysis process.

It turned out that the interview data was much more meaningful than the survey data in terms of providing rich descriptions of the phenomenon. As mentioned earlier, descriptions in the surveys did not clearly articulate a process and tended to focus on certain aspects of the experience and neglect others. Based on this realization, the data analysis in this study focused primarily on the descriptions gathered in the interviews. After a thorough analysis of the interview data, I turned to the survey data to see if any more variations could be identified and to further refine the expression of the structure of phenomenon. In this section, I describe the analysis process for the interviews and then take up a detailed description of the survey analysis in section 4.7.6.

4.7.1 Adopting a phenomenological attitude

As described in section 4.2.1, adopting a phenomenological attitude is an important aspect of phenomenological research. Drawing on the philosophy of Husserl, Giorgi (2009) explains that the phenomenological attitude is one where the researcher processes the experience exactly as described without allowing past experiences or biases (the natural attitude) to affect one's view of the data. In order to adopt a phenomenological attitude, Giorgi says that the researcher must make an intentional effort to set aside their own experiences and allow the experiences of the participants to speak for themselves. As discussed earlier, there is significant philosophical debate in the methodological research regarding the extent to which this is actually possible. Unfortunately, there is little methodological guidance as to how one is supposed to undertake the bracketing process.

One suggestion Giorgi (2009) makes is for the researcher to engage in the process of answering his or her own interview questions related to the phenomenon under investigation. I followed this suggestion and engaged in the bracketing process by writing a description of one of my personal experiences of development in teaching practice prior to beginning the data collection process. I used the same prompts that were used in the survey. My experience of development reveals many of the themes addressed in the theoretical orientation to this research. I experienced development as a complex process that had emotional and cognitive elements at the individual level, but also involved several social and contextual elements. From this exercise, it was clear that my own experience of development in teaching practice was a complex and multidimensional process. I became explicitly aware that my experience had informed the direction that this research had taken in terms of the theoretical orientation, nature of the research question, and the selection of the methodology. I took this awareness into the interview process and was very conscious about not imposing my own biases about the complexity of experiences of development on interview participants. I was also keenly aware of the importance of focusing participants on the raw elements of their experience (thoughts, feelings, actions) as opposed to reflections or interpretations of their experience. As well, in the data analysis process, I was very intentional about honoring participants' experiences as they appeared in the descriptive data and not imposing meaning on them that was not present in the descriptions. In future phenomenological research, I would adopt more of the methods of bracketing described by Tufford and Newman (2010) throughout the research process. I was, unfortunately not aware of their work in this area when I undertook this research study.

4.7.2 Reading the interview transcripts for a sense of the whole (Step 1)

In this step, the goal was to get a general sense of the overall description of the experience. This step is similar to what is undertaken in most qualitative research approaches. However, the difference in this step for phenomenological analysis is that the researcher intentionally adopts a phenomenological attitude, as described above in sections 4.2.1 and 4.7.1.

To get a sense of the whole, my approach was to read the transcripts of all 12 interviews over the course of 3 days in order to get a general, overall sense of the experience of development in teaching practice. In all the experiences described, there was evidence of a multidimensional process involving a variety of individual, social, and contextual factors. As I read the 12 transcripts I noted elements of the process that stood out from each transcript. Based on those notes, I wrote a description of the experience of development in teaching practice as it appeared to me through the whole set of interviews. This description appears in the findings chapter.

After looking at all the transcripts as a whole, I listened to each interview recording while reading through the transcript. This was a powerful way of re-experiencing the descriptions that participants shared in the interviews. In listening to the interviews, I also realized that I have a lot to learn in terms of phenomenological interviewing because there were many instances where I expressed ideas with the hope of helping the participant better articulate their process, rather than asking appropriate probing questions. Although, I always prefaced my comments by saying something like, “This is what I am hearing. Tell me if it is accurate or not in terms of your experience”. Before engaging in more phenomenological research, I would love to have some of my interviews analyzed by an expert.

Early in the process of analyzing the interview data, I realized that I had an overwhelming amount of data to work with. In most of Giorgi’s studies, he gathers and analyzes data from 2 or 3 participants. Since I had data from 12 interviews, I decided to work through steps 2-4 with one group of six transcripts (Drew, George, Frank, Krista, Lucy, Matthew) and then to repeat the process with the other six transcripts (Anne, Casey, Emma, John, Mac, Steven). This decision was based on what seemed manageable in terms of analyzing the data for the emerging essences of experience and was still in line with the sampling requirements for

this methodology which Giorgi (2009) says should consist of “at least three subjects” (p. 198). The second group of transcripts was analyzed completely independently from the first group and then the two emergent structures were consolidated into one. The process of refining the emergent structure is explained in more detail in section 4.7.5 on expressing the structure of the phenomenon.

4.7.3 Determining meaning units (Step 2)

The goal of this phenomenological step is to break the overall description down into units that represented parts of the experience. As suggested by Giorgi, I reread the transcriptions of the experiences and noted every time there seemed to be a shift in meaning or focus related to the description. The number of meaning units in the various interview transcripts ranged from 27-55. As Giorgi (2009) explains, these meaning units “carry no theoretical weight” (p. 130), but make the “description manageable”. Based on Giorgi’s method, nothing is left out in this step. As he explains, “if one were to string all the meaning units together, one would have the entire description unaltered” (2006, p. 308).

Once the interview transcripts were broken down into meaning units, I followed the advice of Giorgi (2006) and transformed all “first person statements into third person statements” (p. 307). For example, whenever a research participant said something like “I believe…”, I would transform the text to read “P believes …”. I agree with Giorgi when he says that such a transformation of the data helps the researcher focus more on the experience than on the individual. It also made for a very close reading of the text and resulted in a version of the data in which all questions and probes from the researcher were removed. I also made grammatical adjustments to improve the flow of the text. I was careful to ensure that none of the descriptive context was omitted. Having the data in this form made a very smooth transition from the original transcript to the third and most involved step of analysis.

4.7.4 Transforming data into phenomenological expressions (Step 3)

In this step, the researcher examines each meaning unit and transforms the description from the participant’s natural attitude into phenomenologically sensitive expressions using phenomenological reduction and imaginative variation, which are described in section 4.2.2. As

Giorgi (2009) explains, “the epistemological claim is that the results reflect a careful description of precisely the features of the experienced phenomenon as they presented themselves to the consciousness of the researcher” (p. 131). To address the tension between description and interpretation, Giorgi (2006) argues that “this is not an interpretation in the strict sense because the meaning that was lived by the speaker is actually discovered and described precisely as it presents itself. Insofar as one stays with the given precisely as given, the articulated expression is a description and not an interpretation” (p. 315). Interpretation, says Giorgi “implies bringing in a non-given factor (such as hypothesis, theory, assumption) to help account for the essential presence” (Giorgi, 2009, p. 78). In alignment with Giorgi’s approach, my intention was to stay as close to the descriptions provided by the participants as possible and thereby ensure that any claims could be experientially validated.

In this step, the phenomenological procedure of “free imaginative variation” (Giorgi, 2009, p. 132) is used. Following the guidelines for “free imaginative variation” as described by Giorgi (2009), I strove to uncover the meaning expressed in each of the meaning units by transforming them into phenomenological expressions using imaginative variation. At this stage a disciplinary attitude is adopted within the phenomenological attitude. Giorgi adopts a psychological attitude whereas I adopt a sociocultural learning attitude as it applies to professional learning. Adopting a disciplinary attitude “brings the proper sensitivity to the analysis and provides a perspective that enables the data to be more manageable” (Giorgi, 2008, p. 2). It is assumed that meanings are embedded in the concrete descriptions and that these meanings can be extracted “to ascertain” higher level categories that contribute to the essential structure of the phenomenon.

Upon review, I suspect that I probably kept more of the original text than Giorgi would recommend in the phenomenological transformation using imaginative variation. As a novice researcher, I was concerned about losing any of the original description. The result for each participant was a three column table which showed the original interview data divided into meaning units in the first column, the transformation into third person in the second column, and the transformation into phenomenological expressions using imaginative variation in the third column. Below is an example from Krista’s data.

Interview Data	Transformation to 3rd Person	Phenomenological Reduction Using Imaginative Variation
A: Neat. So that's a great experience. So now we are just going to probe that some more and go back a bit in terms of how did the idea…so you started talking a bit about how the idea came up, but can you sort or go back to how it evolved and how you came to decide that's what you're going to try. K: Sure. In all levels of the program, we do this exchange of evaluations at midterm time and it's always a workload right. It's more work during that one week because you have to write 12, or some people have to write 24, student evaluations. It would be like report cards for a grade school teacher. But they're all comment based. So it's not like there's a pull-down menu to choose a list from or it's not just assigning a grade. You have to comment specifically. There's criteria and you have to say how they've accomplished that criteria through specific examples, or how they haven't. So that's time consuming and it's a lot of work. In level 1 I find it's also very repetitive. So you want to make each evaluation individual to the student. But because they are just beginners and they are going through the same process all together, they are in the same class, the same lab, in the same assessments, and at the same stage, I find a lot of my evaluations are repetitive between each student. And then I feel badly because I feel like I am just kind of copying and pasting, but I am like, but they are the same on this specific criteria. So it's always been a bit of a struggle and I've talked with other tutors and they feel the same thing, and we've talked about… should we have a bank of comments that we pull from. Can we justify using the same comments between 2, 3, 4 students, and had that debate. A: And that debate was between just a few of you? K: Just a few of us, informally, and just within our level. I think that was key.	In all levels of the program, they do this exchange of evaluations at midterm and it's always a lot of work. During that one week, you have to write 12 – or some people have to write 24 – student evaluations. They're all comment-based. There is no pull-down menu to choose from a list. It's not just assigning a grade. You have to comment specifically. There are criteria and you have to say how they've accomplished that criteria or not through specific examples. It's time consuming and it's a lot of work. In level 1, Krista finds that it is also very repetitive. Even though you want to make each evaluation individual to the student, they are just beginners and they are going through the same process all together; they are in the same class, the same lab, in the same assessments, and at the same stage. Krista finds that a lot of her evaluations are repetitive between students and then she feels badly because she feels like she is just copying and pasting. But they are the same on many of the specific criteria. So it's always been a bit of a struggle and Krista has talked with other tutors and they feel the same thing. They've talked about whether they should have a bank of comments that they pull from and whether they can justify using the same comments between 2, 3, 4 students. They had that debate. That debate was between of few of them informally – just within level 1. That was key.	The original way of doing mid-term performance evaluations was a lot of work for Krista because it involved commenting specifically and providing specific examples on how students have accomplished various criteria or not. It's time consuming and a lot of work. Krista and her colleagues also find the comments they write in level 1 very repetitive because students are all beginners going through the same process with the same learning activities. She feels badly being repetitive since the feedback is supposed to be individualized. Krista and her colleagues have talked about various strategies for handling this repetitiveness and debated various options.

The column that contained the phenomenological expression using imaginative variation was extracted. Using these phenomenological expressions, I began to examine the experience more closely for an emerging structure. For the first three interviews, I used the phenomenological expressions to generate an overall description of the experience for each participant. When writing the descriptive summary of the experience, I felt much more comfortable letting go of the original text and engaging in the process of free imaginative variation through the sociocultural professional learning lens. Based on these first three descriptions, four phases of the experience were identified – a catalyst phase, an idea development phase, an implementation phase, and an outcomes phase. In each of these phases, there were a variety of individual, social, and contextual elements.

Using this observation of phases and elements, I created a visual tool, shown in Figure 4.1 below, to assist in processing the data. I then went back to the phenomenological expressions generated by each of the first six interviews and mapped them individually onto the twelve areas of the visual framework. I did this for each interview individually and, as a result, created a visual map of each individual's experience.

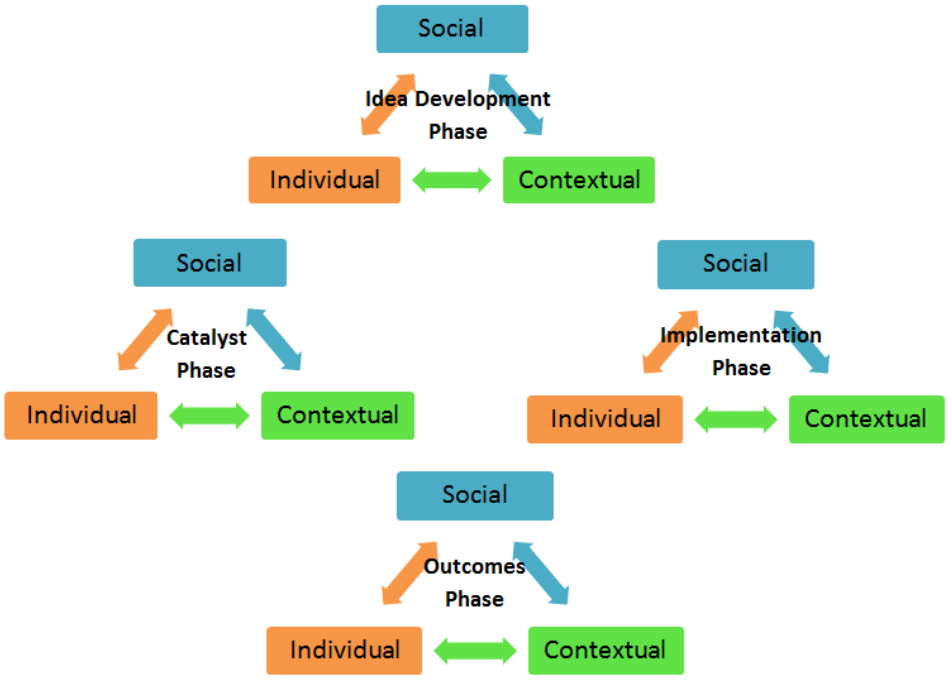


Figure 4.1 Visual Map Outlining Emerging Essential Phases of Development in Teaching Practice.

Although this is not a step or process that is mentioned in methodological guides for descriptive phenomenological research, it was extremely helpful for mapping and conceptually processing the phenomenological expressions for each interview. I continued this process for the remaining interview transcripts in the first group of six – identifying phenomenological expressions, mapping those expressions onto the visual tool, and writing a summary description of each individual's experience.

After completing the analysis of the first six transcripts individually, I synthesized them by creating a summary of the emerging elements from each participant on to another visual map of the phases of development, as shown in Figure 4.1 above. For an example of a visual map based on an individual interview (Krista) and for one that synthesizes the first six interviews, see Appendix G. The purpose of this part of the process was to determine "higher-level invariant" (Giorgi, 2009, p. 100) categories of description for the various components of the emerging structure. Giorgi compares these invariant meanings to a "measure of central tendency" in statistics where the goal is to find a higher level expression that accommodates the majority of variations.

Once this analysis process was completed with the first six participant transcripts (Drew, George, Frank, Krista, Lucy, Matthew), I repeated it with the other six transcripts (Anne, Casey, Emma, John, Mac, Steven).

4.7.5 Expressing the structure of the phenomenon (Step 4)

The final stage in phenomenological analysis is to "integrate the data from various participants into one structure" (Giorgi, 2009, p. 132). Giorgi warns that this a laborious and time consuming step since it involves dwelling with the data and then continuing with the process of free imaginative variation until a suitable way of expressing the structure emerges. As a novice, I have done this to the best of my ability, following the guidelines and suggestions of Giorgi. I can attest to the fact that it is indeed a very time consuming process. The analysis process described for step 3 took about 12-15 hours per interview. Following that, the time spent reflecting on all the data to synthesize it into an essential structure was also significant. Giorgi (2009) describes the relationship between the individual descriptions and essential structure as follows:

> It is granted beforehand that every single description is going to be different from every other, even if the same phenomenon is being researched. However, even if facts differ, the [disciplinary] meaning can be identical. [Disciplinary] meanings achieve a level of invariance that can comprehend multiple facts. Thus, even though sensitive to the context in which they appear, [disciplinary] meanings can be expressed in such a way that the data of several participants can be integrated with them. Consequently, one is not limited to an individual, or idiographic finding, but general structures for the phenomenon being researched can be achieved based upon the data of several individuals. (p. 132)

In this step, as a researcher, I was searching for an invariant meaning structure that describes the "concrete, lived experience from the perspective of the discipline" (Giorgi, 1997, p. 247). This invariant structure, says Giorgi (2009) "should provide a deeper insight into the unified dynamics taking place across varied experiences, and serve as a basis of essential communication" (p. 200). It is the components of this invariant structure that phenomenology refers to as "essences". Giorgi suggests that using this structure, one should be able to return to the raw data and "make better sense of the variations" (p. 200). According to Giorgi (2009), the "claim that the researchers make for the structures obtained is that they are general in the sense that the findings transcend the situation in which they were obtained" (p. 101) thereby contributing to a deeper understanding of the situation.

First, after a holistic reading of the twelve interview transcripts and a phenomenological analysis of the first three interview transcripts, four phases of the process were identified as a possible meta-structure. These phases included a catalyst phase, an idea development phase, an implementation phase, and an outcome phase. The first six interview transcripts were then analyzed phenomenologically and mapped onto these four phases. This analysis confirmed that this meta-structure held across multiple experiences and could be considered as structural essences of the experience of development in teaching practice. As well, from this analysis, individual, social, and contextual essences emerged in each of the four phases. Then, the next six interview transcripts were analyzed and mapped on to the four phases. Many essences that emerged were similar to those that emerged from the first six transcripts. The essences were then examined side by side and for those essences that were different, a higher level descriptor that could encompass both essences was determined. Next, a group of six surveys was analyzed and essences were determined. These were again compared to the previous essences and similarly, where there were differences, I searched for a higher level descriptor. Finally, this was repeated with another set of six surveys. In the second set of six surveys, no

new essences emerged and I concluded that the essences represented a structure for the phenomenon under investigation. Table 4.1 illustrates how the essences evolved through the overall analysis. Where the cell is left blank, there was no clear essence that emerged.

After completing the analysis of the first 6 transcripts, I wrote a descriptive summary of the structure that emerged. Then, after completing the analysis of the other 6 transcripts, I revised the summary to incorporate the higher level descriptors and additional variations which each of the essences. The essences that emerged resulted in the structure of experience shown in Figure 4.7.

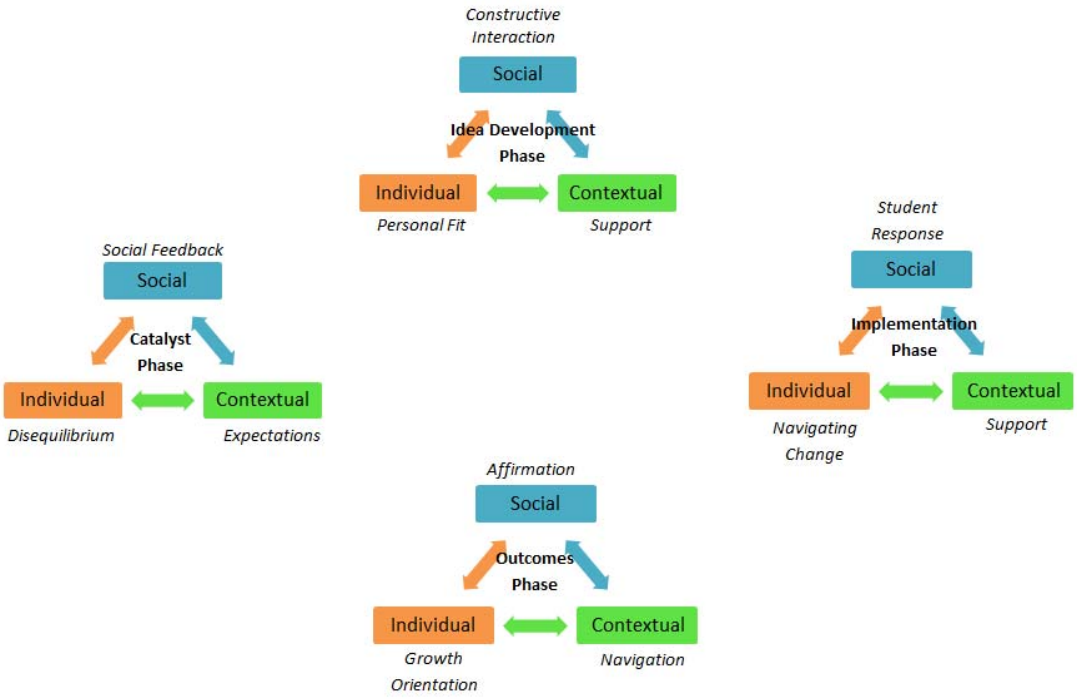


Figure 4.7 A Multi-phased, Multidimensional Structure of Essences for the Process of Development in Teaching Practice for Mid-career College Faculty

After discussion about the model, a final phase of analysis involved reviewing all the descriptive summaries of the interview participants to determine the flow between phases. This flow is discussed in the findings section.

Table 4.1

	First group of 6 interview transcripts	Second group of 6 interview transcripts	Evolution of Higher level essences	First group of 6 surveys	Evolution of Higher level essences	Second group of 6 surveys	Final essences
Catalyst phase							
Individual	Internal tension	Internal Tension	Internal Tension	Disequilibrium	Disequilibrium	Disequilibrium	Disequilibrium
Social	Affirmation	Feedback	Feedback	Realizations	Social Feedback	Social Feedback	Social Feedback
Contextual	Expectations	Goals	Contextual Expectations	Contextual Expectations	Contextual Expectations	Contextual Expectations	Contextual Expectations
Idea development phase							
Individual	Fit	Fit with Vision of Ideal	Personal Fit	Exploration	Personal Fit	Personal Fit	Personal Fit
Social	Exploration with Respected Peers	Constructive Interactions	Constructive Interactions	Constructive Interactions	Constructive Interactions	Constructive Interactions	Constructive Interactions
Contextual	Supportive Environment	Embracing Contextual Realities	Navigating Contextual Realities	Supportive Processes	Navigating Contextual Realities	Navigating Contextual Realities	Navigating Contextual Realities
Implementation phase							
Individual	Navigating Change	Adopting a New Role	Navigating Change	Navigating Change	Navigating Change	Navigating Change	Navigating Change
Social	Student Response	Social Response	Social Response		Social Response	Social Response	Social Response
Contextual	Supportive	Support	Contextual Support	Support	Contextual Support	Contextual Support	Contextual Support
Outcome phase							
Individual	Expanded Awareness	Inspired to do More	Growth	Growth Orientation	Growth Orientation	Growth Orientation	Growth Orientation
Social	Affirmation	Affirmation	Affirmation	Affirmation	Affirmation	Affirmation	Affirmation
Contextual		Navigating Pressures	Navigation		Navigation		Navigation

4.7.6 Survey data analysis

Once I completed the analysis of the interview data, as described above, I turned to the survey data. As mentioned earlier, the survey data was disappointing and in hindsight, I'm not sure that the survey data was particularly useful for this phenomenological study. Although the descriptions of experience provided some additional insight and examples of variation related to the experience of development in teaching practice, most of the surveys did not offer a complete description of an experience of development in teaching practice. The descriptions that participants provided often focused on certain aspects of the experience to the exclusion of others. In some cases, it was difficult to determine what specific change was made to teaching practice. In other cases, a change may have been identified but it was unclear how the rest of the description related to this specific change. However, the data from the surveys was used to gain further insight into the variations that might exist within the essences of experience that had already emerged from the interview data. Some of these insights led to higher level expressions of the essences. In order to make the analysis more manageable, I processed the surveys in groups of about six, just like the interview transcripts. There were three complete groups of 6 and then 3 remaining survey results. Although I reviewed all the survey data, no new meanings or elements emerged after analyzing the second set of six surveys. For each group of six surveys, I followed the process described below.

Reading for a sense of the whole

I did not read all the surveys as a whole group as I had with the interview transcripts. As well, given the structure of the survey questions, the results of each individual survey did not read well as a whole. The sense of narrative somehow got lost as participants worked through the survey answering each question.

Determining meaning units

In the surveys, the meaning units broke naturally by question. In some cases, there were multiple meaning units within a question response.

Transforming data in phenomenological expressions

To transform the data into phenomenological expressions, I followed a similar process for the phenomenological analysis as with the interview transcripts described above. In most cases, I omitted the second transformation (going from first to third person), which Giorgi says is legitimate from a practical perspective since it speeds up the analysis process and the second transformation carries no theoretical weight. In cases where I did conduct the third person transformation first, it was because the respondent's line of thinking was not clear and I felt I needed to spend more time with their data to ensure I understood their descriptions.

Expressing the structure of the phenomenon

I mapped the phenomenological expressions of each individual survey response onto the same visual framework that I used for the interview analysis. Then, I mapped each group of six surveys onto a visual framework. Similarly to the analysis of the interviews, I examined groups of phenomenological expressions in each of the 12 areas to determine larger categories of description. These categories were again compared to the emerging phenomenological structure and additional refinements were made. For an example of what how an individual survey was analyzed as well as how the data from each group of six surveys was synthesized, see Appendix H.

4.8. Validity and Reliability

As with any research method, issues of validity and reliability need to be acknowledged and addressed. Issues of validity and reliability are strongly tied to one's epistemological paradigm in relation to the phenomenon being investigated (Guba, 1981). As explained earlier, the truth claim of descriptive phenomenology is that we can understand structures of human experience in a general way and that they can be "typically described even though they appear to be univocally lived" (Giorgi, 2009, p. 131). In Giorgi's (2009) comprehensive methodological outline for phenomenological research, several of the concerns related to validity are discussed and addressed. These include: (i) validity of descriptions of experience, as expressed by the experiencer; (ii) validity of general structures that emerge from the study of individual experiences; and (iii) researcher bias. I believe that a brief discussion of these areas, as well as the discussion of phenomenological research throughout this chapter, sufficiently addresses

validity and reliability from a phenomenological perspective. I contend that, because Giorgi outlines his methodology in detail, offers examples of empirical research conducted using his method, and openly discusses issues encountered in conducting phenomenological research, his method offers a significantly more reliable approach for novice phenomenological researchers than other approaches.

(i) Validity of descriptions of experience, as expressed by the experiencer.

The data of phenomenological research is first hand concrete descriptions of the lived experience of the phenomenon. The phenomenological assumption is that the description represents the experience as it exists in the consciousness of the experiencer and no claim is made that the events exist exactly as described (Giorgi, 2009). The truth value of the data lies in the authenticity of the experience from the perspective of consciousness. Phenomenon are studied "from the perspective of how they are experienced, regardless of whether or not they actually are the way they are being experienced" (Giorgi, 2009, p. 87-88). As Giorgi (2009) explains,

> Real objects can exist independently of consciousness, but experiential phenomena cannot (p. 67)…Philosophical phenomenology makes explicit that it considers everything to be studied from the viewpoint of consciousness (which can exist at many levels) or subjectivity (which also has levels). Consequently, there is a certain priority given to consciousness because it is the medium of access for any knowledge whatsoever. Nothing can be spoken about or demonstrated without its being given to someone's consciousness. (p. 68)

In data collection, the researcher strives to keep participants focused on description rather than interpretation or explanation, by constantly bringing them back to the specific details of the experience. The researcher strives to pose questions that "invite the interviewee to focus upon a specific situation that he or she actually experienced" (Giorgi, 2009, p. 124) and include as much raw detail (i.e. thoughts, feelings, actions, descriptive elements) as possible related to the experience. In the data analysis phase, the researcher engages in a descriptive analysis, one that does not go beyond what is given and "attempts to understand the meaning of the description based solely upon what is presented in the data" (Giorgi, 2009, p. 127). Giorgi contrasts this with interpretation saying that one does not try to resolve ambiguities or "go beyond what can be accounted for in the description itself" (p. 127). According to Giorgi (2009),

> descriptive findings are more secure because they articulate what is given and can be directly checked by the critical other. They do not require the taking up of a non-given factor that may be arbitrary, such as an assumption, hypothesis, or theory. (p. 128)

Phenomenological researchers need to be comfortable with the idea that events, as they exist in the consciousness of the experiencer, are authentic descriptions of that experience and that the phenomenological attitude involves being open to things as they appear in consciousness. When the descriptions of experiences are analyzed using phenomenological reduction and imaginative variation, the description, as presented to consciousness is raised to reveal higher level invariant meanings, which encompass a wide variety of variations.

(ii) Validity of general structures that emerge from the study of individual experiences.

According to Giorgi (2009), the validity of general structures that emerge from the study of individual experiences is closely tied to the disciplined use of the methodology. It bears repeating that the claim of the phenomenological research is not a universal structure or essence, but a claim that the structures obtained are 'general in the sense that the findings transcend the situation in which they were obtained" (p. 101). The structure of the experience emerges directly from the descriptive data and analysis of the meaning units using phenomenological reduction and imaginative variation, methodological approaches discussed earlier in this chapter. Giorgi (2009) explains this as follows:

> It is granted beforehand that every single description is going to be different from every other, even if the same phenomenon is researched. However, even if facts differ, the psychological meaning can be identical. Psychological meanings achieve a level of invariance that can comprehend multiple facts. Thus, even though sensitive to the context in which they appear, psychological meanings can be expressed in such a way that the data of several participants can be integrated with them. Consequently, one is not limited to an individual, or idiographic finding, but general structures for the phenomenon being researched can be achieved based upon the data of several individuals. (p. 132)

(iii) Researcher bias.

Phenomenological approaches to dealing with researcher bias have been discussed earlier in this chapter. In the gathering of data, adopting a phenomenological attitude and bracketing are specific strategies aimed at addressing researcher bias. The phenomenological researcher does not claim to eliminate researcher bias, but to engage in a process of

identifying, acknowledging, and “holding in suspension” one’s own experiences and thoughts related to the phenomenon so that the researcher can be fully present to experiences presented. As explained earlier, this involves bracketing “personal past knowledge and all other theoretical knowledge not based on direct intuition, regardless of the source, so that full attention can be given to the instance of the phenomenon that is currently appearing to …consciousness” (Giorgi, 2008, p. 3). As suggested by several phenomenological researchers, I wrote a description of my own experience of development in teaching practice as part of the bracketing process. This of course does not guarantee a bias-free attitude but makes one aware of the need to avoid associating participants’ experiences with your own experiences and reminds the researcher of the importance of allowing each person’s experience, as it exists in their consciousness, to be expressed. In data analysis, the process of phenomenological reduction addresses the issue of bias. In this process, the researcher is disciplined about remaining true to the phenomenon as presented in the description. The process, says Giorgi (2009) is one of descriptive analysis as opposed to interpretation and the “results reflect a careful description of precisely the features of the experienced phenomenon as they presented themselves to the consciousness of the researcher” (p. 131). It seems that the transparency required by Giorgi’s methodological approach holds the researcher accountable for elements of bias throughout the research process.

Chapter 5. Findings

In this chapter, I present the phenomenological findings of this study in relation to the research question, "How do full-time, mid-career, college faculty experience the process of development in teaching practice?" As described in the previous chapter the phenomenological structure of this experience emerged through constant revisiting of the meanings present in the phenomenological expressions related to the experiences of the participants. The final constituents of the structure are the outcome of an analytical process that involved phenomenological reduction using imaginative variation, through the lens of various sociocultural perspectives on continuous professional learning.

5.1. Reading for a Sense of the Whole

Before delving into the findings related to the structure of this experience, which emerged after careful analysis of the interview and survey data as described in the previous chapter, I think it is interesting to share a description that I wrote after reading through the 12 transcripts as a whole, jotting down key thoughts that emerged and formulating them into a holistic description. After a careful analysis of the first 6 transcripts, I came back to this description and found it fascinating to see how closely it reflected what emerged from a careful analysis.

Mid-career teacher development seems to be prompted by a personal realization and acknowledgement (based on student observation) that what they are doing isn't working the way they want it to and that they have to do something differently. This could be in relation to student behaviours in the classroom, student engagement, student performance, workload, attendance, etc. Although their first individual response to this may be emotional – frustration, anger, fear – they are able to move beyond that when they find out that they are not alone – that others are feeling or experiencing the same thing. Discussions with colleagues are an integral part of this recognition stage. In attempts to explain their observations, teachers generally try to make links to contextual factors (i.e. policies, culture change, technology, professional accreditation bodies)

Getting an idea of how to move forward is social and collaborative. This social and collaborative problem solving process involves both colleagues and students. Supportive collegial interactions are key in the process. These could be with a respected colleague, a program group, or other professional colleagues. Teachers enter these social and

collaborative interactions with a very specific idea of the problem they want to address. They select strategies to adopt that align with what they already believe about post-secondary learning. These beliefs are formed through experiences as learner, professional experience, academic readings, or involvement in professional development. Teachers' level of anxiety around implementation is related to their personality. As teachers implement something new, they are primarily concerned about students' responses and about changes to their roles. They seek affirmation in terms of student enjoyment, engagement, and/or learning performance. Supportive systems play an important contextual role in supporting implementation. This includes frameworks for problem solving, autonomy, removal of barriers, supportive curriculum, supportive policies, and supportive feedback.

5.2. Expressing the Structure of the Experience

The analysis process described in Chapter 4 resulted in a phenomenological structure of development in teaching practice. This structure, as shown in Figure 5.2, depicts the multi-phased and multidimensional process as experienced by the mid-career college faculty who participated in this research study. In this section, I describe the overall structure of experience. At the end of this section, I share one descriptive summary of experience to help the reader see what this structure looks like in faculty stories of development in teaching practice. Then, in the next section, I will describe in more detail the findings for each aspect of the overall structure and share one faculty story in each section. The remaining descriptive summaries of experiences that emerged from the interview data are found in Appendix F.

Early in the analysis process, components of faculty's experiences of development in teaching practice seemed to fall into four aspects or phases –a catalyst phase, an idea development phase, an implementation phase, and an outcome phase. Although these phases are presented in a way that appears to be sequential, there is no claim being made about them occurring sequentially. In fact, there are instances in the transcripts where two of the phases occurred simultaneously (for example, the catalyst phase and the idea development phase) or in an iterative way (for example, going back and forth several times between idea development and implementation). Faculty described individual, social, and contextual elements in each of these phases and as predicted, based on the literature review, interrelationships between these elements were significant in the development process. The catalyst phase included things that prompted the process of development for college faculty. The idea development phase included elements involved in the process of working out ideas and strategies. The implementation phase included elements of the experience that occurred as faculty tried to

enact change in their classrooms. The outcome phase included elements of the experience that resulted from the development experience. Based on the data collected in this study, there is compelling evidence that these four meta-phases exist as part of the phenomenon under investigation. However, there is no suggestion that these phases are weighted equally across individual experiences, or that they are universal beyond the scope of this study.

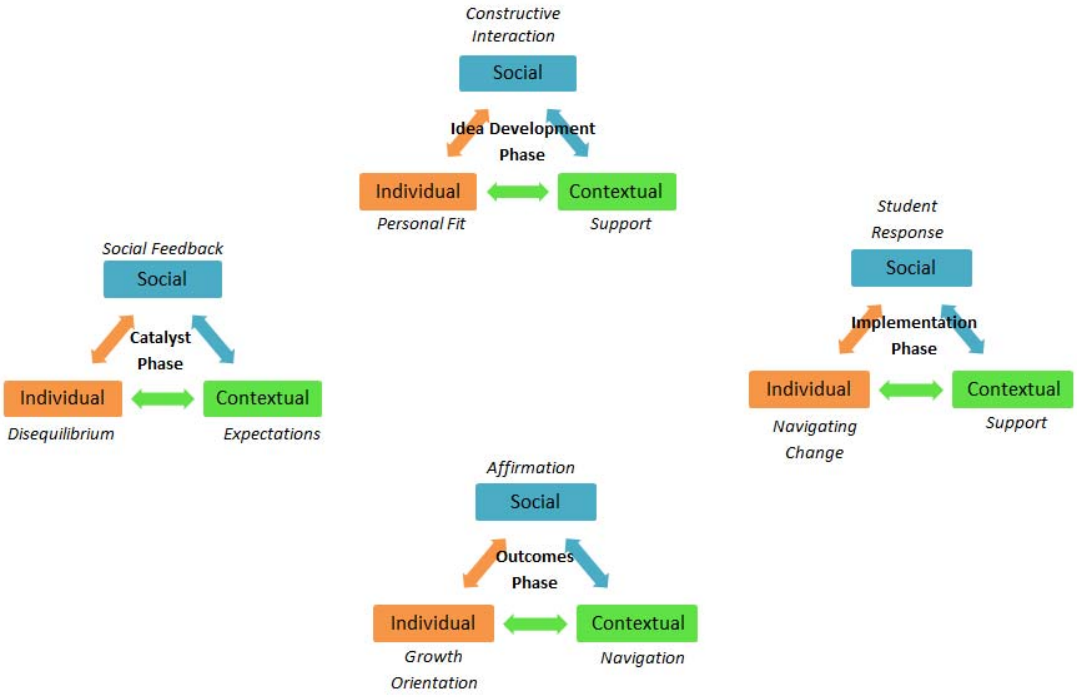
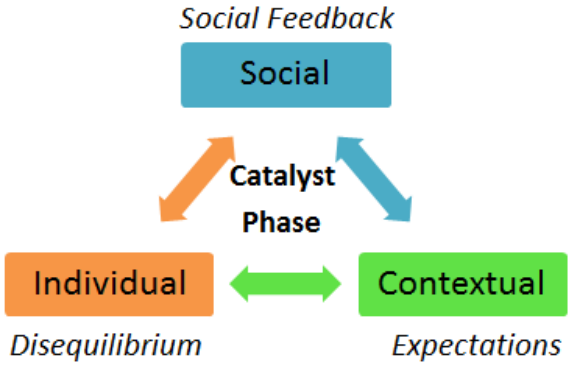


Figure 5.2 A Multi-phased, Multidimensional Structure of Essences for the Process of Development in Teaching Practice for Mid-career College Faculty

5.2.1 Descriptive summary of the experience of development in teaching practice

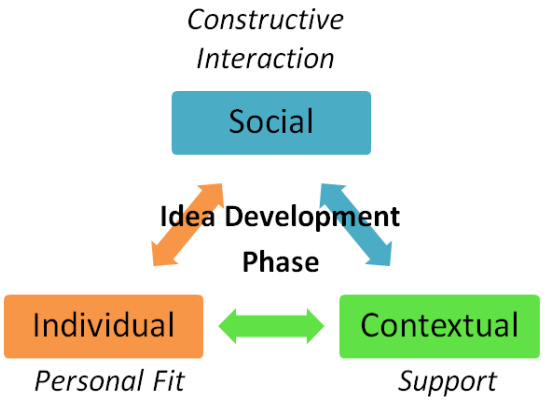


Mid-career faculty experiences of development in teaching practice is a multiphase process that includes a catalyst phase, an idea development phase, an implementation phase, and an outcomes phase. Their experience in each of these

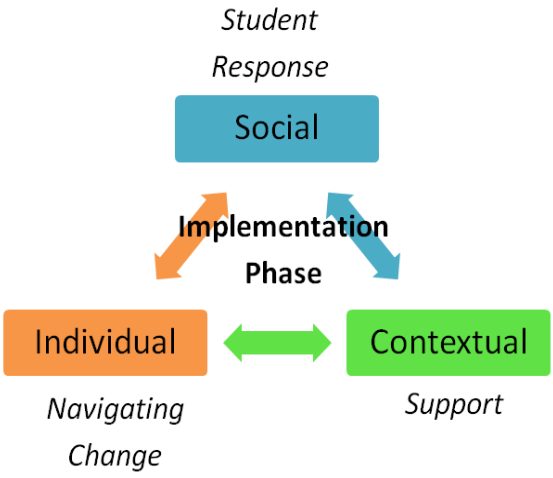
phases is comprised of interrelated individual, social, and contextual elements.

In the catalyst phase, the individual element is characterized by the presence of disequilibrium and the desire to restore equilibrium. This is the most dominant element of the catalyst phase and was often expressed in variations of the expression, “This can’t go on.” Although there is lots of variation in the nature of that disequilibrium, most often it involved a misalignment between the teacher’s values, beliefs about learning, observations, understandings, expectations, and/or goals. The social element is characterized by social feedback. This includes feedback from students related to their learning experiences, or feedback from peers that they too were experiencing similar disequilibrium. A variation of the expression, “It’s not just me” appeared in each of the interview transcripts. The contextual element is characterized as expectations. These expectations came from things such as professional bodies, advisory boards, community partners, or administrative processes related to quality improvement. The interrelationship between the elements of this phase can be described as follows: The individual teacher experiences some type of disequilibrium, which they would like to resolve. This disequilibrium can arise solely from the individual, but can also arise from contextual expectations. When the social environment affirms that disequilibrium as valid and experienced by others as well, teachers feel empowered to begin exploring ideas to try and restore equilibrium.

In the idea development phase, the social element was dominant. Constructive interaction with respected peers characterizes this phase of the experience. The importance of this part of the process occurring in relationships based on respect was mentioned consistently by participants. These constructive interactions were primarily with respected peers such departmental colleagues, colleagues in professional development activities, faculty developers or instructional designers, or other learning professionals in the institution (counsellors, librarians, learning strategists, disability consultants, etc.). These interactions also occurred with experts in the field which they encountered through readings or courses, and with



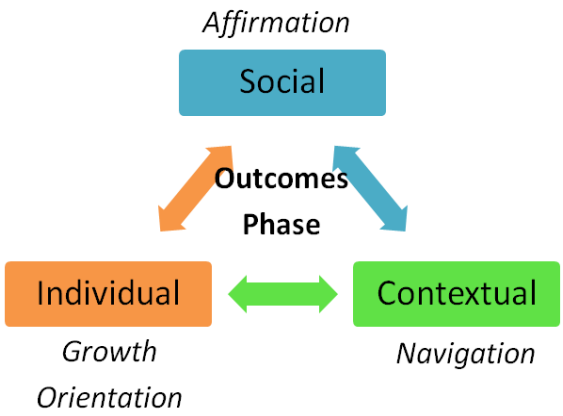
spouses who were also educators. In one case, the teacher saw the upper year students as peers since, within six months, they would be considered professional peers. In this case, ideas were explored with the students. Supportive is what characterizes the contextual element of idea development. A supportive context included things such as time, curriculum and policy frameworks, technological capabilities, classroom space, resources, and program culture. The individual element of idea development is characterized by the concept of "personal fit". Teachers had to see how various ideas or strategies fit with their vision and values, context, personality, experience, students, teaching style, goals, etc. For many teachers, the process of working out this personal fit took time. The interrelationship between the elements of this phase can be described as follows: The individual teacher explores ideas through constructive interactions in order to find a way to address the disequilibrium that has surfaced. When teachers feel that an idea or strategy fits with various individual and contextual elements, they move towards implementing changes in their teaching practice.



In the implementation phase, the social element was also dominant. However, in this phase it was the student response that characterized the social element. In this phase, teachers were very concerned about and very tuned in to student responses. This included attitudinal responses, engagement, and performance in relation to the overall goals. The individual element of this phase could be characterized by "navigating change". Participants described the process of navigating changes to their teaching role as part of their experience. They also recognized that changes they were making involved change for the students and they navigated that through dialogue with the students and clear explanations of rationale and purpose. In many cases, there was an explicit calculation of the risks versus the rewards in navigating change. The process of navigating change elicited various combinations of emotions including anxiety and excitement. The contextual element is again be characterized by support. A supportive context for implementation included things such as supervisory support for trying new things, departmental support, supportive curriculum and policy frameworks, access to technology, access to resources and funding, and appropriate classroom

spaces. In some cases, where the teacher did not experience contextual support, for example when there were threatening politics at play; this had a significant influence on how individuals would navigate change. The interrelationship between the various elements of this phase can be described as follows: When implementing something new in the classroom, teachers are very attuned to both their individual thoughts, feelings, skills, and knowledge related to navigating this change as well as their students' responses to the change. Although a supportive context is important in this phase it tends to take a back seat to the interrelationship between the student response and the teacher's process of navigating change.

Finally, in the outcomes phase, essences of the experience were the least explicit. The most significant aspect of this phase was the individual essence and the "growth orientation" experienced by faculty. This was characterized by being inspired to try to learn more, becoming more aware of various aspects of their practice, and feeling more comfortable experimenting. Most participants described an area of teaching and learning in which they had expanded their awareness. This included things such as expanded awareness of the relationship between assessment and learning or instruction and student engagement. The social essence of this phase involved various types of social affirmation such as colleagues buying in to ideas, former students providing feedback on the value of their learning, opportunities to expand one's influence through committees and peer mentoring, and a generally more positive learning atmosphere in classes. These social affirmations were generally linked to the original disequilibrium (student performance, student engagement, confidence as a teacher), but often went beyond the teachers expectations. Very few participants referred to contextual elements as being significant in relation to the outcomes phase of their experience. When it was described, it was in terms of things that needed to be navigated in order to continue with the changes in practice. This included things such as policies, and access to resources.



5.2.2 Descriptive summary of development experience: Krista

The following descriptive summary of Krista's experience demonstrates how all four phases as well as the individual, social, and contextual essences of each phases, make up a teacher's experience of development in teaching practice.

Krista implemented changes to the process of mid-term performance evaluations which made them more student-directed. She had struggled with the workload of these evaluations, which involved commenting with specific examples on students' performance related to various criteria. Besides being time consuming, Krista and her colleagues were also finding the comments they were making to be very repetitive since the students were all beginners and were going through the same process with the same learning activities.

Krista and her colleagues discussed various strategies for handling these evaluations. Krista had heard one of her colleagues talk about doing mid-term evaluations in a student directed way before, but remembers thinking that it wouldn't work with her assessment schedule. At a meeting, Krista heard that a respected and experienced colleague was doing evaluations in this student-directed way and that she had permission from the "higher ups" to do it this way. At that point, Krista decided to try the revised process because it fit in a variety of ways: it fit well with the rationale behind the problem-based learning curriculum; she saw it as a way of making the performance evaluation more meaningful to the students and at the same time reducing the repetitiveness of her workload; she respected the colleague who was doing it and thought "If she is doing it, then I can do it"; and she felt she had the time in her schedule to make the necessary logistical adjustments. Krista commented that having a workload agreement that allows time for evaluation and for reflecting on teaching makes her feel supported when she wants to try something new.

Although Krista has been teaching in the program for 10 years, she still feels that she is "not the expert" and she looks to her older and more experienced colleagues for "permission" when she wants to try something new. This tends to be more in the form of non-objection than explicit permission, but she likes to feel that others support what she is doing. When Krista was thinking about this approach to evaluation, one of her apprehensions was related to what the students would think because this was different from what they were used to. One of her first feelings was that she would have to run it by the students because this would be switching the standard she had set. Before going ahead with the new process, Krista discussed it with the students to make sure they were ok with it. She explained the process and asked them what they thought. An internal struggle for her was that she wanted students to perceive of her as a good teacher. She didn't want them to think she was trying to weasel out on doing her work or performing her role as a teacher.

Krista set the process up so that students had to complete their self-evaluations and e-mail them to her a week earlier. She added her comments to the evaluations and then e-mailed it back to the students. She found that she wrote almost as much but it wasn't as repetitive as before. It was much more individualized. Students reviewed the comments and came to class prepared to discuss them with Krista and the other ten students in their group. Even though Krista had set up this process differently, she went into the class thinking that it would be similar to before; that she would lead a short discussion, give some individual feedback and then move on. She was concerned and a bit anxious about how students would respond because she had given some of them feedback that was more difficult to hear.

Krista opened the discussion with a very general comment and then invited students to respond. When the first student brought up a specific piece of critical feedback she had been given, Krista recognized this as significant and

consciously decided to just listen and say, “Ok, I am hearing how you feel.” and then opening it up to the group to see what they might have to say. She then had to allow for silence which was very difficult because she is uncomfortable with silence. She had to literally “bite her tongue and sit on her hands”. She remembers doing that. However, after maybe 10 seconds of silence, other students began to speak. It made her aware that sometimes she needs to allow time for others to speak. It was significant for Krista that a quieter student, who doesn’t usually say much, spoke up. At that point, she realized that an important process was going on and remembers physically sitting back and allowing the exchange between the two students to happen. She remembers thinking, “Oh my! They are getting it!” She saw this as amazing progress, especially for the quieter students who spoke.

When students commented back to Krista on what she had written, she acknowledged what they said and opened it up to the group instead of defending her position. She was very surprised by the way that other students took up the conversation and either gave examples to support what Krista said or what the student said. When students got feedback from their peers, they gained powerful insights into their own performance and into the process of self-evaluation. Krista felt that feedback from their peers had a lot more value to the students. When students disagreed with Krista’s comments based on performance outside the class, the discussion resulted in really valuable learning both for herself and for the student.

Half way through the discussion, Krista had to make a conscious decision about whether to keep going or to move to the content she had planned for that class. Because the discussion was very valuable, she made the decision to leave the content. Although she felt that she would be able to adjust the schedule for the following week to accommodate this, she was worried about how the students might respond when they had done the readings for the class. Her worry was more about how this would reflect on her effectiveness as a teacher. She did discuss it with the students at the end of the class to explain her rationale and the process.

Even though Krista has been teaching using the problem-based curriculum for 10 years, she still struggles with her role because it is “still a little foreign” to her. It was not how she learned in school. She feels that it’s her role to lead the discussions and her personality plays into that. She struggles with sitting back because she has this voice in her head saying, “Are they going to think you’re not prepared, or are they going to think, ‘why am I paying for you to not say anything?” In this instance, she was definitely saying to herself “Just let it go. Just let other people speak. Don’t talk”. In the past when she had tried to allow for more student direction, sometimes it worked and sometimes it didn’t.

Krista felt that the discussion worked really well. According to her, “It was one of the first times ever in [her] teaching that she had such good discussion in class about how the students as individuals were doing.” Upon reflection, she thinks that one of the reasons for such a good discussion was that students had specific things to focus on and some time to contemplate what she had written before the class. When she sat back and just cued students on certain things, the students spoke to each other much differently than she had ever experienced. Krista found the process very valuable because it really supported the goal of helping students learn how to give and receive feedback, a skill they need as professionals in their field.

Since it worked so well, Krista intends to start new groups off with this model in the future. She has shared the process and the outcomes with her program team, but respects that everyone will do what they are comfortable with. This experience had made Krista value active listening much more in a real life way. She has always known that’s what she should do, but now having tried it and experienced success, she intends to do it more.

5.3. Essences of the Catalyst Phase

The catalyst phase included things that prompted the process of development for college faculty. As described above, the essences of the catalyst phase that emerged in this study were individual disequilibrium, social feedback, and contextual expectations. In this section, I describe the findings for each of those in more detail in order to explore the variation that existed as part of each essence.

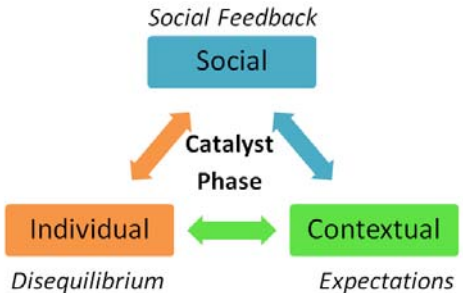


Figure 5.3 Phenomenological Essences of the Catalyst Phase in

5.3.1 Individual essence: Disequilibrium

Although there were a variety of causes and types of individual disequilibrium, the main experience of the teacher was that he/she was not enjoying the teaching experience and finding it uninspiring or unrewarding. Some were not enthused by the course they were teaching and some wanted more from their students in terms of engagement or learning. For some, there were significant changes in the student population that they were teaching and strategies that had been effective in the past were just not working. The feelings that faculty experienced in relation to this disequilibrium were frustration and a loss of confidence as a teacher. Many faculty had a specific vision of what they wanted teaching and learning to look like in their classrooms and the experience they were having did not align with that vision, pushing them to make changes. As I mentioned earlier, a common expression in the interview transcripts was a variation of “something’s got to change” or “there has to be a better way”. In a couple of cases, disequilibrium came about when faculty attended a professional development event and realized that they had to make changes to their teaching, but this was the exception in the data collected for this study.

For many teachers in this study disappointing performance results of their students created a sense of disequilibrium. It is important to note, however, that most of them did not know what to do initially about the disequilibrium that they were experiencing. As well, for many of the teachers, it took the social feedback described in the next section to recognize that what

they were experiencing was not just them, and that moving forward to address the disequilibrium did not reflect poorly on them as individual teachers.

5.3.2 Social essence: Feedback

Social feedback was an essential form of affirmation for teachers in relation to their sense of disequilibrium. Knowing that they were not alone in their experience was a powerful catalyst for change. In many cases, social change which resulted in changes in the student population created a completely different teaching situation for the teacher. This might have been because of more international students, more mature and second career students, more students with disabilities, more first generation students, or more students who struggled with the learning skills needed for college. However, when faculty realized that other teachers were struggling with the new dynamics as well, they felt comfortable opening up and sharing their sense of disequilibrium. In some cases, it was the students who affirmed what the teacher was already sensing. This affirmation might have come through expressions of dissatisfaction or discussions with students regarding performance, attendance, or engagement. In a couple of the experiences, it was the faculty's involvement as a graduate student that affirmed or helped to surface and clarify the nature of the disequilibrium for the teacher and to affirm that he/she was not alone in what he/she was feeling, sensing, or experiencing.

5.3.3 Contextual essence: Expectations

As already mentioned above, contextual expectations came primarily from professional bodies, industry advisory boards, and community partners. Data related to quality improvement measures such as retention, safety, and results of professional exams also carried expectations that could create disequilibrium for teachers. In some cases, the expectations inherent in policies such as those related to students with disabilities were powerful influences in the catalyst phase. Finally, expectations related to curriculum and new technologies were also described as having an influence on the experience of disequilibrium.

5.3.4 Descriptive summary of development experience: Matthew

The following descriptive summary of Matthew's experience of development in teaching shows how the essences of the experience existed for him. This description is particularly rich in its portrayal of the catalyst essences.

Matthew changed some learning activities in the massage therapy instructional lab to a more open-ended, problem-based approach because students were not performing well on assessments that required them to bring together discrete aspects of information and apply them to vague problems of practice. Matthew had noticed that students weren't doing particularly well at this in his labs and in the clinical settings. When the regulatory college introduced this type of assessment as part of the practical exam, it was confirmed that students struggled with this.

In online discussions, Matthew saw that other programs were wrestling with the same thing, which resonated with him. All these things together prompted Matthew and his colleagues to collectively decide that they wanted to do something to help students develop the skills that they needed to perform better in these situations. They identified the problem-based/case study approach as one that could help students experience open-ended assessment and which would provide them with feedback on their skills in this kind of assessment environment.

Matthew had read about the problem-based/case study approach in his graduate work and had been interested in its application to mobile learning. His ongoing reading related to technology-based learning helped with his thinking about this approach. In his collegial environment – both inside the college and outside the college with other massage therapy educators – people were having conversations about this approach. As well as discussing ideas with colleagues in his program, Matthew had the opportunity to get the perspective of an instructional designer – someone not in his program – which was important because Matthew finds that sometimes you can get stuck in your own world and it is good to step out from that.

Matthew knew that in his profession, vague cases were a significant part of what students would encounter and so he reflected on how he, as a professional, approached these cases. Matthew had insight into the way the practical exam was being done, which also provided ideas for this type of assessment. Matthew also drew on models of instructors in the past who were able to "build in the time and space needed for exploring important questions". As well, Matthew had already done fairly simple case-based learning activities in his labs in which students took on various roles (client, practitioner, examiner) and delivered simple and straightforward treatments.

Matthew struggled with how to bring the more complex case-based approach to his students because this was not the way people were traditionally taught in massage therapy programs. He recognized that because most of students' learning up to this point was focused on processing a lot of content, they didn't know how to determine what was important, what was not important, and how it all related. Students had adapted their learning processes to fit the expectations of assessment and had become used to that process.

Matthew spent a lot of time developing the cases and thinking through all the things that could possibly go wrong. His experience with educational technology had taught him to look at things in more detail, consider ramifications and have a plan B. He tried to be very proactive in thinking through how learners with different levels of experience and different levels of anxiety around failure might respond. When developing the process, Matthew made sure that there was a clear structure for students to follow with clear roles and support resources for the various roles. He tried to build on an activity structure that they were already familiar with. He wanted to create an environment that was safe for students and this played heavily into his planning. He thought carefully about where students might struggle in the

cases.

The first time Matthew facilitated the open-ended case based approach in his lab, he was anxious about how the students would respond, which led to a certain amount of trepidation on his part. This was something quite new for them and he didn't know if they were going to buy in. Matthew acknowledged that engaging in this type of learning was high risk for students and tried to discuss that with them. He spent time upfront talking openly with the students, explaining his rationale and where this approach was coming from. He solicited students' responses and was thankful when they agreed that this deeper learning was important. He also explained how they might experience the process and that it might be a bit of a struggle, but that this was important for learning.

During the implementation, Matthew walked around and observed and listened. He made a conscious decision not to get involved in what students were doing, but just to listen and watch. He saw students struggling and trying to get his attention, but he did not make eye contact because he wanted them to struggle through it. When they asked specific questions, he would answer them. When Matthew was walking around and seeing what students were doing "right and not so right", he had to keep telling himself not to go over and get involved. He knew that he wanted to take things up collectively. When Matthew designed the cases, he knew there were going to be particular segments where they were going to struggle. It was affirming to see the students struggle with things he had identified.

After each of the 3 cases in the class, Matthew debriefed with the students, helping them process their struggles and affirming their feelings of uncertainty. In the debrief, Matthew asked students to share their struggles and then they discussed them openly. Matthew is comfortable with open conversation with his students and recognizes that students will have different ways of expressing themselves. He is also comfortable with "why" questions and the fact that he may not always have a clear answer. In such situations, Matthew models the thinking processes involved in problem-solving vague cases so students see that it isn't always straightforward and that there isn't always a single correct response. The focus in the lab is on problem-solving and working through the process rather than performance evaluation.

Students responded well and affirmed the importance of this type of learning exercise. Matthew asked students if they would be willing to engage in this type of learning a few more times during the semester and they said that they "perceived it as a worthwhile exercise". As well, Matthew's lab assistant saw the value of this approach, which was affirming for Matthew.

Alumni who have come in to play the roles of patients in the students' final oral practicals have also noticed the difference in students' performance. Matthew feels that there has been a good return on investment using this type of approach and he finds it a very rewarding type of instruction. He has found it very powerful in terms of his professional growth to have opportunities to share information and insights about this type of learning with other faculty.

5.4. Essences of the Idea Development Phase

The idea development phase included elements involved in the process of working out ideas and strategies. As described above, the essences of the idea development phase that emerged in this study were personal fit, constructive interaction, and contextual support. In this section, I describe the findings for each of those in more detail in order to explore the variation that existed as part of each essence.

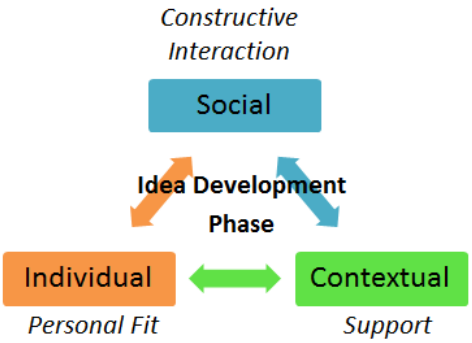


Figure 5.4 Phenomenological Essences of the Idea Development

5.4.1 Individual essence: Personal fit

Exploring ideas and strategies to find a personal fit in how to address their disequilibrium was a significant part of the development process for faculty in this study. As experienced teachers, they had generally developed a sense of themselves as a teacher and a perspective on the teaching and learning endeavor within the context of college education. Faculty's passions, experiences as learners, experiences as a teacher, experiences in the profession, and knowledge of teaching and learning contributed significantly to how faculty described themselves as teachers. Changes in practice had to fit with who they were, what they believed, and what their goals and intentions were in their teaching. Changes in practice also had to fit with how they conceptualized their classroom, including their students and their subject. In some cases, this involved a personal shift in perspectives, values, or beliefs. In other cases, faculty searched for ways to address the disequilibrium that fit with their existing perspectives, values, and beliefs. Constructive interactions, which are explained in the following section, were extremely significant in helping faculty find this personal fit.

5.4.2 Social essence: Constructive interaction

The essence of constructive interaction played a significant role in the idea development phase. The majority of faculty in this study found that constructive interaction with respected peers was an essential part of the development process. As mentioned earlier, this included

departmental colleagues, colleagues they encountered in professional development activities, teaching and learning specialists (i.e. faculty developers, instructional designers, curriculum consultants), or other professionals with expertise in certain aspects of student learning (i.e. counselors, librarians, learning strategists, disability consultants, etc.). Working out ideas with these colleagues in mutually respectful discussions was important for most faculty in building their confidence to take new ideas into the classroom. Many faculty expressed a version of the idea that, if a respected colleague affirmed that something had worked for them, then they thought they could make it work as well. Faculty tended to avoid discussing ideas with faculty that did not share their values and perspectives on teaching and learning or who they thought would be negative or judgmental. In a few cases, faculty engaged in constructive interactions with their students to develop their ideas about what might work or not. Finally, several faculty described how interacting with readings, research, peers, and mentors in their graduate studies was significant in their process of idea development.

5.4.3 Contextual essence: Support

Faculty in this study described various types of contextual support that were important as they developed their ideas. As mentioned earlier, this included things such as time, curriculum and policy frameworks, technological capabilities, classroom space, resources, and program culture. If these things were perceived as supporting an idea, faculty felt empowered to move forward in their idea development. In cases where faculty did not perceive support in one or more of these areas, their path to implementation was longer and relied more on their individual perseverance. Examples of this are policies that were financially driven rather than student learning driven, and barriers to accessing appropriate technology or classroom space. In several cases, faculty specifically mentioned the importance of a supportive manager – someone who believed in their commitment to student learning and supported innovations related to helping students in this endeavor. Faculty perceived these managers as “having their backs” when they engaged in trying new things. Curriculum, and the sense that the goals they were pursuing were supported by the curricular philosophy and curriculum documents for the program, also had an important influence on faculty’s sense of being supported in developmental changes to their teaching practice. Curriculum helped to provide a rationale for making changes and addressing the disequilibrium. Time was also mentioned as an element of contextual support. In some cases, faculty felt that the workload agreements of full time faculty

allowed for time to explore ideas for change. In other cases, faculty felt that the lack of time was a contextual barrier to development in teaching practice.

5.4.4 Descriptive summary of development experience: Drew

The following descriptive summary of Drew's experience of development in teaching shows how the essences of the experience existed for him. This description is particularly rich in its portrayal of the idea development essences.

Drew believes that experience is a core aspect of learning. This belief is a result of his professional background, his own post-secondary experience, as well as learning in an intensive teacher training program. In a teacher training program that Drew completed early in his teaching career, a mentor introduced him to Kolb's learning cycle, which offered him a theoretical explanation for what he knew to be true for him. Drew teaches primarily in a computer lab setting and his course structure consisted of demonstration and lots of lab time for practice and application of skills. He saw his role as giving students the basis and structure for doing things up front and then helping them through the process. Traditionally students would spend this lab time working on things that were due several weeks out. For Drew, it was important that there was alignment between his beliefs about teaching and learning, his course structure, and his role as a teacher.

Over time Drew noticed that fewer and fewer students were working on things during the lab time and they were putting off doing things until the last minute, at which point there would be a big panic. Drew remembers a moment of frustration when only a few students were in the class working on assignments when he knew that many more would benefit from this time of practice and assistance and when he fundamentally believed that experience was the most important aspect of the learning process. Drew remembers thinking, "Wait a second! This is the most valuable part. What's happening? How do I turn this around?" Drew's colleagues were also recognizing that students were not engaging in the practice components of their courses and because they would see each other's classes they came to realize that this was a common thing between courses.

Drew and his colleagues began to ask each other, "What's going on?". They sat down together to discuss it and to explore the issue of attendance from a variety of perspectives including policies and the links between attendance and learning. Drew and his colleagues have immense respect for each other, which plays powerfully into their ability to have these discussions productively. Since the college policy did not allow them to allocate marks strictly for attendance, which they all agreed with, they identified the role of attendance in learning and restructured the assessment process to create extrinsic motivation for the learning behaviours they felt were important. They came up with the idea of breaking larger projects down and having students complete weekly in-class exercises for marks. Although it was, unfortunately relying on extrinsic motivation, they were ok with that.

Drew's respectful relationships with his colleagues were at the core of helping him navigate towards this new approach to assessment. Drew also thinks that having a supervisor who was very good at leaving them alone, removing barriers, providing support and letting faculty focus on doing what's best for the students, made it comfortable for him and his colleagues to make changes without having to worry about interference or repercussions from supervisors. Drew's spouse, who is also a college educator, had a "huge effect" on the way he thought about the situation, helping him think through the process and offering different ideas and ways of looking at it.

Drew identifies the curriculum structure as having a significant influence on both the creation of the challenges and the new approach. The program was continually having fewer program hours to help students acquire increased levels of proficiency in the skills required by industry. As well, the 3 hour blocks for classes required that class periods were used effectively. These elements "built the framework for what they ended up with as a solution as well as the framework for the problem in the first place". Although Drew was comfortable with the new format, he wanted to make sure students were comfortable with it too. He explained the process and the rationale to them and invited their feedback. Drew was aware that there could be issues with the change he was proposing and so was flexible and supportive. He remembers thinking, "I am going to have to be flexible here and see what happens." He didn't want students to feel that he was pushing something on them. Drew was pleasantly surprised that there were no significant repercussions from the students' perspective.

Drew found that, although the students were now extrinsically motivated to stay for the lab period, it resulted in a better learning process because he could help them out more and provide them with feedback. He saw much better results in the end products and final assignments and felt that students were much more skilled than they were before. By doing this, Drew's role changed from giving them a lot of information structure at the beginning to spending a lot more time giving them feedback on their work.

This experience affected the way that Drew looked at assessment and its role in the learning process. As opposed to viewing assessment as a form of accreditation, he finds that he is committed to spending more time giving individual feedback and treating assessment as an integral part of the learning process. Once a small group of faculty started discussing this issue, it evolved into a program-wide discussion. In his program, Drew and his colleagues started to consider what they might do throughout the three years of the program to make sure students were getting the hands on skills that they needed. They wanted to emphasize practice in all the courses, whether they were in the lab or not and base their expectations for students on those of the workplace in their profession.

5.5. Essences of the Implementation Phase

The implementation phase included elements of the experience that occurred as faculty tried to enact change in their classrooms. As described above, the essences of the implementation phase that emerged in this study were navigating change, student response, and contextual support. In this section, I describe the findings for each of those in more detail in order to explore the variation that existed as part of each essence.

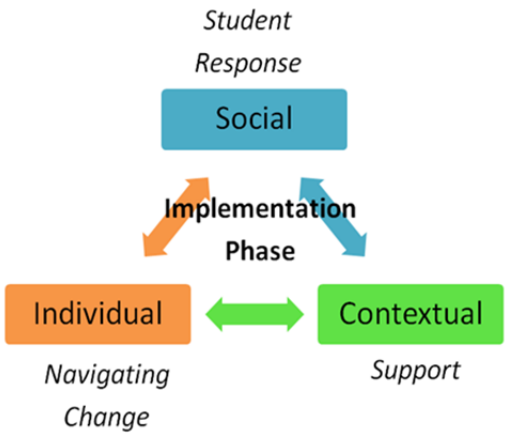


Figure 5.5 Phenomenological Essences of the Implementation

5.5.1 Individual essence: Navigating change

Navigating change was a significant essence of faculty experiences related to development in teaching practice. In their descriptions, we see evidence of several aspects of navigating change: risk management aspects, emotional aspects, and role definition aspects. Most faculty described their experiences of taking the risks involved in trying something new in the classroom. Most were very intentional about managing these risks and took time to explain their approach and rationale to the students before moving forward with the change in practice. Feelings of anxiety and fear were prevalent, even after extensive time spent on idea development. Teachers felt that they were heading into unknown territory and that they weren't sure how it would turn out. Such feelings were, however, balanced with excitement about the possibility that the change might enhance learning. Faculty in this study persisted because of this possibility. Finally, in many cases, teachers had to navigate a new role in the classroom which required new skills on their part and often felt uncomfortable. In many cases the changes also required that students navigate new roles in the learning process. Teachers had to find constructive ways to help students with this at the same time that they were figuring out their new roles. It was evident in the descriptions of experience that some teachers are more risk tolerant that others. Risk tolerant teachers were more likely to express a version of, "if it doesn't work, we just move on", whereas teachers with low risk tolerance were more concerned about appeals and what might happen if students complained. This reinforces the importance of the contextual support described in the idea development phase, as part of giving teachers the confidence to make changes to their teaching practice.

5.5.2 Social essence: Student response

In the implementation phase, the influence of student response on faculty experiences of development was very prominent. The students' attitudinal responses, engagement and performance in relation to the overall goals dominated many teachers' descriptions of their development experiences. In all the experiences described for this study, the student response to the changes was positive. In several descriptions, the student response was even more positive than the teacher had hoped for, which came as a pleasant surprise. In this study, development in teaching practice was defined as a change in knowledge, skills, attitudes, or beliefs that resulted in improvements in student learning from the teacher's perspective. Consequently, it is no surprise that teachers saw an improvement in student performance in the

experiences they described. The faculty in this study seemed to understand and respect their students and, as a result, they were very conscientious of their students' experience of the changes. As mentioned in the previous section, they took time to explain both the rationale and the process to students and to address any of their concerns.

5.5.3 Contextual essence: Support

Contextual support in this phase was similar to that in the idea development phase. The difference was that in the idea development phase, support was described as perceived by the faculty and in the implementation phase it was how they actually experienced it. Access to technology and appropriate classroom space to support the teaching practice in the way the teacher had envisioned it were dominant. In a couple of cases, critical colleagues had an immense negative impact on the faculty members emotional process related to navigating change. In one case, the teacher described how he went into hiding from his critical colleagues but persisted with the change in the classroom because the student response was positive and he knew he had his supervisor's support.

5.5.4 Descriptive summary of development experience: Casey

The following descriptive summary of Casey's experience of development in teaching shows how the essences of the experience existed for her. This description is particularly rich in its portrayal of the implementation essences.

Casey's change in teaching practice was the introduction of teaching strategies to support diverse learners in a community development class that doubled in size from previous years. Casey had always loved teaching this course because of its experiential nature and because of the important personal development that students experienced. She moved between being a direct educator and being a facilitator. She had worked hard to clarify for herself and for students the roles and expectations when she was wearing these different hats.

When the cohort size, and consequently the class size doubled, it really impacted the instructional dynamic in the class. One aspect of this was a larger continuum of students' abilities. This program had previously been oversubscribed, which influenced the cohort profile. When the cohort size doubled, this profile changed significantly. Another aspect was a curriculum change related to the delivery of the field placement. As part of a ministry curriculum expectation, field placements moved from being a block placement at the end of the semester to being integrated into the term. Students were now expected to go out on field placement one or two days a week and were finding this change very difficult.

Casey now realizes that the learners she had worked with previously had very strong learning skills: communication

skills, time management and organizational skills, initiative, ability to problem-solve, ability to work through conflict resolution, and ability to take a verbal description of an assignment and complete the assignment simply from that verbal description. In this new situation, Casey was frustrated with herself for not anticipating what this double cohort would mean and frustrated with the continuum of learners because she felt that the course was wasn't meeting anybody's needs. The learners at one end were not getting enough to keep them engaged and make it meaningful. The learners at the other end were just so overwhelmed trying to figure out what she was even talking about. And the group in the middle was just trying to figure out which way to go. This all contributed to her frustration.

By week 2 or 3 of the course, Casey realized she had a problem based on the environment in the room as well as the questions she was and wasn't getting. As an experienced educator, these new class dynamics caught Casey off guard. Although she had always been really comfortable in her classroom, "all of a sudden she felt like she was in swamp-land" and she was questioning her ability as an educator and her ability to connect with students. She felt unsettled and realized that she was grieving the past and working through a grief process. Besides feeling frustration and grief, she also felt a sense of determination and tenacity. She didn't want to give up on the course or the students. She wanted to find a way to redirect things and make it more meaningful.

It took Casey another couple of weeks to try and understand what was going on in this situation and put her finger on the issues. She did a lot of reflective thinking, she spoke with some students whom she had taught in the previous year, and she engaged in lots of conversation and brainstorming with her teaching partner and fellow educators in the college-educator development group. She had always done a lot of reflective thinking about her teaching; even in great classes she reflected on what was happening and why. In speaking with the students Casey learned that, although the time and effort the faculty put into building relationships with the students early in the program was positive, it had contributed to students feeling that there was a breach of trust when the field placement model changed. Since her course involved integration of the field placement experiences, students' anger about the model change was channeled into her course.

Through conversation, reflection, and integration of lot of accumulated experience as a community development professional, Casey decided, in week 6 or 7, despite some temptation to just consider the course a write-off and find the easiest way to ride out the semester, to have an open and honest discussion with the learners about the issues. She told the students at the beginning of the class that they were going to have a full class discussion about the course. She invited students to leave if they were not able to fully commit to the discussion and offered to find a different way to have the discussion with them. She labeled the issues and shared her frustration openly with them. She told them that they had to figure out how to move forward together and explained which things could not change based on ministry guidelines.

In small heterogeneous groups, she had them draw a figure on a flip chart paper. Inside the figure, they wrote what they expected of her as the teacher and outside the figure, they wrote what they were willing to contribute to the experience. On a separate piece of paper, they identified specific things they needed from a content standpoint. It was a very productive discussion and became a turning point in the course, creating a plan for moving forward. It was interesting for Casey because she was allowing them to see her as a person who, up to that point in her teaching career she really hadn't had to do. She shared more information with them than she normally would and she trusted them in the process. It was an 'ah ha' moment for her because, as much as she had verbalized up to that point in her teaching career that learners bring something to the table, she found that they really did. They rose to the situation and really embraced the conversation. As a result of the class discussion, Casey made changes to the structure of her classes, the schedule, and the assessment piece. She removed some of the experiential learning pieces and provided more direct examples, stories, and YouTube clips because she realized that in a large group, it took much more time to effectively organize and debrief the experiential activities. She started to pair students more for peer learning, as opposed to having them work in groups, and she made the middle break in the class longer so

that students who had questions had time to seek clarification as part of the break. She consolidated some of the assessment pieces.

For Casey, the introduction of peer learning into her teaching was significant in terms of growth in her teaching practice. Upon reflection, Casey realizes that in an unconscious way, she had observed the value of informal peer mentoring when she saw students learning together in the labs or in Starbucks. When she initially thought about incorporating more peer learning, she struggled with how to frame it, how to structure it, and how to make it work well. As someone who takes a great deal of responsibility for what happens in the classroom, she felt that adopting a peer learning methodology might mean that she wasn't doing all that she could for her students. It meant redefining her role and coming to terms with what that looked like in the classroom. As Casey implemented peer learning, she was also uncovering her learning needs. She realized that she needed to put some tools in place to support learning. This involved guidelines for roles and interactions, clear steps to achieve the goals for the structured class time, resources that enabled peers to lead each other in the learning process.

Casey found this new delivery method was much more emotionally and physically demanding because she had to think all the time. She had to go into the class with lots of clarity and focus because she was always thinking about things like, 'What's the key content? What are the main outcomes for today'? 'What frameworks, tools, or strategies do I need to help all of these diverse groups and learners achieve what they need to achieve?" She was questioning her methodology all of the time. When she used experiential learning, a methodology that she had developed and used for 15 years, she was very comfortable. She knew what to expect, how to address issues that arose and knew she had the ability to manage it. She was able to relax and draw energy from the teaching experience. She described it as a flow experience. With this new mode of delivery, she could no longer relax. There was always that piece of 'Is this is really going to work out?' 'How will this go?' 'Will we really achieve what we need to?' 'With integrity, can I say that they got what they should have from this 45 hour course?' It was emotionally and mentally draining. She felt like she was back to when she first started teaching.

As well, based on her past experience and her past observations, Casey was really comfortable reading the group. She had learned from experience what different types of energy meant and what different types of behaviour meant. All of a sudden, all of her "knowns" changed and she was unsettled. She was interpreting responses and behaviours but she was only guessing. For example, if a small group was engaged in a more emotionally intense conversation, she was judging on whether that was good or bad, when in actual fact it was perhaps just part of the peer-to-peer learning process and it was ok and needed to happen.

To navigate this new delivery, Casey drew heavily on her professional experience as a community developer and on cooperative learning tools and materials. She engaged in discussions with professional colleagues around community and capacity building and read extensively on the caring classroom and how to create community in the classroom. She felt fortunate because her chair believed in a constructivist approach and philosophically supported what she was doing. It meant a lot when the chair engaged her in informal discussions about how it was going.

Casey was surprised at how well the peer to peer learning was working but was also very aware of how demanding it was on her. Students were engaged and embracing the new model. They started asking for more peer learning in their other courses. Learning was spilling out beyond the classroom. Students were starting to integrate the learning from this course into their other courses and she saw greater personal development in her learners. These outcomes have inspired Casey to read more about how to create an inclusive classroom with large and diverse student populations.

5.6. Essences of the Outcome Phase

The outcome phase included elements of the experience that resulted from the development experience. As described above, the essences of the outcomes phase that emerged in this study were growth orientation, affirmation, and navigation. In this section, I describe the findings for each of those in more detail in order to explore the variation that existed as part of each essence.

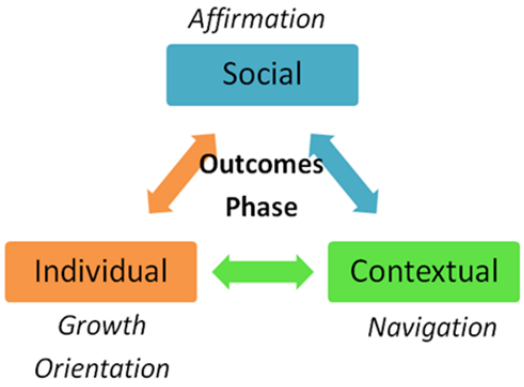


Figure 5.6 Phenomenological Essences of the Outcome Phase in

5.6.1 Individual essence: Growth orientation

As a result of teacher's experiences of development in teaching practice, they expressed a variety of outcomes that all contributed to a growth orientation. When students received their efforts positively and they were able to successfully navigate the changes required, they felt pride and an increase in their confidence as teachers. They experienced feelings of wanting to be more analytical of their teaching, more alert to student's needs, and more inquisitive about student learning. They felt that their expanded awareness had enriched their teaching and they were now inspired to do more and to learn more. In a couple of cases, teachers felt somewhat overwhelmed by the challenge of having to constantly adapt to the ever changing classroom, but this was the exception. Most felt energized and recharged when they experienced the positive results of their efforts.

5.6.2 Social essence: Affirmation

Social affirmation was a powerful influence in the outcomes phase. Teachers valued the positive affirmation from their peers and from graduates related to their instructional efforts. Social affirmation also came through new opportunities such as opportunities to mentor new faculty, to provide input to improve curriculum, to participate in advanced types of professional development, to take on new roles and responsibilities, to share their experience with other

faculty, and to participate in institutional or provincial committees. These opportunities to expand their influence were very affirming for faculty. It was also evident that many faculty sought out colleagues that affirmed their efforts and who shared a similar commitment to growth. In rare cases, teachers experienced affirmation from their deans, which had a significant impact. This was unfortunately the exception in the experiences collected for this study.

5.6.3 Contextual essence: Navigation

This was the only area in which an essence did not clearly emerge from the descriptions of faculty experiences. For those who referred to contextual influences in relation to what came out of the classroom experience, it had to do with navigating a way forward given the contextual realities of their work. This included things such as finding time to continue with the changes in practice, navigating increased expectations that arose from the social affirmation described above, and ensuring continued access to resources needed for the changes in practice.

5.6.4 Descriptive summary of development experience: John

The following descriptive summary of John's experience reveals how the essences of the outcome phase existed for him.

To improve student learning, John changed the structure of a course from a 2 hour lecture twice a week to one hour of lecture and one hour in a computer lab. When John taught this class in the traditional format, he felt like he was losing his students, like he was "blowing smoke" over their heads. As a teacher, this did not make him feel competent or good about his teaching. He also realized that, even when he had students doing "active" things in the class, they weren't learning and the end results in the course were terrible. As well, because of stringent policies at his college and the way the curriculum was structured, students who failed his course had to wait a year to continue in the program. He knew he had to change things up and find a better way if he wanted students to be more successful, which he cared deeply about. John wanted to see students be successful and develop the skills they needed for their profession. As well, he wanted learning to be relevant to them and he wanted to help them make theory real. He sees his teaching role as "service" oriented and feels an obligation to do his best for his students.

In early career faculty professional development sessions, John was exposed to the idea of active learning where it was emphasized along with the idea of being realistic about students' ability to pay attention. As well, John drew on things he had learned in his masters about student differences. Even though John worked very hard to create interest in his class and include active learning tasks in his lecture, he still noticed lots of student behaviours related to disengagement (sleeping, texting, missing classes). In his lecture, everything he had the students do was manual. Even though the students made somewhat of an effort to get the marks, it was ineffective because they didn't have access to the information and tools they needed to make it real. A big shift in John's thinking about active learning involved going from keeping students busy to questioning the value of the learning that was resulting. He was giving them token marks for doing things, but there was no quality and he questioned what they were really learning

because the end projects were terrible.

Instead of giving up on the students, John was determined to find a better way to teach the course and decided to try having them actually work on business plans in the computer lab for half of the course. He believes that if you bring reality and theory together effectively students can learn more complex skills. At the time, he was still considered the "new guy" in his department and he had to deal with skeptical colleagues who preferred to lower the expectations rather than find a better way for students to learn. He has always been tenacious and persistent in pursuing his teaching goals, despite resistance. As well, in his masters, the importance of following your own counsel was affirmed.

In the new format, the learning process involved some reading, some discussion, some research, some case studies, and then application of everything to their own plans. The textbook acted as a guide and support because it did a good job of laying out the process of creating a business plan. As well, John is always looking out for relevant scenarios that students will engage with. Every morning, he conducts an "enviroscan" using several new sites and other relevant professional sources.

The first time John set up his course this way, the time in the computer lab was a nightmare because he realized that his students were not computer oriented and that it was a huge process just to get them logged on to the computers and accessing the appropriate files. As well, in this type of environment, the huge disparity in students' abilities became even more apparent. At the end of a lab class, he was completely fried and frazzled. Over time, John just embraced this as part of the learning process and created step by step scaffolding tools to help students get started up more quickly and get focused on specific task goals. When he identified learning challenges that students were encountering, he tried to come up with tools and strategies to help them. For the "brighter" students, he provided extra links and examples but he spent most of his time with the students who were having trouble. It was all worth it because John found that students were more engaged, they were learning, and they were developing important workplace skills.

By getting students working on the computers, he could set higher standards and have clear, assessable standards for their work. He could see what they were doing and provide them with tools to work with to produce a better product. Each piece of the plan was assessed and could be improved, based on feedback, for the final project. There was a deliverable at the end of each class, which John used to monitor their progress. This form of assessment allowed John to provide ongoing feedback and as a result, students progressed in their skill development. As well, students felt this approach was fair and appreciated that someone was helping them learn. Although this type of delivery is far more exhausting for John because he has to think on his feet and has to find ways to offer feedback or explain things quickly, he is excited by the students' progress and finds that he is continually getting better at helping them achieve the goals of the course. It's a lot of work but he is completely committed.

Now, several other teachers are following his lead and using computer labs to enhance learning in their courses. Unfortunately, this has created competition for the labs and so John always feels the pressure that, at some point he may not get the labs and will have to completely redesign his course. Currently, he has to be persistent and push to get the labs he needs. As a coordinator, John is now a mentor to many of his colleagues and nurtures relationships with former students who come in as guest speakers and create buy-in from the students.

5.7. Movement Between Phases

Although I do not see the phases as necessarily occurring in a linear order, an analysis of the movement between the phases revealed that there were dominant pathways but that there was no singular linear flow of movement. In nine of the twelve descriptive summaries, the process began with a sense of disequilibrium. However, in three of the twelve summaries, the process began with idea development through constructive interaction that occurred either with colleagues, through professional development or graduate courses, or through interaction with reading material.

In all twelve descriptions there is evidence of movement from the catalyst phase to the idea development phase to the implementation phase to the outcomes phase. In five or six of the descriptive summaries, there is evidence of movement from the idea development phase to the catalyst phase and from the implementation phase to the idea development phase. In three of the summaries, there is evidence of movement from the implementation phase to the catalyst phase. In these experiences, implementation led to additional disequilibrium. In another three summaries, there is evidence of movement from the outcomes phase to the implementation phase. In these experiences, the outcomes of implementation and the growth orientation led to subsequent implementation. Finally, there is evidence in one or two of the summaries of movement directly from the catalyst phase to the implementation phase, from the outcomes phase to the catalyst phase and from the outcomes phase to the idea development phase.

The movement between phases, as described above is shown in Figure 5.7 below. In this figure, the darkest and thickest blue arrows depict the dominant pathways. The smaller blue arrows depict pathways that existed in six of the twelve descriptive summaries. The lighter blue arrows depict pathways that existed in three of the twelve summaries and the grey arrows depict pathways that existed in one or two of the summaries.

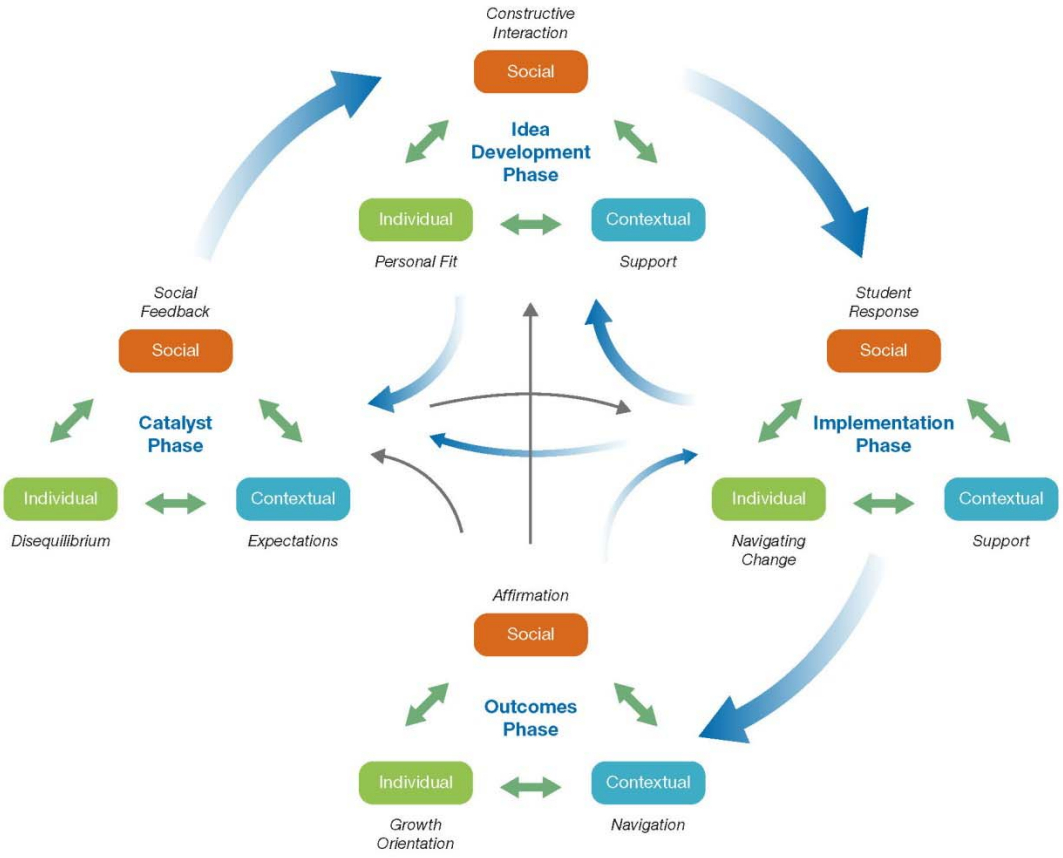


Figure 5.7 Movement between Phases in the Process of Development in Teaching Practice for Mid-career College Faculty

Chapter 6. Discussion

6.1. Introduction

The focus of this research study was to gain a richer understanding and conceptualization of mid-career college faculty's experiences of development in teaching practice in order to improve the design and support of this professional learning process. Using the research question, "How do mid-career college faculty experience the process of development in their teaching practice?", this study solicited and analyzed descriptions of faculty's authentic experiences in a way that tried to acknowledge the interrelationships between individual, social, and contextual elements of this experience. The phenomenological structure that has emerged reveals individual, social, and contextual elements for four phases of this process. In chapter 5, the findings were discussed in detail using the phenomenological structure shown originally in Figure 5.2 and inserted as a reminder below in Figure 6.1. In this final thesis chapter, I discuss the findings of the research study through the lens of Billett's theory of co-participation. I make connections between the findings and the existing literature related to faculty professional learning and discuss the implications of the research findings for educational development practice. Finally, I consider the limitations of this study, and the opportunities that exist for further research.

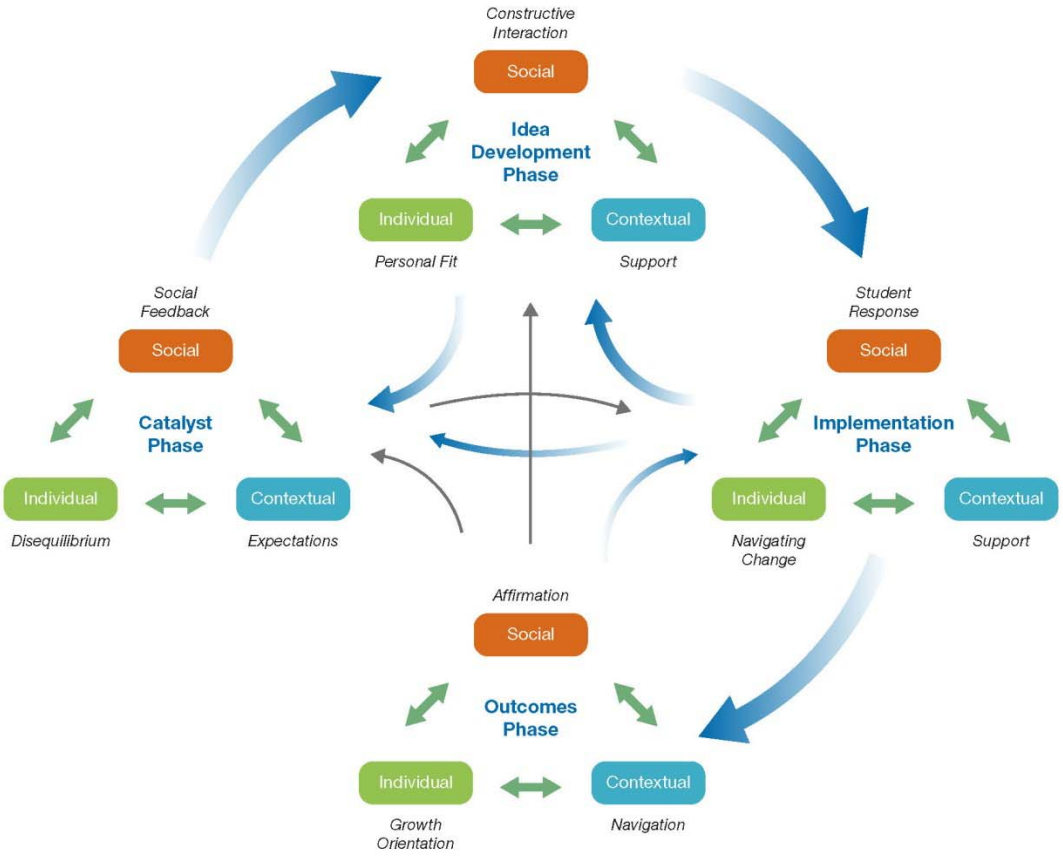


Figure 6.1 A Multi-phased, Multi-dimensional Structure of Essences for the Process of Development in Teaching Practice for Mid-career College Faculty

6.2. Billett's Theory of Co-Participation and Development in Teaching Practice

As discussed in chapter 3, Billett's sociocultural theory of co-participation was selected as the primary theoretical lens for this study because of its acknowledgement and intentional examination of the interrelationships between the individual, social, and contextual elements of learning in the workplace. Billett's theory offers a conceptual framework that views continuous professional learning as an ongoing and evolving process which results from the interaction between the affordances of work practice, which I examine as the social and contextual elements, and the individual's engagement in those practices, which I examine as the individual element. A view of faculty professional learning as ongoing and evolving supports the argument that faculty professional learning, related to development in teaching practice, needs to be

supported throughout their career because of the changing social and contextual dimensions, or affordances, of the educational workplace (Trowler, 2008). These include changes in various socio-cultural aspects of education (i.e. technology, generational values and norms, employer aims and goals), changes in institutional environments (i.e. political influences, policies and procedures), and changes in the larger global contexts (i.e. competitiveness, intensification, massification). This view also affirms the importance of studying mid-career faculty as a distinct faculty group because, as Baldwin et al. (2008) pointed out, the nature of their individual engagement with the social and contextual dimensions (affordances) of the educational workplace and their individual purposes for learning are different from faculty at other stages of their career. Examining faculty experiences of development in teaching practice through the lens of the sociocultural theory of co-participation is, I argue, one of the significant contributions of this thesis research. This lens explicitly acknowledges that development in teaching practice results from the intersection of two reciprocal processes - one being the way workplaces afford participation in practices that promote learning and the other being the way the individual chooses to engage in those practices. As well, this lens supports a bridging of the research on workplace learning, K-12 teacher learning, and faculty professional learning.

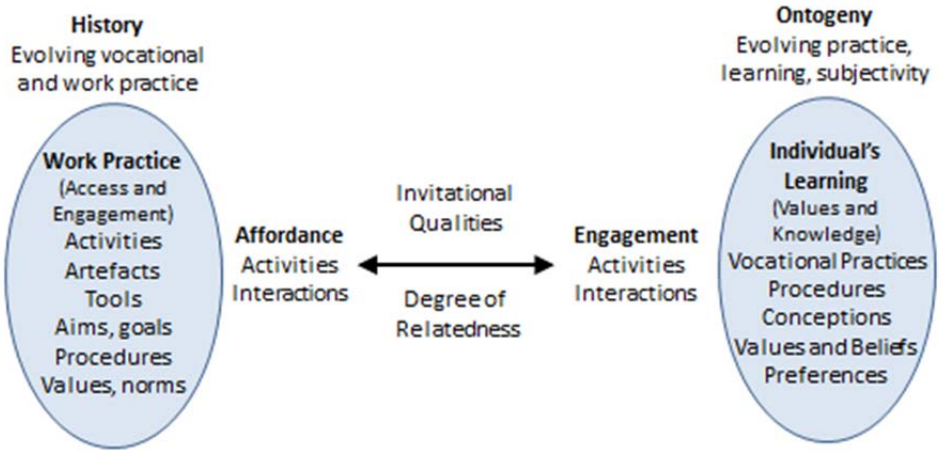


Figure 6.2 Co-participation at Work. From Billett (2002, p. 467)

The experiences of the faculty in this study support Billett's (2009) argument that workplace learning involves interrelationships between the activities and interactions enabled by the work practices and the individual's choice to engage in such activities and interactions for the purpose of learning generally and, in this study more specifically, learning that relates to the

development of teaching practice. The results of this study add to Billett's work by providing empirical data that shows how the principles of co-participation apply to professional learning related to development in teaching practice. The findings of the study provide insight into the individual aspects (i.e. goals and intentionalities, considerations related to practice, values and beliefs, preferences) of such learning and their influence throughout the learning process, the specific nature of social and contextual practices (i.e. activities, interactions) that promote and support learning in each phase of the learning process, and the nature of the interrelationships between individual, social, and contextual elements of teacher professional learning. For each of the four phases that emerged as part of the process of development in teaching practice – catalyst, idea development, implementation, and outcomes - I will discuss the following: what emerged as the key individual, social, or contextual element in that phase; how the other two elements as well as the interrelationships between all three are characterized in the faculty development process; how these interrelationships reflect the reciprocal processes in Billett's conceptual framework of co-participation; and finally, what elements emerged from this research that expand on Billett's research as well as the other literature discussed in chapter 2.

6.2.1 Catalyst phase: Disequilibrium, social feedback, expectations

In this research, a key element of the catalyst phase involved the individual experiencing disequilibrium and wanting to resolve that sense of disequilibrium. Social feedback to validate the disequilibrium and contextual expectations in the work environment related to the disequilibrium were important in catalyzing effort towards resolving the disequilibrium.

Individual disequilibrium as key to the catalyst phase.

The findings of this study reveal that the experience of disequilibrium was a key element of the catalyst phase and played an important role in prompting development in teaching practice. As described in chapter 5, variations in how this sense of disequilibrium was experienced included things such as disappointment in student performance, lack of student engagement in the course, a teacher's general lack of satisfaction with the course or general learning results based on teacher efforts, or feelings of inadequacy in the classroom. Krista's experience of disequilibrium, as described in chapter 5, was related to the nature of the workload of mid-term performance evaluations. She had this sense that she wanted the evaluations to be more student-centred and have more of an impact on student performance.

Matthew's experience of disequilibrium came from students' results on assessments that involved problem-solving. This study affirms the findings of Van Eekelen et al. (2005) who found that experienced teacher learning was directed by situations or problems encountered in the classroom and emerged from the "self-regulation of their teaching practice" (p. 467).

The results of this study support other discussions of disequilibrium and learning, which suggest that the actual learning arises from efforts to resolve this disequilibrium (Dewey, 1938; Fenwick 2003; Kegan, 1982; Mezirow, 1991, 2000). Pickering (2006) specifically identified disequilibrium as part of the faculty professional learning process. In her investigation of the influences of change for university faculty, Pickering found that day-to-day experiences that disturbed teachers' core beliefs produced uncertainties or tensions causing them to adjust their pedagogic perspectives. Two of Pickering's findings that are supported by the results of this study are that disturbances are just the beginning of the pedagogic change process and that student encounters were the most powerful source of disturbances. This study addresses Pickering's call for more research to understand faculty experiences of moving from disturbances to actual changes in practice.

Several other faculty development researchers have identified disequilibrium as a trigger for reflection and hence professional learning (Mälkki and Lindblom-Ylänne, 2012; McAlpine & Weston, 2000). Although reflection was not the focus of this study, I found that faculty responses to the disequilibrium involved much more than a cognitive reflective response. There was evidence of intense emotional responses, which are discussed in section 6.2.3, and social affirmation seeking responses, which are discussed below. McAlpine et.al.'s (1999) notion of a "corridor of tolerance" (p. 109) adds to our understanding of disequilibrium. The corridor of tolerance is a zone within which the individual teacher is comfortable with his or her current teaching practices. According to McAlpine et al., when the activities of classroom practice, such as student performance or engagement, are outside the corridor of tolerance (i.e. unacceptably poor performance or unusually poor engagement), teachers are more likely to be prompted to make changes to their teaching practice. Most of the experiences of disequilibrium that emerged in this study related to aspects of classroom practice that could be described as outside their corridor of tolerance.

In the K-12 research on teacher learning that was reviewed for this study, disequilibrium or disturbance is never specifically discussed as part of the teacher learning process. Although

Bakkenes, Vermunt, and Wubbels (2010) identified "experiencing friction" or experiencing discrepancy between what was expected and what actually happened, as a source of teacher learning, it is listed as just one of nine ways that teachers learn. Given that Kelchtermans (2005) describes "vulnerability as a structural condition" (p. 998) of teaching practice, it is surprising that experiences of disequilibrium are not more prominent in discussions of K-12 teacher learning.

In the professional learning literature, individual tensions or disequilibrium as a catalyst for learning is also hardly mentioned. Billett (2010) explains how the primary individual drive is "to secure personal coherence in encounters with the social and brute world and to overcome or reconcile disequilibrium….[to maintain] security in circumstances that threaten its stability and the reference points for that stability " (p. 7), but does not examine disequilibrium as a catalyst for learning. Rather, his focus is on maintaining equilibrium and he claims that learning occurs when there is alignment between the individual's learning needs and the affordances of the workplace practices (Billett, 2004b). There is evidence in this study that both are true; that both tension and alignment or coherence are important in the professional learning process related to the development of teaching practice. Tensions or disequilibrium are important as catalysts for learning but alignment and coherence between the individual and various social and contextual elements becomes important as faculty make efforts to navigate the disequilibrium and move towards a resolution that results in enhanced student learning. What we see in this study, however, is that this is not just an individual, cognitive process but an affective and social process as well. Another interesting area for further exploration is to understand ways that faculty experience disequilibrium and maintain personal coherence in a way that does not involve development in practice. This could reveal an array of individual, social, and contextual elements that might be important to pay attention to in educational development practices aimed at promoting development in teaching.

Co-participation and the catalyst phase: Social feedback and contextual expectations.

In the catalyst phase, the affordances of the workplace practices contribute as catalysts for development by providing social feedback, which affirms the individuals' experiences of disequilibrium, and contextual expectations, which promote a resolution of the disequilibrium in a way that enhances student learning. Based on the literature reviewed for this study,

identification of the social and contextual elements and their role in catalyzing development is a unique contribution to our understanding of the process of development in teaching practice. Social feedback from peers, affirming that they are also struggling with this issue, legitimizes the disequilibrium, which makes it safe to acknowledge and consider. In Krista's experience, other colleagues also acknowledged that they were finding the evaluations repetitive and time-consuming. In Matthew's experience, online discussions with his professional colleagues revealed that educators in other programs were wrestling with this challenge as well. Contextual expectations for better student performance (such as those expressed by advisory committees, employers, institutional managers, or professional accreditation bodies) reinforce for the faculty member the need to address the disequilibrium. In Krista's case, the expectations in her profession for reflective practice as well as the college curriculum expectations for problem-based learning acted as contextual expectations in the catalyst phase. For Matthew, the contextual expectations involved the introduction of problem-based assessments as part of the practical accreditation exam. The descriptions of Krista and Matthew's experiences show how the individual, social, and contextual elements act in interrelated ways to catalyze the process of development in teaching practice. The individual experience of disequilibrium is the disruption needed to prompt consideration of a change in practice but the social feedback and contextual expectations seem quite necessary in facilitating effort and movement towards resolution on the part of the faculty member. Social feedback came primarily from faculty colleagues either within the department, in other departments within the college, or at other colleges. Contextual expectations came primarily from professionals in the field (i.e. advisory group members, professional accreditation bodies, or community/industry partners). Because this study only explored the experiences of college faculty who had developed in their practice, an area of future research might be to investigate the experiences of faculty who develop in their practice when there are no contextual expectations (i.e. professional or industry expectations) or faculty who do not experience development in their practice.

6.2.2 Idea development phase: Personal fit, constructive interaction, contextual support

In the idea development phase, the individual process of finding personal fit emerged as a key element. However, navigating this phase of the development process involved constructive interactions with respected peers and the perception of contextual support.

Personal fit as an individual key to the idea development phase.

Based on the results of this study, a teacher's individual ontogeny and everything that this involves (i.e. values, goals and beliefs around teaching and learning; personality; knowledge and skills related to teaching; confidence as a teacher) plays a significant role in development of teaching practice. It appears that faculty strive to resolve their disequilibrium in ways that fit with who they are as individuals, what they are trying to achieve in the classroom, and how they conceptualize their practice. In George's experience, he specifically describes his struggle in trying to navigate a new classroom persona in order to provide better instructional support for a special needs student. Drew has strong beliefs about the role of experience in learning and wants to find a way to create motivation for the learning behaviours that he feels are important. The essence of personal fit that has emerged from this study supports Billett's (2009) argument that the individual, and who they are, powerfully affects the nature and direction of learning in the workplace.

In the faculty development literature, the idea that teachers powerfully affect the nature and direction of their professional learning is also supported by the work of Akerlind (2005) and McAlpine & Weston (2000). Akerlind identified five different approaches to development amongst university faculty, and found that the approach they took was related to "both their contextual circumstances and their personal intentions underlying their work as an academic" (p. 26). Although focused specifically on reflection and teaching development, McAlpine and Weston place personal goals at the centre of their model of reflection because "goals represent the teacher's expectations or intentions about what is to be accomplished in terms of instruction and form the basis for actions to be taken in order to achieve this" (p. 368). In their model, goals affected what aspects of teaching faculty monitored and what decisions they made regarding instructional modifications. In the K-12 literature, Clarke and Hollingsworth's (2002) model also identifies salient outcomes (goals) and personal knowledge, beliefs, and attitudes as important domains of a teacher's professional growth process. While the role of individual's goals and intentions has previously been identified in teaching practice, this research adds to our understanding of their role in the development process.

Although goals and intentions are central to the notion of personal fit, there are also practical elements of fit that emerged such as what the students were like, the classroom logistics, and the subject being taught. Drew had to find a way to motivate attendance that fit

with college policies and the curriculum structure. George had to consider both his special needs student and the rest of the class. Both Pickering (2006) and McAlpine et al. (2006) have identified these practical aspects as important influences on post-secondary teacher thinking and decision-making related to teaching practice. Pickering found that novice university teachers made teaching decisions based on an individual sense of what was "possible, plausible, and desirable" (p. 323) and she used the term pedagogic perspective to encompass these aspects. The results of this study would suggest that the notion of pedagogical perspective is not unique to novice teachers and that even the decision-making related to practice of experienced teachers is "pragmatically bounded" (p. 329). In their work on reflective thinking, McAlpine et al. identified four distinct zones of pedagogical thinking that influence teacher actions: conceptual, strategic, tactical, and enactive. Their description of tactical thinking, which "refers to the operationalization of the strategic thinking through specific processes and procedures" (p. 606) describes some of the type of practical thinking that occurred as part of finding personal fit in the idea development phase.

Co-participation and the idea development phase: Constructive interactions and perceived support.

Access to constructive interactions with respected peers and perceived support from the work environment appears to be crucial in the process of idea development and working out ways to address the experience of disequilibrium. Identifying that the idea development phase has a purpose and reciprocal process which is distinct from the implementation phase is a unique contribution of this study. The findings related to the idea development phase offer some insight into what occurs in the space between initial thinking about a teaching issue and putting ideas into action. Experiences of faculty in this phase are powerfully supported by Billett's (2002b) theory of co-participation in terms of the interrelationships between the individual, social, and contextual elements. As Billett describes, it is the work practice that "gives individuals access to knowledge through its affordance of activities and guidance" (p. 466). Drew and his colleagues sat down together to discuss the issue of attendance from a variety of perspectives. They particularly grappled with the role of extrinsic motivation in the learning process. Drew explains that the respect he and his colleagues have for each other plays powerfully into their ability to have these discussions productively. In George's experience, the constructive interactions occurred with counsellors and disability specialists.

Because George already had developed a relationship of trust and mutual respect informally over the years, they were able to have open and productive conversations.

Faculty engage in constructive interactions to explore ideas and strategies, to address their perception of the disequilibrium, and to find a fit for themselves in terms of the many personal and practical elements of teaching practice. As Billett (2004) explains, these interactions can be with "human partners and non-human artefacts" (p. 316). In this research human partners included a whole range of education professionals and non-human artefacts included books or other resources that offered helpful insights or ideas. George's interactions with a team of disability specialists, counselors, and learning commons staff were very important in helping him think about and develop strategies for his classroom. He describes these interactions as "fun and profound" because they affirmed him in his role as the teaching professional but expanded his understanding of learning related to students with special needs. As faculty explore ideas and strategies through constructive interactions either with respected peers, through professional development activities, with students, or through reading materials, their individual intentions and goals come into alignment with their sense of what is "possible, plausible, and desirable" (Pickering, 2006, p. 323). The social affordance of constructive interactions are significant in terms of enabling idea development because they offer what Warhurst (2008) referred to as "purposeful pedagogic interactions" (p. 459). These constructive or purposeful pedagogic interactions help faculty with the process of expanding awareness (Akerlind, 2003) in order to resolve disequilibrium in a way that fits and supports both their individual ontogeny and their goals for student learning. In this study, examples of expanding awareness included gaining new insight into students as learners, working out how a particular teaching strategy might be enacted in the classroom, or re-conceptualizing what it means to learn in a particular course. In Drew's experience, after much reflection and discussion, he and his colleagues built a framework for conceptualizing the problem and the solution. Drew talks explicitly about how he felt comfortable with the new framework and how he wanted to make sure students were comfortable with it as well. George had to try and find a balance between flexibility and strictness that would work for both him and the students. As is evident in the descriptions of experience in this study, development in teaching practice needs to allow teachers to work out how changes in practice fit with their values, beliefs, and experiences as well as with the complex contexts of their practice.

In this phase, we see clear evidence to support the significant role that the social community plays in post-secondary teachers' development of practice, as identified by Knight, Tait, & Yorke (2006) and Warhurst (2008). Community, which is a key element of both Wenger's (1998) conceptual framework for a social theory of learning and Engeström's (2001) activity theory, is the social space in which ideas about practice are tested, explored, expanded, affirmed and/or challenged. Constructive interaction in these social spaces that respects individual's identities, goals, and meaning-making processes, seems to be a key element of the experience of development in teaching practice.

Contextual affordances that support the development process in this phase include a perception of being supported by the norms, values and procedures of the work environment (i.e. the faculty member's discipline, program, or institution). Both George and Casey perceived that they had the support of their deans/chairs as they navigated new approaches in their classrooms. As discussed by Mälkki & Lindblom-Ylänne (2012), the interrelationship between the individual and the context can serve to either build bridges or create barriers for development in teaching practice.

The findings related to the idea development phase reveal more specifically what type of role the social and contextual elements play in supporting professional learning in the transitional space between thinking and action. Although McAlpine, Weston, Timmermans, et al.'s (2006) research investigated the individual, cognitive elements of this space for a small number of university faculty, this study expands our understanding to show that constructive social interactions and the perception of contextual support are significant affordances in the process development for mid-career college faculty.

6.2.3 Implementation phase: Navigating change, student response and contextual support.

In this phase, the social essence of student response emerged as a key element. Interrelated with the student responses were the teacher's individual essence of navigating change and the contextual essence of experiencing contextual support.

Student response as a social key to the implementation phase.

In the implementation phase, it was interesting to see that the social element became a primary aspect of the development process. During this phase, students' responses in the classroom were an important essence of faculty's experience of development in teaching practice. The teachers in this study were very attentive to student responses throughout the implementation phase and their experience of development was impacted by those responses. The students in the classroom emerged as the primary social "community" for learning in the implementation phase. This further supports Sadler's (2012b) claim that "instances of interactions with students acted as a core influence upon new [university] teachers' development" (p. 147). Although his study was with new teachers, it seems to be true for experienced teachers as well. In Casey's description she talks about the importance of seeing students engaged and embracing the new model which involved peer learning. Lucy's experience involved both positive and negative responses from students and she explains how positive responses encouraged her to continue and how negative responses were extremely discouraging. Although experiencing support from colleagues or supervisors influenced faculty's experience of the implementation phase, in that it helped with their confidence and risk tolerance, it came out in the data as less important than the social influence of the classroom.

Co-participation and the implementation phase: Navigating change and contextual support.

In the implementation phase, co-participation consists of the individual experiencing the process of navigating change in the social environment of the classroom as well as the contextual environment. Navigating change in the classroom has emerged from this study as a process that teacher's struggle with on many levels including emotionally, conceptually, strategically, and practically. Specifically identifying the element of "navigating change" as part of the process of development in teaching is another contribution that this study makes to our understanding of this professional learning process. Ho, Watkins, & Kelly (2001) investigated the impact of a conceptual change approach on university teaching but did not examine teachers' experiences of the process of navigating change. In addition, while they only addressed the cognitive aspects of such change (Ho, 2000; Ho et al., 2001), this study revealed that there are many other aspects including risk management, skill development, anxiety and fear, confidence, and role definition. Sadler (2013) refers to the emotional aspects of development in teaching for novice university teachers but does not explicitly make the

connection between emotions and the process of navigating change. In this study, we see the process of navigating change as a significant individual element in the process of implementing change to teaching practice and that the challenges of navigating change are not unique to novice teachers.

Lucy describes how when she first started to move towards a more student-centred approach she found it "nerve-wracking because it was new and [she] didn't know how it would all work". As she explains, anxiety comes because you don't really know what is going to happen and you realize that you are going to have "respond on the fly". Sadler's study revealed that confidence plays a significant role in "taking risks and trying out new ways of teaching" (p. 164). For many of the teachers in this study, a crisis of confidence was part of their process of navigating change. Casey explains how adopting peer mentoring was emotionally and physically demanding and how she was always questioning whether she was doing the best for her students. She said that she felt like she was back to when she first started teaching, that all her knowns had changed. In the K-12 literature, Kelchtermans (2005, 2009) argues that vulnerability is a "structural condition" of the teaching profession and explains that changes in teaching practice are never just a "simple question of changing one set of practices for another" (p. 996) because they are deeply rooted in elements of one's personal interpretive framework and cannot be separated from the emotional, social, and cultural aspects of that framework. This sense of vulnerability is evident in both Casey and Lucy's experiences described above. This element of vulnerability is generally overlooked in discussions of development in teaching practice and even though the experienced teachers in this study accept this as part of their practice, they often expressed a keen awareness of this as they were trying to navigate changes to their practice.

Another aspect of navigating change, which is not evident in the literature addressing teaching development, is the experiences of helping students navigate their new roles. For example, if the teacher adopts a new approach that requires students take a more active role in the learning process, the teacher must redefine what his or her role is in that process and must also define clearly for students what their new role entails. In the descriptions of experiences in this study, we can see several examples of teachers carefully considering how the students will respond to their new approach and trying to think proactively about how to navigate his/her new role as well as about how to help students navigate their new roles. Casey talks specifically

about having to develop supports for students so that they could fulfill their roles in peer learning. This aspect of helping teachers and students navigate new roles could be an important area for further investigation in trying to understand the process of development in teaching practice. It might provide additional insight about the challenges teachers face as they try to put ideas related to effective teaching into action in the classroom. This gap has been investigated as it relates to the link between reflection and action (Kreber, 2004; McAlpine et al., 1999; Mälkki & Lindblom-Ylänne, 2012), but as discussed several times throughout this research, development in teaching needs to be considered as much more than an individual cognitive process. It has many affective, social, and contextual aspects.

Positive student responses, alongside contextual support, created the workplace affordances for the implementation phase of development in practice. Contextual support during the implementation phase involved support from supervisors or departments for trying new approaches, access to specific classroom technology (media projectors, computer labs, document cameras), access to specific kinds of classroom spaces (collaborative classrooms, meeting rooms that students could use, and student working spaces that were aligned with the instructional activities). These contextual supports or workplace affordances had a positive influence on the implementation phase because they supported both the teacher and students in navigating new roles and they contributed to a positive student response. In Lucy's case, where she did not experience contextual support for a difficult class that didn't respond to her efforts, she ended up giving up and waiting until the following semester to start again. Casey, on the other hand, who also had a very difficult group of students, experienced contextual support and was able to navigate new roles for both her and the students in the learning process. Billett (2009a) refers to these contextual supports as the "pedagogic properties" (p. 40) of the workplace, a term which I think offers a powerful way to conceptualize the instructional environment in which teachers work and develop their practice.

6.2.4 Outcomes phase: Growth orientation, social affirmation and contextual navigation

In the outcome phase, none of the elements emerged as a key element, however, there is evidence of the reciprocal processes of co-participation. Teachers' individual feelings of pride and satisfaction that resulted from implementation interacted with social affirmation in the work context to contribute to teachers' desire to continue the development process. For example, in

John's description we see how he has been inspired by the success of his new practices and feels committed to continually improving his strategies for helping students achieve their goals. As well, he is affirmed by other teachers who are now following his lead. I refer to the individual element of this phase as a growth orientation. This growth orientation is characterized by an expanded awareness of some aspect of teaching practice (i.e. how students learn, one self as a teacher the relation between teaching actions and student learning), an increased interest in reflecting on one's practice, an increased curiosity about aspects of teaching practice, increased enthusiasm or motivation to develop instructional tools (i.e. assignments, scaffolds, activities) that promote student learning, and an increased comfort with experimentation in the classroom. Billett (2005) also explains how the outcomes of one experience have a significant influence on individuals' development of self and on how individuals choose to engage with the workplace going forward. In this study we see evidence that teachers are inspired to engage in further professional learning following a positive experience with a change in teaching practice. Further investigation of ways that one development experience influences subsequent experiences is another interesting area for future research.

Teachers were inspired to learn more and try more, provided they were able to navigate the contextual realities of their workplace. These contextual realities included things such as access to appropriate classroom space, access to required technology, scheduling blocks for classes, and workload pressures. In John's case we see how the new teaching strategies have put increased pressure on computer labs and as a result, he now has to worry about whether he will get the labs he needs each semester. Several of the factors listed above were identified by Gregory & Jones (2009) as "forces of the environment" and were seen as forces that affected the adoption of particular teaching strategies. These are again examples of how the affordances of the workplace can either encourage or inhibit learning (Billett, 2002).

6.3. Mid-Career College Faculty Experiences of Development in Teaching Practice

In Chapter 2, I identified several ways in which this study hoped to contribute to the existing literature. This included adding empirical evidence related to the process of development from the perspective of faculty themselves, focusing specifically on the professional learning process of mid-career faculty related to development in teaching practice,

and expanding our understanding of the interrelationships between individual, social, contextual elements in that process. In this section, I discuss these contributions.

6.3.1 Mid-career faculty experiences

As Baldwin et al. (2005) argue, it is important to develop a better understanding of the experiences of mid-career faculty in order to effectively support them during a period of their career where they might experience decreased levels of engagement which may diminish professional motivation and have an impact on vitality and currency in their work. The findings of this study empirically validate the importance of the elements identified by Baldwin and Chang (2006) as essential to supporting the mid-career faculty development process. These elements include collegial support, resources, and reinforcement and emerged from a web-based investigation and synthesis of strategies that teaching centres were using to support mid-career faculty. This research, which is based on an empirical investigation of the authentic experiences of faculty, validates and extends the work of Baldwin and Chang. The three elements of their model align with the social and contextual elements identified in this research. This research adds to their work by identifying the learning purpose of these elements in various phases of the development process and the interrelationships between these elements and other individual, social and contextual elements. In the catalyst phase, social feedback related to an individual's experience of disequilibrium came largely through some form of collegial support. As mentioned in the findings, a variation of the expression, "it's not just me" appeared in each of the interview transcripts. As well, in the catalyst phase, faculty experienced reinforcement for their teaching goals from their colleagues and the contextual expectations (e.g. advisory committees, industry partners, curriculum guidelines). In the idea development phase, collegial support took the form of constructive interactions aimed at working through ideas to achieve a "personal fit". In this phase, contextual support included perceived access to resources such as technology and space, as well as perceived reinforcement through things such as time, policies, and departmental support. These findings provide empirical evidence that can inform the purposes for providing collegial support, resources, and reinforcement as part of educational development practice for mid-career faculty as well as insight into the specific ways these elements contribute to the professional learning process related to the development of teaching practice. Based on the fact that full time mid-career faculty are the largest group of full-time academic employees in an institution (Baldwin et al., 2008), this is an

important group to better understand, support, engage and motivate towards continuous improvement.

6.3.2 How social and contextual dimensions support individual goals

One of the significant goals of this research was to better understand the interrelationships between the individual, social, and contextual dimensions of development in teaching practice. The phenomenological structure that has emerged from the data suggests that the nature of these interrelationships varies throughout the development process and that the social and contextual elements play important roles in defining, directing, and supporting individual goals. This research provides further empirical evidence for Billett's (2004b) argument that, "self and intentionality arises from and is shaped iteratively and continually by negotiations between the social and cognitive experience". The data suggests that this iterative process exists for mid-career faculty as they develop in their teaching practice. This is an important contribution because it enhances our understanding of both the development process and the role that various individual, social, and contextual elements play at different points in that process. This finding suggests that alignment between the social and contextual support and individual intentionalities in the various phases of the development process (i.e. addressing disequilibrium, finding personal fit, negotiating change, and providing affirmation related to growth efforts) promotes mid-career faculty development in teaching practice.

As mentioned earlier, most of the models that contribute to the theoretical orientation of this study identify individual goals as a salient factor in influencing the direction of professional learning (Akerlind, 2007; Billett, 2004b; Clarke & Hollingsworth, 2002; Engeström, 2001; McAlpine & Weston, 2000). That finding is supported by this research. However, from this study we get a more refined understanding of how those individual goals vary during the different phases of the learning process and how the social and contextual interrelationships serve to support individual goals related to development in teaching practice. In the catalyst phase, the individual goal is to address the disequilibrium that he/she is experiencing. The social and contextual interrelationships serve to validate and affirm the disequilibrium and motivate movement towards its resolution. Although this study only looked at experiences of development, an area for future research could be to investigate what happens when teachers

do not experience social feedback that affirms or validates their disequilibrium or when they do not perceive external expectations for resolving the disequilibrium.

In the idea development phase, the individual goal is to find a way to resolve the disequilibrium that has a "personal fit". Kreber (2010) refers to this sense of personal fit using the term authenticity and, based on a study of nine academics, has linked authenticity to individual elements such as educational goals, conceptions of learners, values, and self-concept as well as social elements such as discipline, sociocultural context, and institutional context. This research supports Kreber's argument that all of these elements interact to affect teacher-student interactions and pedagogical practices. The experiences of teachers in this study, during the idea development phase, also reflect many of the findings from Mälkki & Lindblom-Ylänne's (2012) research on the barriers and bridges between post-secondary education teachers' thoughts and actions. These include the practical context of their courses or classrooms, the institutional settings, and student expectations. Similarly, in this study, teachers' processes of finding personal fit involved consideration of ways to actualize ideas in the context of the classroom. For example, Frank talks about how he bounced ideas off his colleagues to see what would work or not, based on what they had tried. As well, he always had, in the back of his mind, his concern about how students would respond. McAlpine et al.'s (2006) identification of conceptual, strategic, tactical, and enactive zones of pedagogical thinking provides helpful insights into the various ways that faculty are processing the "problem spaces" (p. 604) of their practice and working out this personal fit. For Frank, although he had participated in a number of short professional development workshops, it was a four day, intense course design workshop that helped him develop a coherent conceptualization of what he was trying to achieve in his course (conceptual), what he needed to do to achieve that (strategic) and how to go about making that happen in his classroom (tactical). Frank explains how exchanging ideas with other teachers in this four day workshop was very valuable for him. Pickering's (2006) finding that faculty learning related to teaching practice is situated and that "options for change are perceived as pragmatically bounded" (p. 329) is also supported by the data in this study. Similarly to the novice university teachers in Pickering's study, mid-career faculty in this study identified the pedagogic norms of colleagues and their disciplines as social and contextual elements that had a strong impact on their development process in this idea development phase. The identification of the idea development phase as a distinct phase that has particular individual goals and interrelationships is a contribution of this study. The

interrelationships of this phase provide insight into how faculty navigate the space between identifying an aspect of their teaching that they want to address and implementing a change in the classroom. I would suggest that this finding is an important piece of the puzzle in terms of understanding the link between teacher thinking and action in the development of teaching practice. Much of the research to date in this area has focused on the role and salience of reflection in that link (Kreber & Castleden, 2009; Mälkki & Lindblom-Ylänne, 2012; McAlpine & Weston, 2000). However, based on the results of this study, I would suggest, like Warhurst (2008) and Gregory & Jones (2009) that there are other, equally salient, social and contextual elements which need to be acknowledged, understood, and supported in the development of teaching practice. It seems that as individual faculty interact with social and contextual elements they experience the process of expanding awareness (Akerlind, 2003, 2004; Entwistle & Walker, 2000; Ramsden, 2003). Through this process, faculty expand their breadth and depth of understanding related to the way they define the content of their discipline, the way they conceptualize student learning, and the way they attempt to facilitate such learning. I believe that this process, which is described in detail in section 2.1.2, is at the heart of professional learning related to development in teaching practice, especially when that practice aims to promote deep learning as opposed to surface learning (i.e. the memorization of content).

In the implementation phase, the individual goal is to navigate change required by the development in teaching practice, within the context of the classroom. As mentioned in the findings section, development in practice could involve a variety of changes such as new roles for the instructor and/or the students, new instructional or assessment processes (such as those required for problem-based, project-based learning or peer assessment), new technologies, or new classroom logistics (i.e. working in small groups, undertaking individualized projects). Navigating change was often accompanied by a significant amount of teacher anxiety, which offers further evidence for the presence of an inherent feeling of vulnerability in teaching practice (Kelchtermans, 2005) and for the claim that teaching is not an “emotion free zone” (Martin & Lueckenhausen, 2005). Sadler (2013) suggested links between the anxiety of change, the risk taking required to try new things in the classroom, and one’s self-confidence in a particular teaching context. Almost all the teachers in this study experienced a combination of anxiety and excitement in the implementation phase. These feelings were strongly tied to the response of the students to the change they were implementing, a finding that further supports

Sadler's (2012b) claim that interactions with students had a strong influence on development in teaching. This study extends our understanding by showing that student responses are an extremely significant social element in the implementation phase of development in teaching. For example, Emma explains how excited she was when she introduced learning activities designed to promote more meaningful interactions amongst students, and their response was much better than she ever could have anticipated. At first she felt anxious about not having her lesson directed by powerpoint slides, but now she has developed her role as a guide in the learning process and uses her information slides as notes pages to fill in the gaps in the interactive classroom. Navigating change emerged as an important element in the learning process related to development in teaching practice. More research is needed to better understand what faculty experience cognitively, emotionally and behaviorally as they navigate change related to introducing a new approach in the classroom and what social and contextual supports help to minimize anxieties and fears connected with navigating change and help faculty persist through the anxiety and risk of change.

In the outcome phase, an explicit description for individual goals did not emerge, but all faculty expressed intentions that reflected a growth orientation, which involved goals related to learning more about ways to enrich their teaching. For Emma, the results in terms of learning that she experienced were amazing to her and as a result she continues to explore ways to make this type of approach work effectively with various groups of students, not all of which are as responsive as her first group was. She continues to investigate various assessment strategies that support her goals but also fit within the structures of the college system (scheduling, program expectations, time). For Steven, although the positive responses from his students are rewarding and inspire him to do more related to the incorporation of stories into the learning process, affirming feedback from his dean and colleagues is also important in encouraging him to continue growing as a teacher. In this phase, the data revealed that the social and contextual interrelationships which supported and promoted a growth orientation included positive affirmation from peers, social affirmation through new opportunities to contribute at a program or institutional level, and access to resources. This provides empirical support for Baldwin and Chang's (2006) claim that collegial support, resources, reinforcement are essential elements to support mid-career faculty development. It extends our understanding of this claim by providing insight on how specific types of support, resources, and reinforcement contribute to the purpose of promoting a growth orientation.

6.3.3 Development of teaching and the affective domain

Although not described as part of the development experience of every teacher in the study, the prevalence of intense emotions as part of many faculty experiences deserves attention. According to Trigwell (2012) almost no research exists that specifically focuses on the emotional aspects of teaching in post-secondary education. This is surprising given that the findings of this study align with Trigwell's claim regarding the ubiquity of emotion in the teaching and learning process. He writes:

> In educational settings generally, emotion is ubiquitous, not only being a part of students' learning, but also being felt by teachers during their teaching. Teachers' emotional experience is not only influenced by their individual reality (teacher-self), but is also affected in social interactions with others (students-teacher interaction, teacher-teacher interaction …), and is shaped by the wider socio-political context (college politics and culture). (p. 609)

While one would expect novice teachers to experience high levels of anxiety and uncertainty, the results of this study show that disequilibrium in one's teaching practice and the process of making changes to instructional delivery can also lead to anxiety and uncertainty for experienced educators. In this study the emotions expressed in the catalyst phase were primarily more in the negative range (i.e. frustration, self-doubt, annoyance). In the implementation phase we see the whole range of positive and negative emotions reflected in teachers' descriptions of their experiences. This was also a finding in Hagenauer and Volet's (2014) study of university teacher's emotions (2014). In their study of 15 experienced teachers' emotions during teaching, they found that annoyance and insecurity were the most frequently mentioned negative emotions and that happiness, satisfaction, and enthusiasm were the most frequent positive emotions. In this study we gain further insight into how elements of the development process might be linked to various emotions (i.e. disequilibrium and annoyance or insecurity; navigating change in the classroom and anxiety or fear; student response and satisfaction or enthusiasm). Further research is needed into the specifics of the relationships between the emotions that faculty experience and various aspects of the phenomenological structure that emerged from this study (i.e. how specific emotions are connected with the phases of development; what interrelationships are between emotions and the individual, social, and contextual elements of each phase; how various emotions act to encourage or discourage development in teaching; how discouraging emotions can be supported and encouraging emotions can be promoted). Hagenauer and Volet's findings regarding the links between

emotions and student responses in the classroom align with the experiences of the teachers in this study during both the catalyst and the implementation phase. According to them, university teachers typically "expressed positive emotions when their expectations were fulfilled and negative emotions when they were not" (p. 249). As mentioned earlier, disequilibrium was most often related to student engagement or performance and the response of students was the most powerful element of the implementation phase. This study extends their findings by differentiating between emotions in the catalyst phase and in the implementation phase. Based on the experiences of development that teachers shared for this study, I agree with Hagenauer and Volet that we need to continue to question "the still prominent view that university teaching is essentially a cognitive endeavor involving the application of effective strategies to maximize students' knowledge acquisition and understanding" (p. 259). It shows that support for development in teaching that is based strictly on cognitive notions such as conceptions of teaching and reflection on practice will be inadequate in enabling teachers to adopt changes in practice that will lead to improvements in the quality of student learning. The structure that emerged in this study shows that the individual, cognitive dimension is only one dimension of the process. The lived experiences of faculty in this study also involved powerful emotional and social dimensions and consequently, I would argue that if these are ignored in efforts to promote development in teaching, opportunities to affect change are limited.

6.3.4 Development of teaching and professional workplace learning

In section 6.1, I explored in-depth the relationship between the findings of this study and Billett's theory of co-participation. Since the work of several other professional learning researchers had a strong influence on my theoretical orientation to this study (Eraut, 1994, 2000, 2007; Webster-Wright, 2010), I think it is important to briefly examine the relationships between their work and the outcomes of this work.

Webster-Wright's phenomenological study of authentic professional learning in a variety of health professionals resulted in a structure of experience that included understanding, engagement, interconnection and openness. After reflection on the empirical findings of this study in relation to her findings, I would argue that Webster-Wright's study only revealed aspects of the individual elements and that her structure of experience does not represent any of the social or contextual elements that emerged in this phenomenological study. As result, I

would say that this study extends our conception of a structure of authentic professional learning to include social and contextual essences. However, Webster-Wright's work deepens our awareness of what constitutes the individual essences. Her first constituent of authentic professional learning is understanding and involves thinking about what to do, questioning what is done, and transitioning to a changed understanding. These cognitive activities are reflected in several of the individual essences that emerged in this study (i.e. finding personal fit, navigating change). Several faculty (Krista, Emma, Casey) specifically described how they transitioned to a new understanding and saw their students in a whole new way as they asked them to take more ownership for the learning process. Webster-Wright's second constituent is engagement or active participation in professional practice and was reflected in the experiences of all participants in this study. Since this study targeted faculty who had experienced development, it did not tap into the experiences of faculty who were not engaged in the professional practice of teaching. An important area for future research is definitely trying to better understand teachers who are disengaged in their role as educators. Webster-Wright's third constituent is interconnection and is extremely evident in the data of this study. The process of finding a personal fit in the idea development phase involves all the types of interconnection identified by Webster-Wright: connections between various experiences; connections between past, present, and future; and interactions. Finally, Webster-Wright's fourth constituent is openness and refers to openness to resolve tensions that arise in one's work. This is particularly interesting as it relates to this study because all of the participants acknowledged experiences of disequilibrium and their process of development was a process aimed at addressing this disequilibrium. This raises an important question regarding development in teaching practice that needs investigation. What happens when one is not open to acknowledging or trying to resolve experiences of disequilibrium in the classroom? Based on her findings, Webster-Wright advocates for alternative approaches to professional development where the environment supports and enables professional learning. I believe that this study contributes to providing a more concrete understanding of what social and contextual elements are needed in the environment as it relates to mid-career faculty learning.

This study both confirms and extends the work of Eraut in relation to the development of professional practice. In Eraut's epistemology of practice, individual elements include challenge and value, support and feedback, confidence, commitment and personal agency. The contextual elements include allocation and structuring of work, the relationships with people at

work, and the individual's participation and expectations. Many of Eraut's individual and contextual elements are supported by the essences that emerged from this study. This study confirms Eraut et al.'s (2000) argument that professional learning is "situated in the work itself and in its social and organizational context" (p. 249). This study extends Eraut's work by identifying various phases of development related to the professional learning of mid-career college educators. The data supports Eraut (2007a) and Billett's (2006) argument regarding the importance of individual agency in the professional learning process; however the elements of challenge and confidence deserve further specific investigation. Confidence also emerged as an important influence on development in teaching in a study by Sadler (2013). According to Sadler, self-confidence is strongly tied to one's perceived content knowledge and influences "an individual's decision to teach in a particular way and the reflection that takes place" (p. 165). These elements merit further attention in the conceptualization and practice of educational development.

6.4. Implications for Educational Development Practice

The results of this study reveal that development in teaching practice is a multi-phased and multidimensional process. This, I believe, has implications for the way we conceptualize educational development, and instructional development more specifically, and the way we design processes and supports for the development of teaching practice. Both the conceptualization and practice of educational development need to account for individual, social, and contextual elements of each phase – catalyst, idea development, implementation, and outcomes.

6.4.1 Conceptualizing development in teaching as multi-phased and multidimensional

As Billett (2009a) points out, "how learning is conceptualized is central to understanding human learning and development and how intentional learning experiences are to be thought about, designed, enacted, and appraised" (p.35). As mentioned earlier, the post-secondary education faculty development literature predominantly conceptualizes development in teaching as an individual, cognitive process. A few faculty development researchers who have adopted a sociocultural lens to investigate this professional learning process (Knight, Tait & Yorke, 2006;

Roxå and Mårtensson, 2009, 2011; Warhurst, 2008) have contributed to a conceptualization of development in teaching practice that acknowledges the powerful influence of the social context in that process. One limitation of most sociocultural studies is that they minimize the role of individual agency and intentionality in professional learning This limitation is addressed by Billett's theory of co-participation, a theory that conceptualizes workplace learning as involving ongoing interactions between a) the affordances of the social and contextual environment, and b) the ways that individuals engage with that environment based on a complex array of individual factors. A couple of faculty development researchers have acknowledged the interaction between the social, contextual, and individual dimensions of development in teaching (Gregory & Jones, 2009; Kreber, 2010a; McAlpine & Saroyan, 2004;) but these researchers have not specifically linked this to the sociocultural theory of co-participation. The findings of this study support the theory of co-participation as a meaningful theoretical framework for conceptualizing the professional learning process related to development in post-secondary teaching practice.

Using the theoretical framework of co-participation to conceptualize the design and practice of educational development is an important contribution of this study because it explicitly highlights the importance of acknowledging the interrelationships that exist between individual, social, and contextual elements in one of the main learning processes that this field aims to support – that of development in teaching practice. By introducing the notion that development in teaching practice is a process that involves a number of phases, each with distinct essences for the individual, social, and contextual elements, this study affirms Billett's (2002b) claim that learning at work is not just co-participative but also dynamic where the "goals and bases for participation are likely to be constantly changing" (p.467) . Conceptualizing educational development as supporting a dynamic and interactive process offers a powerful sociocultural lens for examining its practices.

6.4.2 Practicing educational development based on a multi-phased and multidimensional conception

Conceptualizing development in teaching practice as a multi-phased and multidimensional process, as shown in Figure 6.4 below, has important implications for the design and practice of educational development. As mentioned above, the results of this study suggest that each phase has distinct individual, social, and contextual elements and

interrelationships. In this section, I examine implications for educational development practice in each of the various phases. I conclude with a general discussion of how this multi-phased and multidimensional framework can offer a meaningful lens for examining and deconstructing the goals and practices of educational development as well as a specific example on how it has impacted my practice of educational development.

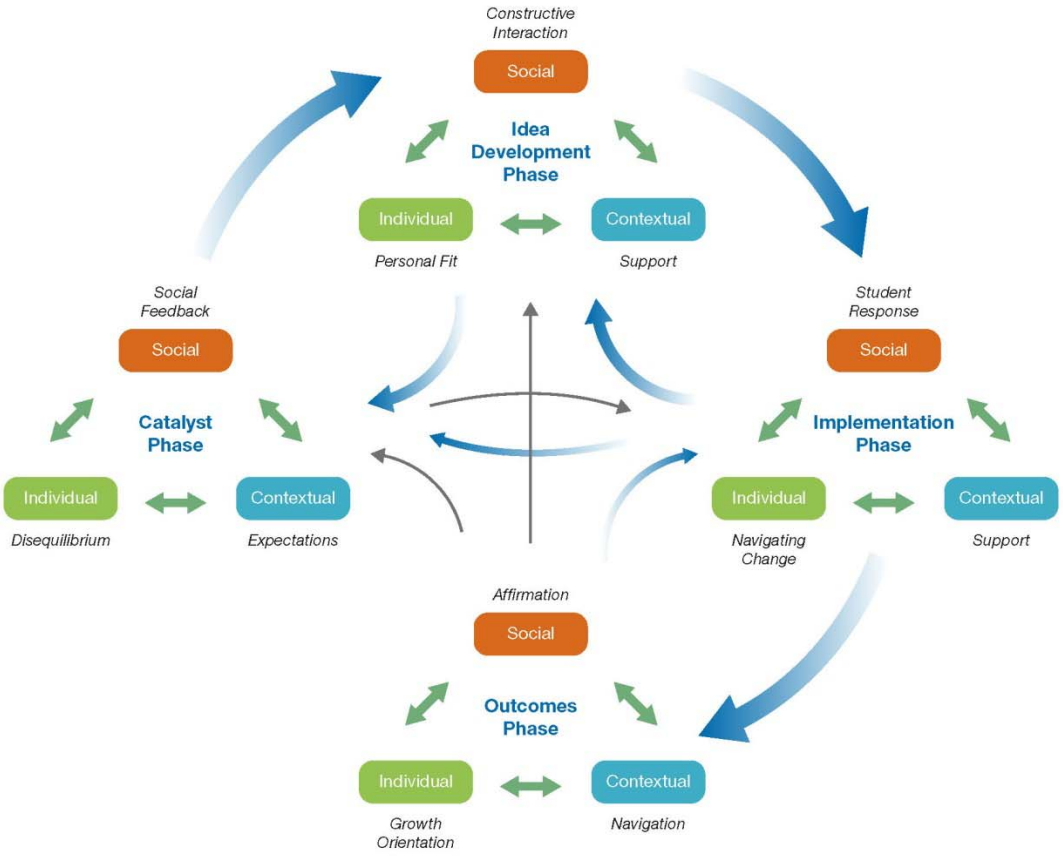


Figure 6.4 A Multi-phased, Multi-dimensional Structure of Essences for the Process of Development in Teaching Practice for Mid-career College Faculty

Educational development practice to support professional learning in the catalyst phase

In the catalyst phase, the experiences of the teachers in this study show that an individual sense of disequilibrium is a powerful catalyst for development in practice. The importance of acknowledging that an individual teacher's sense of disequilibrium is a powerful source of change has been identified by other researchers (Mälkki & Lindblom-Ylänne, 2012;

McAlpine & Weston, 2000; Mezirow, 1991, 2000; Pickering 2006). The act of problematizing elements of practice as part of the professional learning process has been discussed by other researchers. Pickering (2006) suggests that problematization creates a point where beliefs can be interrogated and alternative actions considered. McAlpine et al. (2006a) examine the importance of paying attention to the nature of teachers' "problem spaces" (142), or the internal representations of the external world, in efforts to promote development in teaching practice. Based on the results of this study, I argue that educational development practice needs to be grounded in faculty's experiences of disequilibrium or problem spaces.

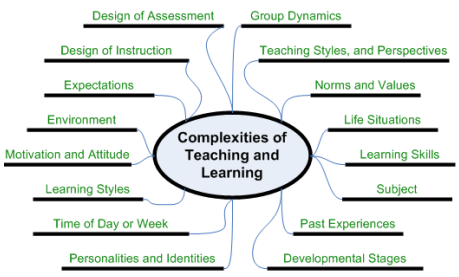
The importance of social feedback in affirming an individual's disequilibrium is also an important consideration for educational development practice. Given this finding, it is important to create safe opportunities for faculty to surface and express their experiences of disequilibrium and to receive social feedback that validates and affirms these experiences and promotes its resolution in a way that enhances student learning. Problem-based or inquiry-based learning approaches that are based on effective sociocultural learning designs and promote divergent thinking about common educational challenges is one possible way of supporting the learning needs of the catalyst phase. An example of a tool I have used that reflects this type of approach is shown below. This approach is based on using a thinking tool that supports and promotes dialogue which begins with a teacher's experience of disequilibrium and encourages divergent thinking, collaboration, and problem-solving. Respectful and collaborative discussions with peers generally affirm that faculty are not alone in their experiences and a well-designed thinking tool helps support the constructive exploration of the problem-spaces of their experiences.

Troublesome Teaching Situations

a) Description of the situation:
What's going on? - Possible reasons based on the complexities of teaching and learning

b) Guiding Principles:
What are the values, intentions, and goals that will guide actions/responses to the situation

Response Options
What to Do? – Possible Teaching Approaches, Strategies, Responses



Preventative	In the Moment	Follow up

Although effective tools and collaborative discussions can support the cognitive aspects of development in the catalyst phase, the data from this study shows that experiences of disequilibrium have powerful emotional elements as well. Based on this finding, educational development practices need to acknowledge, understand, and support the emotional dimensions of disequilibrium, not just the cognitive. This aspect of supporting development in teaching practice is still very poorly understood and requires more research.

Another finding that has implications for educational development practice is the influence of contextual expectations in the experience of disequilibrium. In college teaching expectations for student learning are clearly expressed by professional bodies, advisory boards made up of industry professionals, and curriculum expectations monitored by the ministry. The experienced college faculty in this study were tuned in to these expectations and experienced disequilibrium when they sensed that these expectations were not being met. For example, the catalyst for Anne's experience of development was a clear sense that the students were not understanding or enacting the professional expectations of nursing in their clinical placements. Frank drew on his workplace experience to picture what he was aiming for in terms of student performance. This suggests that such external expectations contribute to catalyzing development in teaching practice and that educational development practice should increase faculty's awareness and understanding of these contextual expectations, including what they look like in practice, what aspects of them are useful and/or problematic in gauging the overall effectiveness of teaching efforts, and what implications they carry for instructional practice. Based on this notion, it seems that a question related to contextual expectations should be added to the exercise described above as part of the guiding principles discussion.

Both the external and internal contexts that influence post-secondary teaching are constantly evolving because of many aspects including massification, intensification, and globalization discussed in chapter 1. If we conceptualize the post-secondary teaching workplace as constantly evolving, something that was part of the experiences of many participants in this study, then we acknowledge that educational development practice has to understand, support, and help teachers navigate disequilibrium throughout their careers, not just at the beginning of their teaching career. This means that educational developers must find ways to engage mid-career educators in the type of discussion outlined in the box above. If designed with purpose and intention, Faculty Learning Communities (Cox & Richlin, 2004) and

the Open Space Technology (Owen, 2008) seem capable of addressing this educational development challenge. Although these approaches to professional learning have the capacity to support mid-career faculty in the development of their teaching practice, they would need to be designed to address disequilibrium, provide social feedback that affirms the experience of disequilibrium, and acknowledge contextual expectations. The essences that have emerged in this study provide a lens for examining these approaches to evaluate their potential for effectively supporting the development process.

Educational development practice to support professional learning in the idea development phase

The data from this study related to the idea development phase has several implications for educational development practice. First, in order to support faculty in their pursuit of finding personal fit, the findings of this study suggest that educational development practices need to acknowledge the existence of the many aspects that comprise what Billett (2009b) refers to as the individual's ontogeny as well as the evolving vocational and work practices. As discussed earlier, an individual's ontogeny refers to everything that makes up who they are – their personalities, personal histories, sense of self, values and beliefs, and intentionalities. In post-secondary teaching, this also includes things such as disciplinary background, teaching experience, and conceptions of teaching. Based on this finding, it seems important that educational development practices help faculty to become aware of their own ontogeny and how that fits with both their teaching practice and the practices of the larger educational context. The crafting of teaching philosophies seems to have the potential to promote this type of exploration and a very basic level. Part of this process often includes self-assessments related to perspectives, goals or values of teaching such as The Teaching Perspectives Inventory (Pratt & Associates, 1998) discussed in chapter 2. Based on the results of this study, significant gaps in the practice of writing teaching philosophies are that they generally remain focused on only some of the individual elements that make up one's ontogeny and they neglect to promote reflection on how one's personal philosophy fits with the broader educational context. The process of developing a teaching philosophy seldom problematizes the philosophy or considers how to enact one's philosophy in the complex context of teaching practice, which is a significant gap in relation to the development of teaching practice. Early in her career, Lucy had created a vision for herself of the type of teacher she wanted to be and central to that vision was student engagement. Throughout her experience of development in teaching, she strove to find ways to

teach her theory heavy class in a way that was engaging. Since one of her challenges was debriefing student-centred activities and very few of her colleagues were using these types of strategies, she would attend professional development sessions "on high alert" for efficient ideas for debriefing these activities. Because her program curriculum is strongly influenced by an external accrediting body and a qualifying professional exam, strategies she implements need to be effective and efficient. In many cases, Lucy attended professional development sessions that were interesting but did not help her with her immediate challenges of practice. Although her teaching philosophy provided her with an ideal to strive for, it offered very little practical guidance in how to achieve this ideal.

The importance of constructive interaction in the idea development stage identifies a social element that has significant implications for educational development practice. For example, Drew relied heavily on interactions with his colleagues to develop and implement a new assessment strategy that would reinforce for students the importance of practice. Drew was fortunate to have this type of interaction with his immediate colleagues. This was not the case for many of the participants. Several participants mentioned an intensive course design workshop as a professional development activity that provided opportunities to interact with peers and explore new ideas related to teaching. This workshop, which is described in a book called, *Rethinking Teaching in Post-secondary education: From a Course Design Workshop to a Faculty Development Framework* (Saroyan & Amundsen, 2004), is grounded in beliefs about the importance of such interaction in professional teacher learning. They argue that, "the intellectual and social coming-together of faculty is the basis for effective…development" (McAlpine & Saroyan, p. 216) and that the goal of educational development should be to "create a community of individuals from across disciplines who can talk about teaching with each other, share experiences, and help one another in making the learning experience of..students a memorable one" (p. 209). They describe the rational for its importance by saying, "collaborative interaction among colleagues helps individuals make greater sense of some of the issues they are confronted with personally. Moreover, participants are often more successful in clarifying peer concerns and answering questions in very meaningful ways" (McAlpine & Saroyan, 2004, p. 208).

In another example, Mac searched for ideas to make his course less teacher-centred. He found ideas in a workshop on universal design for learning (UDL) and a teaching open forum

run by the Centre for Teaching and Learning (CTL). Because Mac did not experience support from his departmental colleagues, these opportunities for constructive interaction were instrumental in his development. This finding, regarding the role of constructive interaction in the development of teaching practice, supports the arguments of Knight & Trowler (2000) regarding the importance of developing systems of work relations that afford and support faculty efforts to improve teaching and learning. In this study, it was in the context of these constructive interactions (which included interactions with departmental colleagues; collegial interactions in professional development activities; interactions with areas such as student services, curriculum or counselling departments; interactions with meaningful literature or other resources; and interactions with professional colleagues; friends or family members outside the college) that faculty expanded their awareness and understanding of various aspects of teaching practice. This expanding awareness involved encountering new ideas and perspectives related to conceptions of teaching and learning, student learning processes, instructional approaches, assessment practices, uses of technology, and conceptualizations of their subject. Based on these findings, it seems important that educational development practices are intentional about supporting and creating a variety of opportunities for faculty to engage in what Warhurst (2008) refers to as, “purposeful pedagogic interactions” (p. 459) and collective meaning making, based on situated and social learning theories, to support learning needs in the idea development phase. The findings of this study extend Warhurst’s claim by clarifying specific intentions and broader purposes for pedagogic interactions. The data shows that through such interactions, faculty experience an expanded awareness that contributes to their ability to find a personal fit for addressing their sense of disequilibrium. These interactions need to account for individual ontogeny and the evolving vocational and work place practices. Finding ways to promote such interaction is perhaps one of the biggest challenges for educational development practice.

In this study, the perception of contextual support was also an important element in this phase of the process. This perception of support included things such as a sense that one had permission to do things differently, time to explore new ideas, curriculum frameworks that allowed for changes to practice, and access to technology for learning. Based on this finding, educational development practice should perhaps involve advocating, on behalf of teachers, for aspects of contextual support that are important for development in teaching practice. It seems that when faculty perceive contextual support, they are more likely to engage in the reflective processes and constructive interactions that are part of the idea development phase.

Educational development practice to support professional learning in the implementation phase

In the implementation phase, educational practices need to be focused on helping teachers navigate change – both changes related to their roles in the teaching-learning interaction as well as changes related to students' roles in this interaction. The findings of this study indicate that navigating such change has cognitive, behavioural and affective components. For example, when Krista introduced her new student-driven approach to mid-term evaluation, she experienced many challenges related to navigating change. She had to help students understand the new process for completing, submitting, and debriefing their performance feedback and in the debriefing session, she had to make an extremely conscious effort to allow the students the time and space to speak. Krista admits being very uncomfortable with silence and having to literally "bite her tongue and sit on her hands". She shared that even though she had used a problem-based curriculum for 10 years, she struggled with her role because it was "still a little foreign to her". McAlpine and Weston's (2000) research on the practical, strategic, and epistemic spheres of reflection provides a rich basis for designing educational development practices to support the cognitive dimensions involved in navigating change. However, much more needs to be done to intentionally support teachers in navigating the cognitive, behavioural and affective components of change. We see in the experiences of the teachers in this study that those who have a higher level of risk tolerance do not describe as many negative emotions related to navigating change (i.e. anxiety, nervousness). Nonetheless, everyone expressed some variation of the idea of wanting to feel comfortable in the classroom as well as wanting students to feel comfortable. This extends Sadler's (2012a) finding that "simply making [faculty] aware of and discussing student-centred approaches is not sufficient" (p. 743). Although his research participants were novice faculty, this study shows that, when making change to teaching practice, teachers at all stages of their career require support on conceptual, emotional, and practical levels. For some teachers, this might only involve cognitive elements such as outlining a purpose and process for introducing changes to classroom practice but for many it involves significant conceptual changes that have affective and behavioural elements as well. Finding ways to help teachers reduce the risks of new approaches and get students comfortable with their new roles may help reduce anxieties related to implementation. Taking time to work through the behavioural logistics of new approaches (i.e. what will the teacher do, what will the students do, how will that look, what might go wrong, how can that be addressed) also seems to be important to supporting implementation.

Educational development practice needs to be intentional about helping teachers feel comfortable cognitively, affectively, and behaviorally as they make changes to their practice.

Educational development practice to support professional learning in the outcome phase

In the outcomes phase, educational development practices need to consider how they can facilitate faculty experiences of social affirmation and how they can support teachers as they navigate the contextual realities of persisting with practices that enhance student learning. For example in this study, when teachers received affirmation from either their graduates, from students in the course related to their learning, or from peers, they were inspired to share their practices with colleagues and pursue further learning. As well, when teachers have easy access to the schedules, equipment, or classroom spaces that support their practices, they are more likely to persist than if they have to continually fight for appropriate contextual support. John has helped several other teachers use computer labs to enhance learning in their courses but with the increased pressure on computer labs, he now is concerned every semester about whether he will have access to them. Educational practices that might offer experiences of social affirmation could include various ways of recognizing and celebrating effective practice – symposiums of student work, symposiums of teaching practices, newsletters highlighting teaching efforts, and other meaningful forms of recognition. Similarly to the implementation phase, it seems important that educational development practitioners help teachers by advocating for appropriate scheduling, equipment, and classroom spaces. Educational development practices need to be designed to support teachers who continually want to try new instructional or assessment strategies in their courses and learn more about various student-learning centred approaches. Many of the teachers in this study found themselves having to re-examine practices as classes became larger and more diverse with wider spectrum of ability and motivation for learning. Educational development practice needs to understand and be open to working with faculty to address these increasingly complex classroom challenges. Various types of faculty learning communities and forums seem to have the potential to offer many of the types of support that have been identified in this study. Similar to the catalyst phase, effective support for continuous professional growth involves understanding and responding to the concerns, goals, and intentions of teachers throughout their career.

6.4.3 Using a multi-phased and multidimensional lens for examining educational development practice

The multi-phased and multidimensional sociocultural framework that has emerged from this study offers a meaningful lens for examining and deconstructing the goals and practices of educational development related to the development of teaching practice. In this section I offer four general suggestions for how this might be applied and explain a specific example of how it has impacted delivery of the Course Design Institute (Saroyan & Amundsen, 2004) at my institution.

In terms of general principles that can be applied to educational development practice, I offer the following suggestions. First, goals and practices of this field must begin by acknowledging that the process of development in teaching is focused on the resolution of an individual sense of disequilibrium that is experienced in some aspect of teaching. Surfacing, affirming, and problematizing experiences of disequilibrium ought to be at the centre of educational development practice. Second, educational development goals and practices need to recognize that the process of resolving disequilibrium begins with an internal sense-making journey which requires supportive and constructive social interactions with respected peers. Rich interactions that are sustained over time are needed to support this journey. These interactions need to offer alternative lenses and ideas for examining the sources of disequilibrium and alternatives for resolving it in a way that enhances student learning and fits for the individual. Billett's theory of co-participation identifies many of the individual and work practice elements that are involved in this sense making journey. Third, educational development goals and practices need to acknowledge and support the complex cognitive, emotional, and behavioural process of navigating change in the classroom that exists for most teachers. Finally, educational development practices need to help institutions examine how various contextual elements either support or act as barriers to development in teaching.

In terms of specifics related to how the results of this study have impacted my work as a faculty developer, I focus on my delivery of the Course Design Institute, a four day intensive professional learning workshop for faculty based on the work of Saroyan and Amundsen (2004). As the authors explain

> The primary focus of the Workshop is to encourage participant professors to link their teaching directly to student learning. The Workshop also aims to develop a shared

> discourse on pedagogical issues and a language to express individual conceptions about teaching and learning to others. (Saroyan & Amundsen, 2004, p. 5)

Over the four days, the participants first work through a process of mapping their course content against learning-centred objectives to create a coherent vision for their course that is clear to themselves and to novices in their disciplines. Then they strive to identify assessment and instructional practices that align with and support this overall vision. It is an intense process for faculty that, like the title of Saroyan and Amundsen's book suggests involves "rethinking" many aspects of their instructional practice. Over the five years that I have facilitated this workshop, I have encouraged faculty to share openly about their experience of the process and have come to understand that, even for experienced and learning-centred educators, this process can involve deep conceptual change and that implementing the ideas that emerge from the process can often take several years. The results of this study empirically confirm that the idea development phase, which the workshop process supports extremely well, is completely separate from the implementation phase. I recognize that the implementation phase needs to have its own ongoing support process and although I have informally spoken with faculty about how things are going with their course, I realize that this process needs to be much more intentionally designed and implemented. After uncovering, through this study, the significance of disequilibrium as a starting point for professional learning, I have met with each teacher individually prior to the workshop to discuss aspects of their practice that cause disequilibrium and have strongly encouraged them to work on a course in which this disequilibrium is particularly troubling. Then, being aware of the dominant areas of disequilibrium in the group, I have added resource materials related to these areas and have designed discussions to specifically address them. Many aspects of professional learning that are emphasized in Saroyan and Amundsen's work have been confirmed by the results of this study. This includes the importance of providing opportunities for "intellectual discussions on teaching with colleagues" (p. 21), of acknowledging disciplinary perspectives in the development of teaching, of examining the "context in which faculty teach and develop as teachers" (p. 20) as part of the instructional development process, and of aligning instructional approaches with goals as opposed to privileging certain approaches. The results of this study have helped to clarify why each of these aspects are important in the professional learning process and how they fit into the overall process. As facilitators of the process, we have become much more intentional in the way probe people's thinking and in the way we design discussion and reflection activities during the course of the workshop. The essential structure that has emerged has also provided

a tool for gaining insight into the challenges faculty experience in the process, especially related to finding personal fit with ideas they encounter in the readings and in the interactions with their colleagues from other disciplines. I realize that much more needs to be understood about the conceptual change process in the idea development phase and how that can be supported through the learning design of the workshop. Finally, I realize the importance of treating this workshop as only half of the process of development in teaching practice. Although faculty have asked for ongoing support and collegial interaction related to various instructional and assessment strategies (i.e. problem-based learning, case study learning, portfolios) I have not, until completing this study, recognized the vital importance of this follow-up step in affecting change in teaching practice. Recently, we organized a half day for past participants of the workshop to reconnect and we focused primarily on issues of implementation. I am committed to providing such follow-up as part of supporting professional learning in the future.

6.5. Study Limitations and Suggestions for Future Research

The limitations of this study are primarily connected to the inherent limitations of phenomenological research. Although phenomenological research inherently has some limitations, so do all methods of investigation. As discussed in chapter 4, I was aware of these limitations before conducting the investigation and still believed that descriptive phenomenological research was the most appropriate and effective method for the investigation.

6.5.1 Data Collection Methods

The data was collected using both an open-ended online survey and face to face interviews. Several limitations of the online survey were revealed by the data from the survey. As discussed earlier, the structure of the survey did not lead participants to share complete, coherent and/or rich descriptions of their experiences of development in teaching practice. Upon reflection, there are several possible reasons for this. One is the structure of the questions which I realize, in hindsight, did not solicit data following a process approach (i.e. what happened first, then what, then what) but rather asked about various elements of experience (thoughts, feelings, actions). To continue researching faculty experiences of development using an online survey would require a deeper understanding of how to create a survey that effectively

elicits data related to the process of development. There is a possibility that, even with a deeper understanding, an online survey may not be a useful tool for this type of study. My assumption in this study was that phenomenological interview questions, which focused on drawing out aspects of the raw experience (i.e. What were your thoughts? What were your feelings? What did you do? etc.), could be used in a survey to elicit a coherent description of experience. This was not the case. Another limitation of the survey was the length of time that it took for participants to complete. I believe this is a significant reason for the fact that half of the people who entered the survey did not complete it. A final limitation was that I did not ask people to identify which institution they were from. This was originally done to protect confidentiality. However, it did not allow me to determine how many people from the various institutions completed the survey. Since one of my initial goals for this research was to collect experiences from faculty at a variety of institutions, it would have been helpful to know how many responded from each of the four institutions that were initially targeted. Only when people gave their contact information as consent to be contacted for an interview was I able to identify which institution they were from. Only half the people who completed the survey indicated that they were willing to participate in an interview.

For the interviews, the primary limitation was the difficulty I had getting people who did not have some type of relationship with me to agree to participate. As discussed earlier, significant efforts needed to be made at institutions other than my home institution to create interest and willingness to participate in the study. I was only able to build those relationships at one institution other than my home institution, which I consider a limitation of the study. I would approach this differently in the future, using another approach (perhaps a snowball method) to recruit interview participants. The reason I did not do this initially was that my contacts at other institutions are all faculty developers and I hoped to attract some people to the study who did not have close connections to their teaching centre. A common critique of phenomenological research is that it is difficult to detect or to prevent researcher bias. As already discussed in chapter 4, I acknowledge that the direction and focus of this research study stems from my own experience in the development of teaching practice as something that is complex and involves variety of individual, social, and contextual elements. Although I have followed methodological procedures designed to stem bias during the data collection and data analysis process, I recognize that this is an aspect of phenomenological research that remains contentious.

6.5.2 Data Analysis Methods

A couple of limitations related to the data analysis methods are again inherently tied to phenomenological research. Phenomenological research does not allow for generalization of the results and limits the truth claims to the intentionality of the study. In this case, the truth claims are valid for a specific group of mid-career educators in two Ontario colleges. Further replication of the study with other groups of faculty and different intentionalities would extend the generalizability of the conclusions. Possibilities for this are discussed in the next section. In terms of a phenomenological study, I think that the sample size, and hence the amount of data to analyze, was large. As a result, although I spent a significant amount of time analyzing each transcript following the steps outlined by Giorgi (2009), I perhaps would have spent more time with each transcript had the sample size been smaller (3-5 participants is a typical size for descriptive phenomenological research). I believe, however, that the essential structure that emerged is well grounded in the data and reflects the experiences of all 12 participants. Increasing the sample size might have uncovered more variation in the structural elements, but would have made the data set even more prohibitive. Another limitation of the data analysis method is that it is very time intensive to complete, making it unrealistic to ask a critical colleague to engage in the same process to affirm or challenge the findings. As Giorgi (2009) points out, results of phenomenological research studies are best verified through replication. Processing the transcripts in two groups of 6 participants could perhaps be viewed as a replication; however, I look forward to replications by other researchers in the future.

6.5.3 Suggestions for Future Research

Following up from the previous section, one suggestion for future research is a replication of this study either by other researchers or with a co-researcher. Carrying out such research in other types of institutions (i.e. universities), other provinces or other countries would help to strengthen the explanatory power of the essential structure that emerged and perhaps reveal additional variations of either the structure itself or the elements within the structure. Another opportunity for future research is to conduct a more focused exploration of faculty experiences for each of the phases in the structure of experience that has emerged from this study. I believe that a deeper understanding of the implementation phase and the experiences of faculty related to negotiating change in their classrooms would make an important and significant contribution to our understanding of development in teaching practice. Finally, an

investigation of the experiences of faculty who experience disequilibrium but do not make developmental changes to their teaching practice would offer important insights into other dimensions of development in teaching practice.

Other types of research into mid-career faculty experiences of development in teaching practice would also be useful. One such study might involve a longitudinal investigation of a development process as it unfolds, rather than relying on retrospective accounts of experience. Another type of study, which was originally intended to be part of this study, is an investigation that collects data based on discussions about changes teachers have made to various teaching artifacts (classroom presentations, assignments, tests, in-class activities). In this study, that component was dropped because it represented a completely different intentionality, or way of directing consciousness in the phenomenological interview, with regards to development in teaching practice. As explained in section 4.2.3, different intentionalities result in different ways of knowing something. However, a study that adopts this type of intentionality in soliciting descriptions of experience could yield new insights into experiences of development in teaching practice. The adoption of different intentionalities becomes a powerful notion when trying to understand a complex phenomenon like development in teaching practice because it allows that there will always be more to know.

Studies of professional learning processes related to development in practice are not common but a deeper understanding of how to empirically investigate such processes generally, and particularly as it relates to professional learning, offers significant opportunities for future research. I look forward to future research studies with such a focus.

Chapter 7. Conclusion

In conclusion, it is my hope that the results of this descriptive phenomenological inquiry have contributed to a deeper understanding of the processes of development in teaching practice as experienced by the faculty themselves and that this understanding will enable institutions to better support and promote continuous professional learning in this complex profession. As described in chapter 2, the proposed contributions of this study were fourfold and I believe it has made a contribution in each of the four areas. First, it increased our understanding of the interrelationships between the individual, social, and contextual dimensions of faculty professional learning using Billett's theory of co-participation as a theoretical lens. Second, it added to the empirical research on mid-career post-secondary faculty. Although the data was collected from college faculty, the findings align with a significant amount of research that was conducted with university faculty. Third, it gathered experience-based data from a sample size larger than most qualitative studies that focus on rich descriptions of experience. This larger sample size enhances the explanatory power of the emergent structure. Fourth, it uncovered insights into the process of professional learning related to development in teaching, going beyond prior work that was primarily focused on factors that contribute to such learning.

Based on the results of this study, it is important to acknowledge, conceptually and practically, that mid-career development in teaching practice is a multi-phased and multidimensional process. In terms of the multi-phased nature, the four phases of the phenomenological structure provide a framework for the thinking and practice of educational development in post-secondary institutions. Acknowledging development in teaching practice as a process that has several phases, each with distinct elements and interrelationships, will result in better support of the complete process, rather than just isolated aspects of it. In terms of the multidimensional nature, this study affirms that Billett's theory of co-participation applies to mid-career faculty professional learning and that such learning occurs through ongoing interactions between the individual ontogeny and the social and contextual practices of the

workplace. The study reveals that although individual intentionalities and goals direct the development process, the social interactions with colleagues and students are essential for growth and change in practice. As Billett (2004b) argues, it is the relationships between the individual and the social practice that need to be better understood in order to enhance workplace learning and development. This research has contributed to furthering that understanding as it relates to development in post-secondary teaching practice. Particularly, by identifying essences of the experience, I believe it has helped us better understand specific aspects of the individual, social, and contextual elements of this process and the interrelationships between them. In the discussion of the results, I was excited to see how the phenomenological structure allowed for the integration of a significant amount of faculty development research. This structure may have the potential to provide an umbrella for integrating various prior findings related to post-secondary development in teaching practice. Such integration might be helpful to educational development practitioners as they design learning interventions to support and promote development in teaching practice.

Finally, as we consider the link between development in teaching practice and its relationship to improving the quality of student learning in post-secondary education, I am drawn again to Billett's discussions of cultural transformation or the "remaking of culture" (2006, p. 58). Based on this research, it is important to acknowledge that moving teaching practice from being focused on the transmission of information to being focused on enabling deep student learning does not just involve an individual transformation but also a cultural transformation. Implementing new practices in the classroom is a complex process that often requires significant ontological changes for the teacher and the students and involves interrelationships with a variety of social and contextual elements. Like Billett (2009a), I advocate for more comprehensive understanding of professional learning as it occurs in the context of working life and for more empirically based approaches to promoting and supporting development in teaching practice. I believe this research has contributed to both of these.

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Appendix A: Recruitment Message

Recruitment Message – Jan2012/Revised March 2012/Revised May 2012

E-mail communication - Invitation to Participate in Online Survey

Subject line: Participation in PhD research on faculty experiences of development in teaching practice

Lead In: This e-mail message is being distributed on behalf of Annique Boelryk, who is a faculty developer and instructional designer at Georgian College. Annique is pursuing a PhD at Simon Fraser University and is studying faculty experiences related to development in teaching practice. Participation in this study is completely voluntary.

Dear Ontario college faculty

I am a doctoral student in the Faculty of Education at Simon Fraser University and have worked in faculty development at Georgian College for over 10 years. The purpose of my PhD thesis research is to more clearly understand the learning process involved in the development of teaching practice in higher education. If you are a mid-career full time faculty (6-19 years in post-secondary education) in the Ontario Community College system, I would like to invite you to participate in my research.

The findings of this study will inform the design of support for teaching development within post-secondary institutions. I feel that, in order to better support teachers in their practice, it is critical to explore teaching development through the actual experiences of faculty themselves. Participation in this study will also undoubtedly provide you with insight into you own experience as a teacher.

Participation in the Study

The first level of participation involves completing an online survey with several short answer questions designed to guide you in describing one of your personal experiences related to development in teaching practice. **Pilot testing of the survey indicates that this should take approximately 20-30 minutes, depending on the level of detail you choose to provide.** The final question of the survey asks if you are willing to continue to a second, optional level of participation involving a semi-structured face to face interview. A final phase, with a small subset of volunteers, will focus on discussing actual teaching documents related to one's development in teaching practice.

This study has been reviewed and has received ethics clearance through the Office of Research Ethics at Simon Fraser University, as well as the Review Ethics Board at your college.

The link below takes you to an introduction to the survey and the Online Consent Form. After reading the consent form, you will have the option to exit, should you decide not to participate, or the option to continue to the survey. The survey will be open until December 31, 2012, but we are hoping to begin collecting data as soon as possible.

Link: http://

If you have any questions regarding this study, or would like additional information, please feel free to contact myself as the principal investigator:

Appendix B: Online Consent Form

Online Informed Consent – Jan 2012 / Revised June 2012– Doctoral Research

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Study Title: Professional Learning and Post-Secondary Teaching: Investigating Faculty's Lived Experiences of Development in Teaching Practice (PhD Research)

Ethics Application #: 2012s0049

Principal Investigator: Annique Boelryk

Investigator Department: Faculty of Education – Simon Fraser University

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This research study is being conducted as part of a doctoral program in the Faculty of Education at Simon Fraser University.

PLEASE READ THROUGH THIS CONSENT INFORMATION CAREFULLY AND INDICATE YOUR CONSENT AT THE END.

Purpose and Goals of the Study

The overall goal of this PhD research study is to better understand the learning process of post-secondary faculty in relation to teaching growth. This study focuses specifically on the experiences of mid-career (6-20 years in post-secondary education), full-time college faculty. The focus is on descriptions of experiences, by faculty themselves, related to their development in teaching practice. The analysis of these experiences will provide insight into the complex and multidimensional learning process involved in development in teaching practice.

Participation in the Study

You have been directed to this online consent form, through a recruitment e-mail message that was sent out to all full time faculty in our target group at your institution. A member of your teaching support unit was asked to distribute the recruitment message to the target group without adding any personal communication. Participation in this study is completely voluntary.

At this point, you are only being asked for your consent to participate in the first phase of the study, which is the online survey. At the end of this consent form, you have the option to continue to the survey or exit. Pilot testing of the survey indicates that it should take approximately 20-30 minutes, depending on the level of detail you choose to provide.

The survey asks you to answer several short answer questions related to a particular experience of growth in teaching. It is designed to guide you in providing a detailed description related to a personal experience. You may decline answering any questions and you may discontinue at any time. All identifiers will be anonymized when the data is compiled. Completion of the survey will be taken as your consent to participate in the study.

The last item on the survey asks whether you would be willing to participate in a follow-up face to face interview. If you are willing to participate, you will be prompted to provide your contact information. If you chose to supply contact information, you may or may not be contacted for an interview. The interview would be conducted at a time and place that is convenient for you.

Research Results and Uses of Data

The data collected in this study will be published as part of a doctoral dissertation and will be presented at professional conferences and submitted for peer review and publication in professional journals(s) and/or newsletters. Data from this study may also be used in future studies, for which we also ask your permission as part of this consent form. Findings will always be presented using pseudonyms. Findings will not be attributed to anyone personally without first seeking specific written consent. To obtain results of the research, contact Annique Boelryk, the principle investigator.

Confidentiality and Consent

The online survey uses a secure, Canadian-based online survey tool (FluidSurveys). All data from these surveys is stored on a secure server, housed in Canada. This data will be stored on a password protected flash-drive and kept in a locked cabinet. All survey data will be anonymous and any possible identifiers will be removed.

If participants are willing to participate in an interview and provide their contact information, they can be assured that, immediately upon collection, contact information provided in the survey will be extracted and separated from the other responses and will not be linked in any way. Contact data will be stored separately from the other data on a password protected flash drive and kept in a separate locked cabinet.

This study has received ethics clearance through the Office of Research Ethics at Simon Fraser University and the ethics review board at your college. Should you have comments or concerns regarding your participation in this study, please contact Dr. Cheryl Amundsen (Associate Professor, Faculty of Education and PhD Supervisor) or Dr. Hall Weinberg (Director, Office of Research Ethics).

Based on guidelines of the Tri-Council Policy on Ethical conduct for research involving humans, there are no known or anticipated risks associated with participation in this study.

PLEASE MAKE SURE YOU UNDERSTAND AND AGREE TO THE FOLLOWING STATEMENTS BEFORE GIVING CONSENT TO PARTICIPATE.

I understand the purpose of this study and know about the risks, benefits, and participant requirements that this research project entails.

I understand that I am free to withdraw at any time from the study without any penalty or prejudice.

I understand how confidentiality will be maintained during this research project.

I understand how the survey data will be securely stored.

I understand the anticipated uses of data, especially with respect to publication, communication, and dissemination of results.

Consent

If, after reading and understanding the information in this consent form, you ARE WILLING to participate in the study, click on the YES button below and you will be taken to the online survey. The survey will be open until June 30, 2013.

If, after reading and understanding the information in this consent form, you ARE NOT WILLING to participate in the study, click on the NO button below.

○ Yes, I AM WILLING to participate → CONTINUE TO SURVEY

○ No, I AM NOT WILLING to participate → TERMINATION PAGE

Appendix C: Survey Questions

Online Survey Introduction

This survey is the first phase of a doctoral research study. The purpose of the study is to better understand faculty professional learning processes related to development in teaching practice in order to inform the design and support for teaching development within institutions.

The study relies on detailed descriptions of actual experiences in order to better understand the faculty professional learning process related to development in teaching practice. The main questions of the survey are short answer questions to probe various aspects of one specific experience that occurred after 5 or more years of full time teaching.

Completing the survey will take approximately 20-30 minutes of your time, depending on the level of detail you choose to provide. All survey data is anonymous and will be handled in compliance with the Research Ethics Review Board of Simon Fraser University in British Columbia as well as the Research Ethics Board at your college.

Your participation is completely voluntary. The next page is the ONLINE CONSENT FORM. After reading the consent form, you will have the option to exit, should you decide not to participate, or the option to continue to the survey.

Are you a full time community college faculty in Ontario, Canada?
- Yes
- No

If respondents answer “no”, they will receive the following message.
Thank you. Based on your survey responses thus far, your profile does not match the target population for this study.

How many years have you been teaching full time in post-secondary education?
The target group for this study is full-time, mid-career faculty, which is being defined as from 6-20 years of full-time, post-secondary teaching experience.
- 1-5 years
- 6-20 years
- More than 20 years

If respondents answer “1-5” or “More than 20 years”, they will receive the following message.
Thank you. Based on your survey responses thus far, your profile does not match the target population for this study.

What disciplinary area represents your main area of teaching?
- Business
- Liberal Arts
- Technology
- Health Sciences
- Other _____

Are you willing and able to describe A SPECIFIC EXPERIENCE related to the development of your teaching practice?
In this study, **development in teaching practice refers to** changes in knowledge, skills, attitudes, actions or beliefs that result in improvement in student learning, as perceived by the teacher. The focus is on experiences that occurred AFTER 5 OR MORE YEARS of full-time teaching experience.

- Yes
- No

Please describe, in as much detail as possible, a specific situation [AFTER 5 OR MORE YEARS OF FULL TIME TEACHING] when you experience development in your teaching practice.
In this study, development in teaching practice is considered a change in knowledge, skills, actions, attitudes or beliefs that results in improvement in student learning. Please describe your experience including as much details as possible about things such as the following:

a) The **context** of the specific teaching situation (i.e. when, where, what course, description of the class, description of the students)
b) What happened to prompt a **change** in your knowledge, skills, attitudes, actions or beliefs?
c) What did you do (please provide as much detail as possible)?
d) What were your **thoughts** through the process?
e) What were your **feelings** through the process?
f) What were your **actions/behaviours** through the process?
g) How was the process of development influenced by **aspects of the teaching environment** or **other people**?

The research approach for this study involves collecting and analyzing detailed descriptions of people's experience related to development in teaching practice. In the text boxes below, please provide detailed descriptions of various aspects of ONE SPECIFIC EXPERIENCE.

The research approach for this study involves collecting and analyzing detailed descriptions of people's experience related to development in teaching practice.

If you would prefer not to describe your experience here in writing, but would be willing to participate in a face to face interview related to your experience, move to the next page.

Context of your specific experience of development in teaching practice.

Please describe the context of the specific situation where you experienced development in your teaching practice (i.e. when, where, what course, description of the course/program, description of the students, goals of the course),

Please avoid specifically naming your college - instead refer to it as "my college".

Describing your experience of development in teaching practice

i. Please describe the specific **changes in YOUR knowledge, skills, actions, attitudes, or beliefs** that resulted in improvements in student learning?
ii. What was the nature of the **change in students' learning** that resulted?
iii. What happened to prompt a change in your knowledge, skills, actions, attitudes, or beliefs?

Process of development – actions, interactions

i. What were your **actions/behaviours** through the process of development (i.e. what did you do?)
ii. What types of **interactions** with students, colleagues, or others were involved in the process? How did you experience those interactions?

Process of development – thoughts feelings

i. What were your **thoughts** through the process? How did your thoughts relate to your actions and interactions?
ii. How did your **beliefs about teaching and learning** influence the process, or conversely, how did your experience influence your beliefs about teaching and learning?
iii. What were your **feelings** through the process? How did your feelings relate to your actions, interactions, thoughts, and/or beliefs?

Social aspects of your development experience

i. What was the influence of others **(internal to the organization)** on your experience of development (i.e. students, colleagues, mentors, supervisors, etc.)?
ii. What was the influence of others **(external to the organization)** on your experience (i.e. external colleagues, experts, authors, friends, family, etc.)

Environmental aspects of your development experience

i. What was the influence of other things in the internal teaching environment on your experience of development (i.e. curriculum, policies, leadership decisions/directives, internal professional development initiatives, etc.)

ii. What was the influence of other things in the external education environment on your experience of development (i.e. provincial mandates, external bodies, professional bodies, external professional development, social changes, political changes, etc.)

Would you be willing to participate in a follow-up face to face recorded interview (approximately 1 hour) to further explore your experiences related to development in teaching practice?

· Yes
· No

If you selected “Yes” above, please provide your contact information in the space below (Name; phone number; e-mail address). A reminder that your answers to the questions above will remain anonymous even if you provide contact information here. Immediately upon collection, contact data will be extracted and separated from the survey responses and will not be linked in any way.

SURVEY COMPLETE – SUBMIT Thank you for your participation in this research study.

Appendix D: Interview Informed Consent File

Interview Informed Consent: To be Signed by Interview Participants

Study Title: Professional Learning and Post-Secondary Teaching: Investigating Faculty's Lived Experiences of Development in Teaching Practice (PhD Research)

Ethics Application #: 2012s0049

Principal Investigator: Annique Boelryk

Investigator Department: Faculty of Education – Simon Fraser University

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Ethics Review Board Approval

The University and those conducting this research study subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of participants. This research is being conducted under permission of the Simon Fraser University Research Ethics Review Board. The chief concern of this Board is for the health, safety and psychological well-being of research participants.

Should you wish to obtain information about your rights as a participant in research, or about the responsibilities of researchers, or if you have any questions, concerns or complaints about the manner in which you were treated in this study, please contact Dr. Cheryl Amundsen (Associate Professor, Faculty of Education and PhD Supervisor) or Dr. Hall Weinberg (Director, Office of Research Ethics).

Your signature on this form will signify that you have received and understood the procedures of this research and whether there are possible risks and benefits of this research study; that you have received an adequate opportunity to consider the information in the documents describing the study; and that you voluntarily agree to participate in the research interview for this study.

This research study is being conducted as part of a doctoral program in the Faculty of Education at Simon Fraser University.

Purpose and Goals of the Study

The overall goal of this PhD research study is to better understand the learning process of post-secondary faculty in relation to development in teaching practice. In this study, development in teaching practice refers to changes in knowledge, skills, attitudes or beliefs that results in improvement in student learning, as perceived by the teacher. This study focuses specifically on the experiences of mid-career (6-19 years in post-secondary education), full-time college faculty and investigates the process of development in teaching practice as experienced by faculty themselves. The main research question asks faculty to provide detailed description of personal experiences of development in teaching practice. The assumption is that collecting and analyzing descriptions of actual experiences will provide insight into the complex and multidimensional learning process involved in development in teaching practice.

Participant Requirements

This research study uses a phenomenological approach to gain insight into post-secondary faculty experiences of development in teaching practice. This approach relies on detailed descriptions of actual experiences in order to better understand the object of study. In this second phase of the research process, participants will describe their experiences of development in teaching practice in a face to face, recorded interview.

As a participant in the face to face interview, you will partake in a 1 hour interview designed to gather detailed descriptions of your personal experiences of development in teaching practice. The interview will comprise of a series of open-ended questions designed to elicit specific descriptive details of experiences of development in teaching practice. Follow-up questions would probe individual, social, and contextual elements of that experience. The interviews will be transcribed and analyzed for general themes that relate to the overall nature of the experience using codes and margin notes. Following the transcription and initial analysis of the data, you will be invited to review the transcript to ensure that it accurately reflects your experience.

We do not foresee any potential risks or discomfort to participants. Your participation in this study is completely voluntary and you are free to decline participation or withdraw at any time.

Benefits of this study

The benefits of this study are that it will reveal knowledge related to post-secondary faculty experiences of development teaching practice from the educator's perspective. Such knowledge will contribute insights that can inform the design of support for professional learning related to development of teaching practice.

Confidentiality

The interview data will be audio-recorded and transcribed. All data will be safely and securely storied in a locked cabinet and will be referenced using pseudonyms in order to ensure confidentiality. There will be no identifying information used which would compromise the respondents or their institutions anonymity. Participants will not be asked about their institution. Any references to institutions that arise during the study will be portrayed anonymously. Pseudonyms will be used for any references to participants. Knowledge of participant identity is not required in any reports of this study.

Research Results and Uses of Data

The data collected in this study will be published as part of a doctoral dissertation and will be presented at professional conferences and submitted for peer review and publication in professional journals(s) and/or newsletters. Data from this study may also be used in future studies, for which we also ask your permission as part of this consent form. Findings will always be discussed using pseudonyms. Findings will not be attributed to anyone personally without first seeking specific written consent.

To obtain results of the research, contact Annique Boelryk.
Annique Boelryk
PhD Candidate – Simon Fraser University

It is important that participants fully understand the nature of the study and that they freely agree to participate. Having volunteered to participate in the research study described above, I certify that I have read the procedures describing the study and understand the procedures to be used in this study and that there will be no personal risks to me in taking part in the study.

Please make sure you understand and agree to the following statements before giving consent to participate. Please initial each statement to indicate understanding and agreement.

I understand the purpose of this study and know about the risks, benefits, and participant requirements that this research project entails. _____

I understand that I am free to withdraw at any time from the study without any penalty or prejudice. _____

I understand how confidentiality will be maintained during this research project. _____

I understand that interviews will be recorded, transcribed, and securely stored. _____

I understand the anticipated uses of data, especially with respect to publication, communication, and dissemination of results. _____

The participant shall fill in this area. Please print legibly

Participant Last Name: _____ Participant First Name: _____

Participant Contact Information:

Contact at a future time for use of data in other studies (if different from above)

Participant Signature: _____

Date (MM/DD/YYYY): _____

Appendix E: Interview Protocol and Questions

PhD Study – Faculty Professional Learning Related to Development in Teaching Practice

Interview Protocol and Questions

Central Research Question. The central research question identified for this study is, "How do mid-career post-secondary faculty experience the professional learning process related to development in teaching practice?" The research interview will be conducted using a phenomenological interview. The goal of the interview is solicit personal pre-reflective descriptions about experiences in the development of teaching practice, tapping in to the individual, social, and contextual dimensions of that experience.

The interview questions are designed to elicit rich and detailed descriptions of the experience from the participants. The interview questions identified below may be adapted as the interview unfolds, in order to better elicit details related to the central research question. At the beginning of the interview, I will collect the following background information to provide relevant contextual details.

Background Information.

Years of post-secondary teaching; primary teaching discipline; other areas of teaching

Brief summary of academic and professional background

Formal learning experiences related to teaching

Interview Question 1

If we think of development in teaching practice as changes in knowledge, skills, attitudes, or beliefs that result in improvements in student learning from the teacher's perspective, can you think of and describe for me, in as much detail as possible, a time when you felt you experienced development in your teaching practice?

What was the **context** of the specific teaching situation (i.e. when, where, what course, description of the course, description of the students, goals of the course)

What was the change in knowledge, skills, or attitudes that resulted in improvements in student learning? Please describe both the change and the results from your perspective.

What happened to prompt this **change** in your knowledge, skills, attitudes, or beliefs?

What did your **experience of the process of development** involve (please provide as much descriptive detail as possible)?

What were your **actions/behaviours** through the process? (i.e. What did you do?)

What types of **interactions** with students, colleagues, or others were involved in the process? How did you experience those interactions?

What were your **thoughts** through the process? How did your thoughts relate to your actions and interactions?

What were your **feelings** through the process? How did your feelings relate to actions, interactions, and thoughts

How did your **beliefs about teaching and learning** influence the process, **or conversely**, how did your experience influence your beliefs about teaching and learning?

Are there any other personal, social, or contextual aspects of this experience that you think are relevant to understanding your experience of development in teaching practice?

Interview Question 2.

What, for you, were the main social and contextual elements that impacted your professional learning process in this experience?

What aspects of your interactions with students, colleagues, contextual elements, and/or other resources supported your professional learning process in this experience? Describe your actions, thoughts, and feelings related to these interactions.

What aspects of your interactions with students, colleagues, contextual elements and/or other resources constrained your professional learning process in this experience? Describe your actions, thoughts, and feelings related to these interactions.

Appendix F: Descriptive Summaries not Included in the Findings Discussion

F.1 Lucy

The significant change for Lucy was recognizing that different groups of students have really individual dynamics and that, as a teacher, she had to learn to adapt to that dynamic.

Early in her teaching career, Lucy put together a vision for herself of the type of teacher she wanted to be. This was inspired by a teacher she had in an intensive teaching training program who was very open, friendly, and engaging. In this vision, student engagement is a really important element of learning. As a result, when Lucy encountered a class that was not engaged and in which there were negative vibrations, she was taken aback. She discussed this with several colleagues and was relieved to find it was not just her – "all of them were recognizing this" challenging dynamic in the class.

Lucy tried to figure out what was going on by talking to some of the students and doing a one minute paper where she asked students, what was going well, what wasn't, what would they like to see more of, what did they want to see less of? When she encountered a good student who was clearly disengaged (she observed him reading a newspaper at the back of the class), she realized that she had to make a change. Because students were asking for something other than powerpoints, she moved to more student-centred approaches.

At first, when she started to move towards a more student-centred approach with less powerpoints, "it was nerve-wracking because it was new and [she] didn't know how it would all work". As Lucy points out, "in these types of activities, you don't know what you don't know so when you're doing these activities; it's a case of learning [to respond] on the fly".

The first activity she tried was a huge success – students were engaged and did great work. At that end they responded positively, saying they would like to do that again. Lucy networked with her colleagues and attended pd sessions to learn more student-centred strategies and particularly to find effective and efficient ways of debriefing these activities. In these activities, Lucy was concerned that students got all the essential points that they needed. This is important because Lucy teaches heavy theory classes in a program where curriculum is strongly influenced by an external accrediting body and where students have to write a qualifying provincial exam at the end. When she attended pd sessions, she was "on high alert" for ideas related to debriefing student-centred activities. In the end, it was the discovery of how a document camera could be used to support debriefing that became the best solution. Debriefing continues to be something she and her colleagues struggle with.

After several years of running her class using more student-centred approaches, Lucy encountered a class that that didn't want to do group work and wanted to go back to powerpoint-based lectures. Because Lucy's vision of wanting students to be engaged is

a driving force for her teaching, she is not going to continue in the same manner if students are not engaged. She then feels that she needs to change. As a result, she looked at what she could do within the frame of a more standard lecture to try and get students more engaged. She tried lots of different strategies, but this group "just didn't want to play in the sandbox". Lucy can picture herself standing in front of the class with a brainstorming activity that had worked very well in the past and nobody would put their hand up or volunteer an answer. Her first response was a feeling of real frustration with the students because she knew it was an effective activity. She wanted them to engage so she brought in candies to bribe them and this seemed to work. However, she got push back from the other teachers because now students wouldn't work for them unless they brought candies.

For Lucy, the experience of trying to engage a completely unengaged class was very emotional, so emotional that she started to question her own ability as a teacher. At that point, she felt that she really needed cohesiveness and support in the team, and they didn't have much of that. She thinks they would have all survived that experience better if they'd maybe gotten together at the end of the week and gone out for a glass of wine and talked it out, but that didn't happen. And they didn't get any support from leadership. The feedback that they were getting was focused on blame rather than support. It was very, very disheartening and it made her dread walking into the classroom. She just totally felt like she didn't know what she was doing. It was a really bad experience all around.

Lucy eventually talked to a faculty developer that helped her recognize that it wasn't her fault and helped her with some coping strategies for the remainder of the term. It helped that she knew other teachers in the program were having the same challenges, but Lucy wished they would have supported each other better through the process. At a departmental meeting, which included many programs, she heard that other programs were experiencing similar challenges. It was very helpful to know that she was not alone.

In the end, Lucy gave up trying with this group and was very relieved when this behaviour was not the new norm. The next groups that came into the program were much more engaged. In observing subsequent groups, Lucy has recognized that some students do not have the reading and summarizing skills to process text information, some students don't have the group work skills to make that a positive experience and some students don't like anything that requires creative expression. She suspects that her very difficult group might just have been a whole class like this.

Lucy learned from that difficult group that when a group refuses to engage, it's not necessarily her fault. She learned that as teachers, they should have supported each other better. She learned that she should have looked for outside help when she wasn't getting it inside the team.

F.2 George

The change for George was in the nature of his teaching persona in the classroom. Because he had a student with an Aspergers related development disorder, he had to adjust his delivery to be much more authoritative and direct. George struggled to

navigate this type of teacher identity since it conflicted with his more natural "counselor" persona, but he knew it was important for the learning needs of the student.

When George received the form identifying the student as special needs, he contacted the disability specialists and set up a case conference. This included the counselors, the teacher, and the student. The counselors and George already had developed a relationship of trust and mutual respect informally over the years so they were able to have open conversations. He had reached out to them as a coordinator because he had always tried to better understand the systems in the various areas of the college. Over the years, they had invited him to participate in various professional development and in-service activities. Getting invitations to such activities had generated a lot of trust.

During the case conferences, the other professionals helped him define his role and let him be the expert on teaching. They helped him clarify his responsibilities as a teacher as well as the student's responsibilities. They validated the importance of the expectations set out by the curriculum and of continuing to keep those as the standard for achievement. They also validated the challenge of this student's needs and supported George in trying to navigate the change in his teaching style. Working as a team with the disability specialists, counselors and learning commons staff was very important for George in navigating this process. Talking together and doing case conferences with key stakeholders was "fun and profound". It was very helpful for them to actually say that he didn't have to modify curriculum or lower expectations. He learned how these professionals could support him in his primary role as a teacher. Several other things that influenced his thinking about sensitivity and respect related to people with special needs were guest speakers in his classes, reading for his teaching at the university, and conversations with his spouse who also works with special needs individuals.

George struggled to navigate between being the social worker and being more of the authority as a teacher. It felt uncomfortable because the social worker in him would come up a lot, and go, 'I feel terrible for having to lay down the law'. The first time George adopted the new tone in his classroom, he felt both anxiety and comfort. The anxiety came from knowing that he was coming across rather rough compared to his typical approach with students. The comfort came from knowing that he was being very clear and that the Asperger student needed this. He also assumed that other students would benefit from the clarity. When George started being very strict and direct in the classroom, it would come off as rude to some of the other students who challenged George on this saying, "Why are you being so mean?". Although George's first internal response was frustration and even anger at the students for challenging him, he was able to frame it more constructively by admiring the courage of these students and the care they were showing for their peer in coming forward. Although his first response to them was a gentler version of mind your own business, George eventually found a way to explain his approach to other students in a respectful way that honoured the confidentiality of the special needs student. To formulate an appropriate response, George drew on his professional practice in human services and professional guidelines for demonstrating compassion and respect for all people.

As George was navigating this new persona there was always the internal struggle of trying to balance flexibility and strictness. Watching how other faculty interacted with

their students in relation to this was very helpful. His teaching partner and mentor, who George respects immensely, brought lots of experience and wisdom to his work. He was patient, kind, and gentle with students and had a rich understanding of the organization and of students. George learned a lot from observing him. Articles and books, including fiction, on people with disabilities also influenced George's perspective. The fact that George's manager was supportive of whatever he did, trusted him to do what was best for the students, and gave him lots of breathing room was helpful in the process. There were several environmental influences on his thinking and on the process of navigating this change. The institutional push for accommodation and inclusion is an "inherent reminder of what George is supposed to do" and is helpful. Policies around this have offered a framework for supporting such students. Such policies are frustrating when they create an inordinate amount of work and when they seem to lower standards, but that was not the case in this situation. Accountability to field placements and maintaining a good relationship with them was also a powerful influence.

As George continues to try and balance flexibility and strictness, he has three key filters: avoiding an appeal, demonstrating compassion for students, and considering students' prior performance and commitment. Self-preservation is as strong an influence for George as serving students.

F.3 Frank

Frank made changes to his course, because he felt that the existing structure and pattern where not a good fit for him. He didn't feel that it was working for him or for the students. Frank believes strongly that it is important for students to have time to think in the learning process and the current structure didn't seem to allow for that. He wanted to create space for them to think.

To develop his ideas about how to restructure the course, Frank drew on his workplace experience, talked with colleagues, and looked at various textbooks. His workplace experience helped him picture what he was aiming for in terms of student performance. Bouncing ideas off of other colleagues helped him refine what might work or not, based on what they had tried. As well, in the back of his mind, Frank was concerned about how the students would respond to and learn from the new structure. Student engagement was an important element of feedback for Frank in terms of how things were going. Frank got some ideas that helped him refine his thinking from short pd sessions – ideas about learning differences/styles, and assigning students roles in teams.

In a four day intense course design workshop, Frank was able to re-conceptualize his course as an interconnected whole and refine the assessment pattern of the course to support his beliefs about learning, which involved supporting students in reasoning and repetition so that they can understand how all the pieces of learning connect to the big picture. Exchanging ideas with other teachers in this workshop was very valuable for Frank.

Frank's confidence from years of experience and his belief in his ability to adapt and move to a plan B if things weren't working, helped Frank overcome the nervousness of trying something new. Frank's attitude towards change is that if it doesn't work, he will

just adapt and move on. Because Frank believes that what he is trying to achieve with students is important – helping them with thinking, reasoning, and making connections, he is able to persist through tense moments in the class.

As well, to help the process and reduce student uncertainty, Frank tries to identify with and anticipate what students are feeling and experiencing and provide support for that. He does this through reflection and drawing on his own experiences as a student. Frank explains his rationale and goals to students, provides them with a clear structure of the learning process and breaks things down so he moves students from basic skills to more advanced skills. Access to various technology including computer labs, a document camera, and internet resources have been very helpful in supporting the new course structure.

Frank has found that student performance on assignments has improved. After delivering the course using the new structure several times, he is now confident that the revised structure contributes to this rather than just the dynamics of a particular class. The advisory committee for Frank's program also affirms that the thinking and reasoning skills he is helping student develop are important and valued by the industry partners.

F.4 Anne

The change in teaching practice described by Anne involved her taking on the role of clinical educator resource person in order to address inconsistencies across placements related to the expectations of students and the facilitation of their learning in these environments.

As a faculty member in the nursing program, Anne heard lots of student chatter about inconsistencies related to their semester 2 placements. This included inconsistencies in workload, in professional expectations, and in how experiences were being linked to the learning objectives for semester 2. This frustrated and bothered Anne a lot because she felt that these inconsistencies reflected a lack of professionalism in the program and they seemed a contradiction to their humanistic curriculum approach. This situation became intensified when financial interests drove educational decisions and students passed into semester 2 who shouldn't have. These students now placed unrealistic demands on clinical educators, taking inordinate amounts of time, effort, and energy to ensure the safety of the students as well as the patients in their care. As well, social changes were leading to a significant increase in the diversity of the student population. Such diversity related to ethnic background, language, prior education and experience, and current educational situations were also increasing the complexity of facilitating student learning for clinical educators.

In her masters program, Anne had the opportunity to write and reflect on the idea of professionalism in nursing and for her final project, she developed a proposal for addressing inconsistencies on student placements. The proposal involved developing resources and supports for clinical educators as well as the creation of a resource role. Anne credits the influence of a respected mentor and teacher in her masters program, who both affirmed and challenged her as they engaged in lots of discussions about nursing education. As well, Anne's program coordinator was supportive of her concerns and her proposal. This proposal was presented and, in the following year, Anne was

given the role of clinical educator resource person as part of her workload. In this role, Anne was committed to addressing inconsistences amongst clinical educators that were affecting the student learning experience.

In this role, Anne observed and had to respond to lots of problems and lack of professionalism. A particularly difficult situation, where a student came to her in tears, revealed that there were three distinct stakeholders in these situations – students, clinical educators, and agencies – and that inconsistencies in students' experiences could be the result of unclear expectations on the part of any or all of these stakeholders. In this situation, Anne remembers asking herself, "How did this happen?" and becoming even more passionate about trying to prevent such bad student learning experiences in the future. Throughout the process of navigating this new role, Anne notes that her father, who was a physed teacher, provided a role model for how to treat people with fairness and respect, even in difficult situations. Her faith also gave her compassion for each person's situation. Her passion for nursing and nursing education is a driving force in her professional growth.

In navigating and trying to achieve the goals of this new role, Anne has come to see how curriculum, learning objectives, and codes of conduct related to professional competencies have to act as the lens to guide observations, interpretations, and actions. This helps to reduce the inconsistencies that come from everyone interpreting things in their own way. She has developed resources, workshops, and regular communications to help clinical educators make the connections between these guides and the realities of the bedside.

F.5 Emma

For Emma, the change was to make students' experiences and context the starting point for her course rather than the predetermined context. In her Canadian tourism course she was pushed to make changes to the course because of the significant changes in content, context, technology, and the realities of the field since years ago when she taught it last. The traditional model of telling students what they needed to know was no longer realistic or meaningful. In her program, there were more mature students and students were generally coming with more awareness and knowledge of people and places. Because Emma had always believed in the importance of making learning real for students she felt she had to adjust to these new realities. New technologies available to students and available in the classroom offered lots of new possibilities related to accessing information and sharing information.

Emma knew that she wanted to start with students' experiences and contexts, she wanted to incorporate more multimedia, and she wanted to promote student autonomy to explore their interests. Her vision for the course evolved through collaboration with other teachers, through her experience in a masters program, and through conversations with an instructional designer at her institution. She loved the readings and ideas that she was exposed to in her masters. For her, "reading fans the learning fire". As her thinking about the course evolved, it "just made sense to her". Conversations with colleagues were valuable in providing feedback on her ideas. She worked collaboratively with one teacher who was very good at sequencing and

scaffolding the learning. Emma saw how that worked well for students and saw the value of this approach.

When Emma started getting students to be more autonomous in the finding and sharing of information, it was a wonderful discovery for her. She discovered that she was not the only expert in the room. Everybody brought something to the conversation, which was very exciting. Now, every time Emma teaches the course, she is making discoveries along with her students. She found that getting students involved in a hands-on way and getting them to talk about their own experiences creates a powerful "free flowing and collaborative" atmosphere in the classroom where wonderful relationships develop. Although Emma had intentionally tried to plan learning activities to promote meaningful interaction amongst the students the result was much better than she ever could have anticipated. She learned that, despite the power of free flowing conversation and activity, students, especially first semester, need a tangible, clear structure so they understand the overall expectations. Emma felt that her collaboration with the other teacher really helped her with this. As well, her participation in an intensive, Course Design Institute provided opportunities to share ideas with colleagues from different disciplines, a process that Emma feels is critical in advancing ones teaching practice.

The end results, in terms of learning, were amazing. Student engagement and performance was better than she could ever have anticipated. At first she felt anxious about not having powerpoints, but now she uses them as her "notes" page to guide, rather than direct, the learning process. In terms of assessment, she puts more of the weighting on in-class assignments and less on testing. Her challenge is to make this approach work within the time and curriculum structures of the college system. Emma is always reflecting on her course and making adjustments to her instructional approach based on student responses. Student behaviour, she says, is the main catalyst for change.

F.6 Steven

The change that Steven made was to introduce stories and dramatizations into his course. In the particular experience he describes, he remembers starting to introduce stories because he had taken a course over from another teacher and he didn't feel inspired by it. He also remembers taking the Teaching and Training Adults program at the beginning of his teaching career and finding the process of video-taping a lesson very powerful in terms of seeing some of the things that he was doing that were not effective and he didn't know he was doing.

Steven had always collected stories on his computer because he loved them and found them inspiring, but he had never used them that much. During his career in radio and television, Steven had seen a lot of people who were very good at presentations and using stories as part of those presentations. In particular, he had taken a one week course with a communications professional who used Martin Luther King's story and his speech, "I Have a Dream" in a powerful way. This professional has inspired Steven's style in many ways.

Now that Steven is committed to using stories in his lessons, he looks for them and finds them everywhere – in movies, on television, in books and magazines, in people that he

meets. He uses them to communicate all kinds of things related to his course – lessons about communication, character, life and personal development, business, leadership, and ethics. He looks for stories that fit what he is trying to teach or get across to the students. Steven has realized that, although he can tell students about a concept, get them to write it down, or have them read all kinds of explanations, things are easier for students to learn and remember, and tend to stick longer when he tells them a story. He believes that part of it is emotional connection that they make – whether through laughter, tears, surprise, awe, inspiration.

Although Steven could not remember the first time he incorporated stories into his lessons, he models different kinds of stories and different ways of delivering stories with the goal that students will use them effectively in their own presentations. He starts off with simple expectations and always models it, giving them several examples, and explains how it works and why it's important. He sees students go from being completely petrified in front of their peers to being able to confidently deliver moving and effective presentations. This is extremely rewarding for Steven and inspires him to do more. As well, positive feedback from his dean and his colleagues reinforces the effectiveness of this teaching strategy. For Steven though, the most important affirmation comes from seeing the positive emotional impact stories have on the people in his classes.

Steven described a couple of times when he presented stories that involved some risk on his part. In one case, it was a 5 minute dramatization of terrible teaching, in which he comes in to the class late on the first day of the course and proceeds to role play a horrible teacher (doesn't make eye contact, makes things confusing, talks to the blackboard, taps his pencil, fidgets, says "um", etc.). In the other, he used the story of Hitler as an example of a powerful communicator who used this power for evil. In both cases, he was initially scared about the reactions he might get from the students. To cope with this fear, Steven stays completely focused on what he is doing. Once he finds that a story or dramatization works, it is fun and rewarding to do. When he tries something risky, Steven thinks about the worst case scenario and what his "out" will be. He feels, however, that risk is an important part of making teaching effective. He calls this "fun risk" because no one gets hurt and if it works, the payoff is high. He has come to realize that, as long as students understand the purpose and the context, either before the story or after, they do not respond negatively. The real and contextualized nature of stories makes them extremely engaging for learning.

Environmental influences in the development of this teaching practice are the class size that enables students to many mini presentations throughout the course and apply what they are learning as well as the availability of technology in the classrooms to support various types of presentations. From a sociocultural perspective, Steven believes that, since students do not encounter a lot of storytelling in their post-secondary experience, they embrace it. As well, given how much time students spend on their communication devices, they seem to value opportunities to practice listening and speaking.

F.7 Mac

The change that Mac made to his first year intro to sociology course was to offer students options for assessment.

Although Mac was confident about his ability to be entertaining and engaging in the classroom, he felt disgruntled about the rigid structure of the course and wanted to "shake things up" to create a more participatory classroom. Mac felt that the standard approach to teaching sociology was, in many cases, like ramming square pegs into round holes and he realized that the traditional structure was not inspiring for bright and keen students. When Mac attended a professional development session on universal design for learning (UDL), he became excited because it offered ideas for designing learning that better met the needs of individual students.

Mac had already introduced some low risk strategies to make his classroom less teacher-centred and more democratic. He had started providing options on tests where students had some degree of choice on the weighting of multiple choice questions and essay questions and he had started to ask for students' help with administrative tasks in the classroom. Now, he wanted to give students options on their major term assignment. Students selected a unit in the course where they would become the "specialists" and they could either do a paper only or do a combination of a paper and a presentation. The assessment rubric in each case was different.

While trying to navigate how this might work in the classroom, Mac was influenced by some peacekeeper training he was doing with the military. In this environment, Mac saw examples of course design that allowed for the choice that he wanted for his students. He learned that if the learning goals and key elements of success were clearly articulated, then the learner could own the process. As well, his involvement in human rights training deepened his awareness regarding the need for respect of all types of diversity, not just the more traditional categories of diversity. This increased his resolve to try and design learning that respected the diversity of his learners. In pursuing the idea of choice in assessment, Mac felt supported by his dean and believed that the culture of his program would allow for innovation in this area.

When Mac implemented his approach to assessment, he was afraid that it would be confusing for the students and hard to manage. He did his best to explain, in his syllabus, his rationale for this approach and how it worked. He explained that it was about respecting a broad range of learners.

A very difficult part of this process was dealing with the criticism of some of his colleagues who said that this approach to evaluation was not fair since it wasn't the same for all students and accused him of being "unprofessional". Mac believed it was fair, and that equality doesn't necessarily mean treating everyone exactly the same. Because this colleague was being quite public about his criticism, Mac froze and went into hiding. He felt squelched and like his continued participation in the program might be at risk if this escalated. Mac persisted with his approach but it really damaged his feelings about the program which he believed was intended to support creative and out of the box thinking and yet was allowing such "screamingly un-innovative and unimaginative" criticism. Mac felt very sad because he would have like to shout out, "Look what I am discovering! Let's learn together! If you have criticisms, please be constructively critical, but I would like to share with you everything that I am learning by making these changes to my course." He didn't feel that he could do this within the context of his program.

During this time, however, Mac remembers finding encouragement and support through the Centre for Teaching and Learning (CTL) at his college. Besides discussions with a former colleague, this was the only place where he felt safe to discuss his ideas related to teaching practice. This was where he found the moral support to carry on when he felt surrounded by teachers whose approach to teaching did not fit with his beliefs and values about learning. In the context of CTL activities, even if people didn't agree with him, he felt they respected the idea of experimenting with teaching and learning.

Other sources of support for Mac included his immediate supervisor and his family. His supervisor at the time was a kind, supportive person and his family ratified and supported him in his work. As well, Mac was pursuing his PhD at the time and many of the courses were grounded in the concept of social-entrepreneurship and how having the courage to use your imagination and be creative can change society. This affirmed Mac's thinking and beliefs related to teaching and learning.

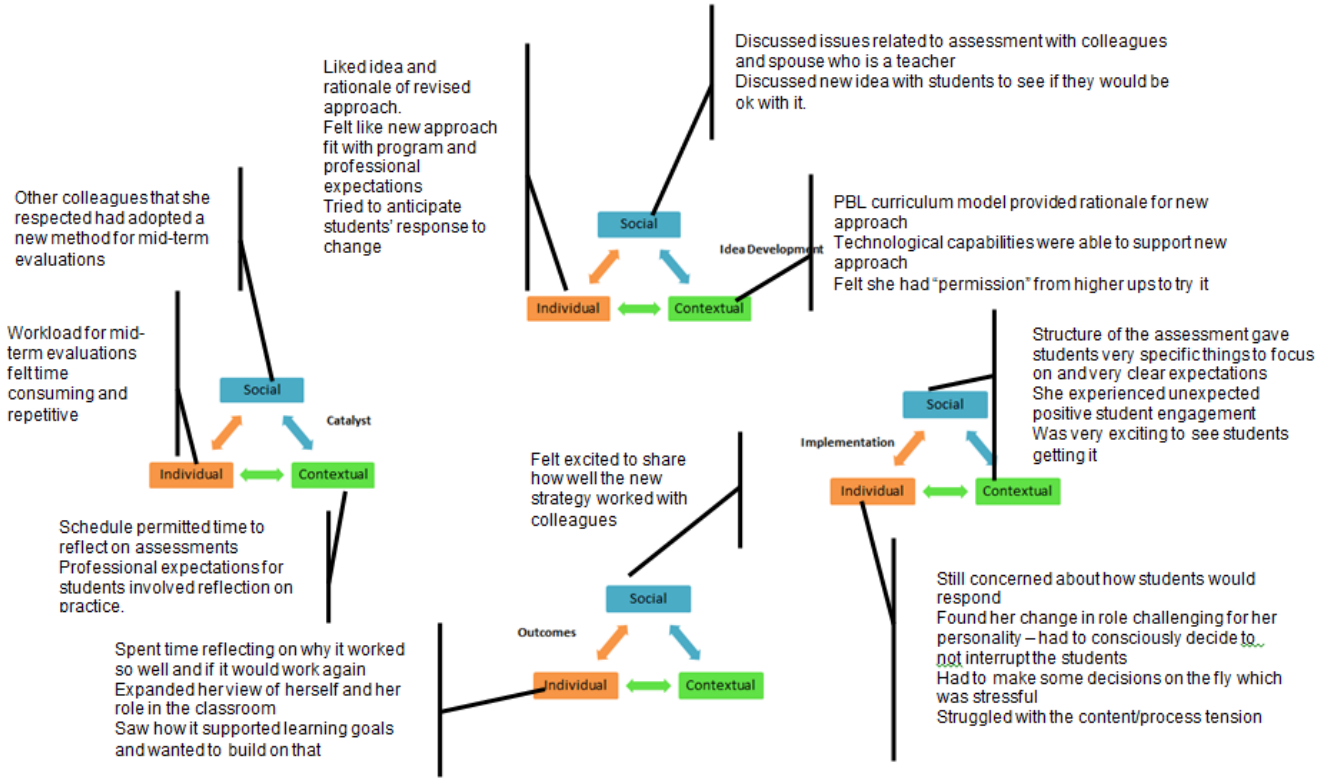
Mac persisted in his new approach because it fit his vision of the type of classroom environment he wanted to create. Mac found that the students go more excited about learning and more into it. They became more verbal in class and when they felt that the discussion was in their "area of specialty", they would speak authoritatively, even though they were only intro level students. Doing a presentation was a liberating option for students who were less confident about their writing and for students who confident in their ability to talk and share their experiences with others.

Mac tried to encourage students to do the presentation because he saw how everyone in the class benefited when good research on fascinating topics was shared and made relevant to students' lives. Mac kept the expectations for the presentations clear and simple so that they would not feel pressured. The presentation was considered successful if students demonstrated an understanding of the research related to the core concepts and succeeded in engaging other students.

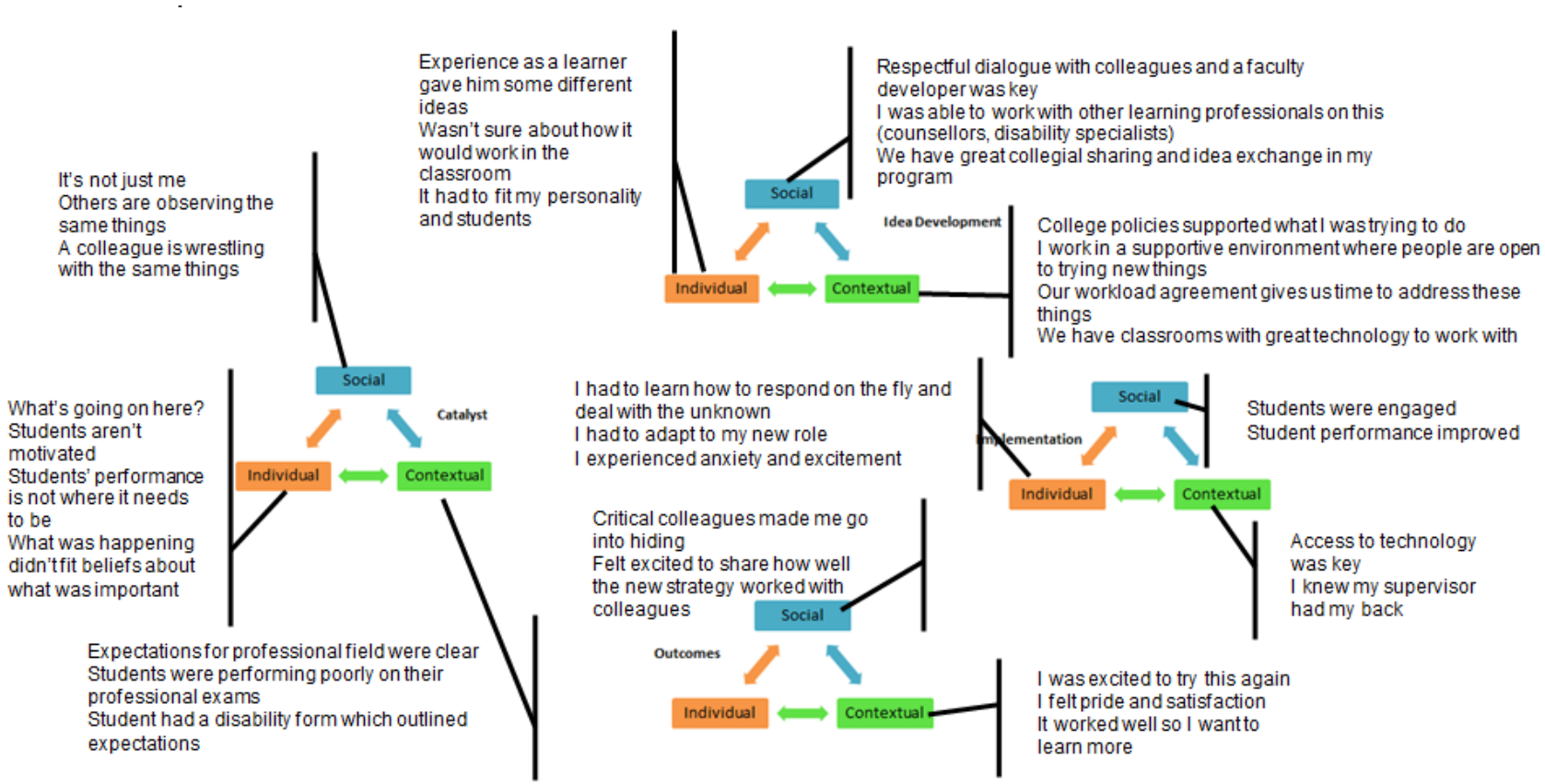
Once the students understood Mac's intentions and expectations, they loved the variety offered by the choices. The better Mac got at explaining and organizing this approach, the more positive the feedback from the students. In spite of criticism, idealism kept him going. He is always thinking about how to make the world a better place and he believed that the world of his courses would be a better place if students had more choice. So, he forged ahead and became more skilled at managing the diversity and explaining it to his students.

Appendix G: Sample of Visual Mapping for Interview Analysis

G.1 Visual summary of phenomenological reduction for Krista



G.2 Visual summary of phenomenological reduction for Group 1



Appendix H: Sample of Survey Analysis

Professional Learning and Post-Secondary Teaching: Investigating Faculty's Lived Experiences of Development in Teaching Practice (SP6 - Ref# 8124362 – Business)

Survey Data	Phenomenological Reduction Using Imaginative Variation
Context: One of the most significant influences on my teaching is a growth in my understanding of how social media and technology are affecting learning and knowledge acquisition. I participated in a CTL Learning Community about teaching the learner who has not known a time without the worldwide web. I am increasingly challenged by gaining and maintaining student attention in the classroom knowing that information can be obtained from so many sources. I constantly think about ways I can add value to my students' learning experiences and frequently engage them in this discussion. *One 'ah ha' moment for me was when two young women in our graduate HRM Program were viewing their BlackBerries during a class while a guest was speaking. The guest was speaking about assessment. He had asked students to complete an on-line assessment prior to class. The young women I am referring to were viewing the results of their assessment as the speaker was guiding the class through the meaning of the scores. What I initially judged as 'rude' behaviour, quickly became an important insight into how technology is enabling and enhancing our students' learning experiences.*	For SP6, a significant influence on her teaching was a growth in her understanding of how social media and technology affect learning and knowledge acquisition. SP6 participated in a CTL Learning Community about teaching learners who have not known a time without the worldwide web. SP6 is increasingly challenged by gaining and maintaining student attention in the classroom knowing that information can be obtained from so many sources. She constantly thinks about ways that she can add value to her students' learning experiences and frequently engages them in this discussion. One 'ah ha' moment for SP6 was when two students in her program were viewing their BlackBerries during a guest presentation. The guest was speaking about assessment and had asked students to complete an on-line assessment prior to class. The students were viewing the results of their assessment as the speaker was guiding the class through the meaning of the scores. What SP6 initially judged as 'rude' behaviour, quickly became an important insight into how technology is enabling and enhancing students' learning experiences.

Changes: i) I am slower to judge my students based on my initial observations of their behaviour (e.g. looking at their cell phones). I need to find out if their behaviour is contributing to or distracting from the learning process in the classroom. I also became more aware of the significance of information technologies as enhancements to learning. *ii) Quick and easy access to information that was relevant to the guest lecture that was taking place. Students can readily and quickly obtain information on the web that supplements classroom learning.* *iii) I connected the dots. I was sitting behind the students who were viewing their cell phones and realized that what they were viewing on their phones was directly related to the guest speaker's subject - 'on-line assessment tools' :)*	As a result of this experience, SP6 is slower to judge her students based on initial observations of behaviour. She first determines if their behaviour is contributing to or distracting from the learning process in the classroom. SP6 is more aware of the significance of learning technologies as enhancements to learning and realizes that students can easily access web information to supplement classroom learning. The situation with the students helped her connect the dots.
Actions/Interactions: *I observed the students who were viewing their on-line assessment results via their cell phones. I have spent much time reflecting on the incorporation of social media and technology into my classroom and as extension to my classroom. I modified an assignment in a Training and Development course to allow students to choose between designing and delivering a face-to-face learning experience in the classroom or a virtual experience using the web.* *ii) I appreciated the different perceptions shared by teachers in the CTL Learning Community. When we talked about student use of laptops, cell phones etc. in our classrooms, we had different reactions (anywhere from "I don't allow them in my classroom" to "I incorporate these technologies into my course design and delivery".*	After seeing the students access their assessment results online, SP6 reflected on how to incorporate technology as an extension to the classroom. As a result, she modified an assignment to allow students to choose between designing and delivering a face-to-face learning experience in the classroom or a virtual experience using the web. In the CTL learning community, SP6 appreciated the discussion related to different perspectives on technology in the classroom. Perspectives went from “I don’t allow students to use technology” to “I incorporate technologies into my course design and delivery”.
Thoughts/Feelings *I have a strong desire to remain current and knowledgeable about my subject matter and delivery approaches. I am challenged and sometimes frustrated when learning the new technologies.* *ii) I never viewed myself ever as 'sage on the stage' or expert teacher. I have always viewed my role as facilitative in the classroom. I acknowledge the experience and knowledge that my students bring into the classroom and I want to incorporate this as much as possible. The extra 'layering' of this, is to manage the incorporation of*	SP6 has a strong desire to remain current and knowledgeable about her subject matter and delivery approaches, but sometimes feels challenged and frustrated when learning the new technologies. Although she has always viewed her role as a facilitator of learning and tried to incorporate her students’ knowledge and experience, SP6 finds it challenging to incorporate technology so it enhances, rather than detracts from learning. She has many mixed feelings about it: inquisitive /curious/ incompetent at times/ frustrated at

educational technology tools and social media in the classroom so that enhances learning and isn't an impediment. *iii) Inquisitive/curious/incompetent at times/frustrated at times/definitely challenged and open to new learning.*	times/ definitely challenged and open to new learning.
Social Aspects: *I believe that educational technology is challenging all of us in education to learn new ways of acquiring, storing and disseminating information. We cannot stick our heads in the sand and ignore technology or we will be known as 'dinosaurs', 'in the dark ages', 'not keeping pace' etc. Finding the balance between technological and human skills is an interesting challenging* *ii) I know my family are impressed with how I am keeping up with social media and technology. Employers and graduates connect with me through LinkedIn and professional associations are expecting more and more usage of webinars, podcasts, etc.*	SP6 believes that educational technology is challenging all of us in education to learn new ways of acquiring, storing and disseminating information. She believes that we cannot stick our heads in the sand and ignore technology or we will be known as 'dinosaurs'. Finding the balance between technological and human skills is an interesting challenging. SP6 knows that her family is impressed with how she is keeping up with social media and technology. Employers and graduates connect with her through LinkedIn and professional associations are expecting more and more usage of webinars, podcasts, etc.
Environmental Aspects: *My peers influence me a great deal. I have enjoyed working with a terrific team of faculty in our School of Business. I especially enjoy working with new full-time and part-time faculty who are highly motivated to become as effective as they can be. I appreciate the programming that the CTL designs and delivers. The course design workshop that I have participated in over the past two years has offered a very fresh perspective of post-secondary teaching and curriculum design. I anticipate more changes as leadership and our staff demographic changes. I react with curiosity & anticipation on good days, but in all honesty, sometimes with fatigue. I am questioning how long I will have the energy to remain as current as I possibly can be. Changes in the human resources profession have altered some of our curricula. There is an increasing emphasis on performance, measurement of performance (metrics), analysis of results, technology use etc. There are days/weeks that I wonder if at this stage in my career I have the stamina and motivation to remain updated and 'in the know' about the latest changes within the profession.*	SP6 says that her peers influence her a great deal. She has a great team in her school and she especially enjoys working with new full time and part-time faculty who are highly motivated to be effective educators. She also appreciates the programming in the CTL. The course design workshop offered a very fresh perspective on post-secondary teaching and curriculum design. SP6 anticipates more changes as leadership and staff demographics change. On good days, she reacts with curiosity and anticipation. But, in all honesty, sometimes her reaction is fatigue. SP6 questions how long she will have the energy to remain current. Changes in the profession have altered some of their curricula and there are times that she wonders if she has the stamina and motivation to remain up to date with the latest changes.