

Reframing Professional Development Through Understanding Authentic Professional Learning

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Continuing to learn is universally accepted and expected by professionals and other stakeholders across all professions. However, despite changes in response to research findings about how professionals learn, many professional development practices still focus on delivering content rather than enhancing learning. In exploring reasons for the continuation of didactic practices in professional development, this article critiques the usual conceptualization of professional development through a review of recent literature across professions. An alternative conceptualization is proposed, based on philosophical assumptions congruent with evidence about professional learning from seminal educational research of the past two decades. An argument is presented for a shift in discourse and focus from delivering and evaluating professional development programs to understanding and supporting authentic professional learning.

KEYWORDS: professional development, professional learning, authentic learning, professional knowledge, workplace learning.

Within the contemporary context of a rapidly changing society, there is consensus across professions that undergraduate education is only the beginning of learning that continues throughout professional life (Day, 1999; Graham, 2006; Jarvis, 2004; Knapper & Cropley, 2000; OECD, 1998b). Indeed the term *lifelong learning* has become a mantra, referred to in most political and academic polemics about the future of society and the role of professionals in this future. The need for continuing professional development (PD) to maintain high quality practice is widely identified as an implicit responsibility of professionals today, reinforced by explicit requirements of professional standards and registration procedures (Friedman & Phillips, 2004). Across professions, from teaching and nursing, to engineering and architecture, there are increasing pressures towards the pursuit of more effective, efficient and evidence-based practices that deliver improved outcomes for clients whether they be students, patients or clients (Garet, Porter, Desimone, Birman, & Yoon, 2001; Penz & Bassendowski, 2006). Consequently, large quantities of money, resources, time and effort are expended to research, deliver and improve PD practices (Ball & Cohen, 1999; Borko, 2004).

There is a significant body of educational research into professional learning (PL) that can inform PD practice. Given the importance of PD research and the considerable resources invested in PD practice, it is crucial that, as educational researchers, we are able to critically examine assumptions about PD when undertaking research in this area. The intent of this article is to critique the way that PD is usually conceptualized, in both research and practice. Such conceptualization influences the focus and outcomes of PD research, as well as the way that the

practice of PD is supported. In this article I offer an alternative conceptualization, based on the notion of “authentic professional learning”, with implications for enhancing the support of professionals as they continue to learn through their professional lives.

Research Informing Professional Development Practice

Over the past two decades, empirical research has demonstrated that effective professional learning continues over the long term and is best situated within a community that supports learning (Darling-Hammond, 1997; Garet et al., 2001; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006; Wenger, 1998;). Such situated learning at work can engage individuals in actively working with others on genuine problems within their professional practice (Boud & Middleton, 2003; Burbank & Kauchak, 2003; Lave & Wenger, 1991; Lieberman & Miller, 2001; Oakes & Rogers, 2007). Over this time, rapid economic and social changes have been demonstrated to impact on professionals’ practice with consequences for professional learning (M. W. Apple, 2000; Fullan, 2001). In this changing workplace context, the importance of critical reflection in PL has been highlighted; it is through challenging implicit assumptions and questioning taken-for-granted practices that PL can lead to changes in practice (Antonacopoulou, 2004; Boud & Walker, 1998; Brockbank, McGill, & Beech, 2002; Brookfield, 2005; Katz, Sutherland, & Earl, 2005).

From an increasing amount of empirical research, a consensus has developed within the educational research community that effective PD is based on a notion of PL as continuing, active, social and related to practice (Garet et al., 2001; S. Wilson & Berne, 1999). Indeed, a consensus model of principles for effective PD has been proposed in teaching (Hawley & Valli, 1999). Yet this apparent consensus has had limited impact on PD practices, with a noticeable disparity between research findings and practice in most professions, even in teaching (Borko, 2004; Sandholtz & Scribner, 2006). Although, with a nod to adult learning theories, PD programs are more flexible and learner-centered, more engaging and interactive, many remain as episodic updates of information delivered in a didactic manner, separated from engagement with authentic work experiences (Gravani, 2007; Hawley & Valli, 1999; Murrell, 2001). This de-contextualization essentially disregards the value of ongoing and situated learning, thereby reinforcing the perceived divide between theory (what you learn in a course) and practice (what you do at work every day). The argument against this predominant “training” model, that learning cannot simply be transferred in a discrete package, no matter how flexible or well-designed, has been raised in the educational literature for over a decade (e.g. Darling-Hammond & McLaughlin, 1995; Hargreaves, 2003; Lieberman, 1995).

It is important to acknowledge the many examples of innovative PD practices that have moved away from “training” and do draw on this research into PL. Examples are found, particularly in teaching (e.g. Clark, 2001; Oakes, Rogers, & Lipton, 2006); to some extent in health (e.g. Lingard, Garwood, Schryer, & Spafford, 2003; Sharoff, 2006); and occasionally in other professions (e.g. Hara, 2007; Hunter, Laursen, & Seymour, 2007). Despite such examples, many PD experiences across professions still seem predicated on the assumption that learning consists of discrete finite episodes with a beginning and end (Wenger, 1998). Also, despite the fact that learning providers evaluate courses against stated learning outcomes, such learning may not be integrated into changes in everyday work (Cervero, 2000; Fullan, 2001; Tierney, 2006). Yet the stated aim of much PD is improvement in practice towards competent or even “accomplished” practice (Murrell, 2001). There is increasing critique of PD across national and

professional boundaries with many calls for re-evaluation of PD practices (Ball & Cohen, 1999; Borko, 2004; Cevero, 2001; Darling-Hammond & Sykes, 1999; Friedman & Phillips, 2004; Gallego, Rueda, & Moll, 2005; Gravani, 2007; Hodkinson & Hodkinson, 2005; Mazmanian, 2005; McRae, Ainsworth, Groves, Rowland, & Zbar, 2001; McWilliam, 2002; S. Wilson & Berne, 1999).

Why have a significant proportion of PD practices not altered in response to research findings that suggest positive directions for change? Many possible reasons exist. They range from the problematic nature of a bureaucratic working context for many professionals (Sandholtz & Scribner, 2006; Wood, 2007) through professional issues such as time pressures and stress at work (Hargreaves, 1997; Hochschild, 1997) to problems with introducing change in such change-weary times (Fullan, 2003; Hayward, Priestley, & Young, 2004). Particularly in the teaching profession, the historical nexus between teaching and learning may reinforce the assumption that significant learning experiences require external direction. In addition, considerable resources have been invested in established structures for providing “development” activities for professionals. The focus of this article, however, is on another suggested reason; the conceptualization implicit in most research into PD that, arguably, tends to reinforce the status quo in PD practice.

My key argument is that the way in which PD is usually conceptualized in contemporary research and practice is problematic, limiting critical evaluation and potential for change. By conceptualization, I refer to the philosophical assumptions about PL and knowledge that underpin research and discourse surrounding PD practice. All research is based on certain epistemological and ontological assumptions about the nature of knowledge and reality that shape the planning, implementation and outcomes of that research. Similarly, implicit assumptions underlie professional and workplace discourses that shape professional practice. These assumptions are rarely made explicit, let alone critically examined or challenged (Butler, Scott, & Edwards, 2002; Duncan, Duff Cloutier, & Bailey, 2007; Hagar, 2004).

In addition to these limitations in conceptualization, the *experience* of learning, especially continuing PL is still poorly understood. Despite decades of research and theorising about learning in situ and knowledge as used in professional practice, our overall understanding of this important topic is still ambiguous (Beckett & Hager, 2002; Billett, Fenwick, & Somerville, 2006). To gain further insights to enhance support for professionals as they learn there is a need to understand more about how professionals continue learning through their working lives. I argue for the need to move beyond the current focus on how best to provide PD activities towards understanding more about the fundamental question of how professionals learn. More research is required that examines the experience of PL in a situated manner, whilst questioning philosophical assumptions underpinning such research.

Before reviewing research that informs PD and examining underlying philosophical assumptions, there is a need to delimit the terms used. In this article I use the term continuing professional learning (CPL) to describe the learning of practising professionals. The term CPL can be distinguished from the more common phrases, continuing professional development (CPD), professional development (PD) or continuing education (CE). It can also be distinguished from PL that occurs within undergraduate professional education programs. The learning of practising professionals that does (or does not) occur through CPD, PD, CE or any other activity is the focus of this article and my own research, rather than particular activities per se. Importantly, use of the term CPL avoids a dichotomy between formal PD courses and everyday professional growth which are often treated separately in the literature (Alsop, 2000; Beckett &

Hager, 2002; Day, 1999; Jarvis, 2004). From this perspective of CPL, it is professionals, rather than researchers, who define such a term by describing situations where they feel they have learnt. Professionals learn, in a way that shapes their practice, from a diverse range of activities, from formal PD programs, through interaction with work colleagues, to experiences outside work, in differing combinations and permutations of experiences.

This article proceeds in three sections. First, the current PD literature is critiqued against the background of a broad sweep of educational research that is relevant for understanding CPL. This overview of the research terrain draws on three different areas of educational inquiry in addition to the PD literature (i.e. community education, workplace learning and professional education) in proposing a way of reframing PD. Second, seminal research from the past two decades is revisited to summarize what we know about professional knowledge and learning, examining philosophical assumptions underpinning this research, as well as the contradictions and tensions involved in learning in the contemporary working context. The notion of “authentic PL” is proposed, to differentiate the lived experience of CPL from the usual discourse of PD.

The third section draws together the first two in arguing for a shift in discourse and focus, in both research and practice, from delivering and evaluating PD programs to understanding and supporting authentic PL. This article concludes by considering implications for practice and future research possibilities extending from reconceptualizing PD and understanding more about authentic PL.

Section 1: Reframing Professional Development

Overview of the Relevant Research Terrain

Findings from diverse fields of inquiry have implications for the investigation of CPL. Relevant research findings can be drawn from community education, workplace learning and professional education, as well as from the PD literature itself. *Relevance* refers, in this instance, to research findings that have had a significant impact on our understanding of the nature of PL. By a *field of inquiry*, I refer to a body of research with specific foci, audience, conferences and journals. Despite many points of connection when viewed as a broad educational research terrain, the research in each field has a specific target.

From the field of community and adult education, the notion of learning being holistic and potentially transformative is relevant for understanding more about CPL. From the workplace learning literature, research highlighting the situated and social nature of continuing learning and critiques about the workplace as a context for learning are relevant. From the field of professional undergraduate education, research into the complex nature of professional practice knowledge and practice-based preparatory programs has relevance. Unfortunately, the PD literature in professions other than teaching draws on very little of the valuable research from these other fields.

Community Education. The origin of this field of inquiry was in community-based adult education. Critical and interpretative approaches to research in adult education have recognised the potential for learning to be emancipatory and transformative (Cranton, 1997; Freire, 1974; Imel, Gillen, & English, 2000; Willis, Smith, & Collins, 2000). These approaches take a holistic view of learning as involving the whole person within their socio-cultural community (Jarvis & Parker, 2005). The importance of critical reflection on the taken-for-granted assumptions about

everyday life in transformative learning has been particularly highlighted in this field (Brookfield, 2005; Mezirow, 2000).

A key contribution to PD practices from the field of adult education has been recognition that the professional is an adult. The notion that adults' learning needs were different from those of children was theorised as andragogy by Malcolm Knowles (1980). However, tenets of andragogy are no longer restricted to adult education. Such notions as drawing on previous experiences of the learner or providing flexible pathways for learning are now the basis of effective pedagogy across all areas of education, although this may not be evident in all PD practices. Recognition of variance between adult learners, described as differing learning styles (Honey & Mumford, 1992), did have an impact on PD practices. Although potentially useful, the concept of learning styles is often used in a simplistic manner to categorise learners, however (Coffield, Moseley, Hall, & Ecclestone, 2004).

More complex contributions from this field, informed by Michel Foucault's (1980) nexus between power and knowledge and John Dewey's (1927) notions of participatory social inquiry, are currently found in community-based urban teaching research (Hyland & Noffke, 2005; Murrell, 2001; Oakes et al., 2006). Such research highlights the potential impact of professionals learning through engagement with communities to address issues of social justice and diversity. Socially important forms of community-based PL, engaging with issues of social inequality with students, clients or patients, are equally as important within other professional communities as diverse as health and law (Sullivan, 1995). Yet this area of inquiry has had virtually no impact on PD practices in most professions beyond teaching.

Workplace Learning. Over the past decade, the workplace has become firmly established as an essential setting for both continuing learning and research into that learning (Boud & Solomon, 2001; Garrick & Rhodes, 2000b; Rainbird, Fuller, & Munro, 2004). There is increasing acceptance within the research community of the centrality of workplace learning for effective CPL (Billett, 2001a; Eraut, 2004; Mott & Daley, 2000; Rodrigues, 2005).

This field of inquiry has its focus on how employees learn at work. Interest in work-based learning emerged as a response to the demands of the global marketplace and the subsequent need for retraining. Thus the initial interest in this field was on vocational education, but there is increasing research about the role of the workplace in PL (Barr, 2000; Darling-Hammond, 1997; Easterby-Smith, Crossan, & Nicolini, 2000; Richardson, 1999; Ward & McCormack, 2000). Research about workplace learning across education, management and organizational psychology is highly varied, ranging from prescriptive, positivistic polemics to reflective, critical discourse analyses. Two aspects are relevant to understanding CPL. One is the wide acknowledgement across this field that learning is context dependent. The other involves the critical analysis of the workplace as a context for learning.

The Vygotskian premise that learning is essentially a socio-cultural activity has been integral to understanding how participation in professional practice can be viewed as "moment-by-moment" continuing learning (Billett, 2001b; Rogoff, 1990). The social nature of such participation in a "community of practice," described by Jean Lave and Etienne Wenger (1991), has led researchers to explore how work situations with differing socio-cultural practices promote the development of differing abilities (Billett, 2004; Fenwick, 2001b). Thus workplace culture has been found to be important in determining what is learnt and how (Brockbank et al., 2002; Sandholtz & Scribner, 2006; Solomon, 1999). Research into the situated and social nature of workplace learning has had an impact on PD as evidenced by the increasing use of

internships, mentors and networks to support PL at work (Brockbank & McGill, 2006; Gold, 2002; Hargreaves & Fullan, 2000; Lieberman & Grolnick, 1997; Stoll et al., 2006). A dichotomy is evident in the literature, however, between support for everyday learning at work as “informal” and the provision of purposeful “formal” learning in PD programs. It may be argued that engagement with formal PD, discussions with colleagues or thinking about work in bed at night all constitute the social practice of a particular profession. As mentioned, although such engagement may differ, the experience of learning that does (or does not) happen through such processes may not vary significantly.

There is a growing body of research that raises many questions about learning at work, with two poles to the voices of disquiet about the prevailing workplace context for learning. One draws on critical theory within a postmodern framework. This approach is critical of the current workplace, investigating issues ranging from the impact of economic rationalism on staff downsizing to implicit power and gender inequalities at work (Alvesson, 2004; M. W. Apple, 2001; Beckett & Hager, 2002; Billett et al., 2006). The other pole draws on social theory within an interpretative framework. There is emerging interest in academic and popular discourse about valuing workers as people with lives outside work. This research talks of people as the “heart” of business organizations and addresses the problematic nature of work/family balance, giving voice to workers’ feelings (Hochschild, 1983, 1997; Pocock, 2003). Research from both these perspectives raises important issues for understanding CPL.

Professional Education. Two aspects of higher education research have relevance for CPL. One is research investigating the complex nature of professional knowledge as used in practice. The other is the substantial body of research into pedagogical practices in universities that enhance preparation of students for the realities of professional practice. Building on this research, teachers of undergraduate professional programs have moved from a primary focus on transferring knowledge towards an understanding that knowledge is co-constructed with students. This significant shift from teaching to learning in higher education has led to the introduction of innovative pedagogical practices, such as problem-based learning, action learning and practice-focused service learning, and the use of collaborative, flexible and interdisciplinary teaching strategies (Barr, Koppel, Reeves, Hammick, & Freeth, 2005; Biggs, 2003; Boud, Cohen, & Sampson, 2001; Boud & Solomon, 2001; Bringle, Phillips, & Hudson, 2004; Butin, 2005; Dall’Alba, 2005; Darling-Hammond, 2006; Madden, 2000; Walker, 2001).

The focus of undergraduate professional education programs is on the preparation of practitioners who are competent to enter the current workplace, whether it be as doctors, engineers or teachers. Different conceptions of professional knowledge as used in competent practice underlie some of the differences across professional education programs. For example, where educators view competence as acquisition and application of attributes, teaching of these is often separated into different parts of a course: theoretical knowledge first, practical skills later and professional attitudes just prior to graduation (Schön, 1995). Gloria Dall’Alba and Jörgen Sandberg (1996, 2006) have challenged the consideration of professional competence as an attribute-based phenomenon. Their empirical research findings, that different ways of understanding professional practice underpin and determine how professional skills are developed, have implications for CPL beyond undergraduate professional education.

Although the need for lifelong learning of professionals is stressed through university education, the patent differences between learning as a student, within a controlled framework focusing on assessable outcomes, and learning as a professional have not been clarified. Despite

many innovative PD practices, there remains a persistent didactic influence in a considerable proportion of PD practices following graduation that echoes an undergraduate framework.

Each of the three fields of inquiry mentioned in this section can inform research into CPL and influence PD practice, although unexplored areas remain. Despite principles of andragogy from the field of community education influencing most PD practices, the transformative, emancipatory potential of PL is usually overlooked. The field of workplace learning has much to contribute to PD practices, but there is still a problematic dichotomy between learning from everyday work and PD programs. Undergraduate programs emphasise learning throughout a professional career, but little is known about differences between undergraduate and continuing learning as a professional.

Critique of Professional Development Literature

Against this broad educational research background, we may inquire about the current focus of the PD field of inquiry. Does the PD literature reflect what is known about effective PL, taking into account the complexities of the current professional context and drawing from relevant educational research? A strategic review was undertaken with the intent of establishing the focus of, and discourse used, in current PD literature across professions.

Literature Search Strategy. Research into PD usually focuses on one particular profession, although research across professions is beginning to emerge (e.g. Axford, 2005; Daley, 2001). Although ERIC is the largest educational database, Proquest 5000 was chosen for this scan as it contains literature from a wider variety of professions. Proquest incorporates over twenty databases, with literature from professions such as: accounting, business, law, journalism, social sciences, education, health, pharmacy, information technology, engineering and science. The aim of the scan was to take a strategically planned “snap-shot” of the current range of PD literature. Because there is a substantial volume of PD literature available, the period was limited to the twelve months, from April 2006 to March 2007.

The inclusion criteria used were the descriptors of *profession** and *develop** (in close proximity) in the title, citation or abstract, with the selection limited to scholarly journals and the preceding year. This search produced 1028 articles. Through a scan of the abstracts, articles were excluded based on the following two criteria: where the focus was on student learning rather than PL (as in schools or higher education), and where PD was not the clear focus of the article but was mentioned incidentally as a benefit of some other process. This reduced the number of articles to 203 where it was apparent from the abstract that the participants were practising professionals and their PD was the focus of the article.

Overview of Current Professional Development Literature. These 203 articles were categorized according to both *profession* and *purpose*. Five broad categories of professions were developed, based on the research participants and/or audience for the article. These were teaching (including school and university), health (including medicine, nursing, therapy and pharmacy), business (including management, law, accounting and information technology), social sciences (including social work, journalism and psychology) and science (including engineering, natural and physical sciences).

The stated purpose of the article was determined as essentially *empirical research* or *professional commentary*. An article was deemed to be an empirical research article if the

method, theoretical basis and findings were articulated. Empirical research articles were further divided into research with a focus on evaluating PD programs (*evaluative*) or research that in some way disrupted traditional notions of PD (*critical*). An article was determined to be a professional commentary if it was a report of a PD initiative, or a discussion or reflection on PD. Commentary articles were further divided into those that focused on describing a PD program (*program*) or those with a focus on PL experience (*learning*). See Table 1 for numerical details of the categorization of the 203 articles.

Remembering that the aim of this scan was a snapshot of the current literature across professions, raw numbers are not particularly relevant. Although division into categories was not clear cut in all cases, a general pattern can be discerned. As expected, teaching, as the “learning profession” (Darling-Hammond & Sykes, 1999), has by far the largest body of PD literature (40% of the sample) followed by the health profession (25%). Approximately half of the total number of articles were research based (49%), with the other half (51%) being commentary based, that is reports, discussions or reflections about the value of PD or examples of best practice. Thus this scan reflects both current research and practice across professions.

Table 1: *Categorization of Current Professional Development Literature*

Professional Categories	Evaluative Research	Critical Research	Program Commentary	Learning Commentary	Total Literature
Teaching	27	17	26	11	81 (40%)
Health	21	1	28	2	52 (25%)
Business	11	5	15	5	36 (18%)
Social Sciences	9	2	9	1	21 (11%)
Sciences	5	1	6	1	13 (6%)
Totals	73 (36%)	26 (13%)	84 (41%)	20 (10%)	203 (100%)

First, I consider the 99 empirical research articles (see Table 2). Almost half (44%) of the total empirical research into PD took place within the teaching profession alone. Most of the research across all professions focused on evaluating PD programs (74%); either evaluation of the content, participation, means of delivery or outcomes of programs. Only a small proportion (26%) of PD research challenged or critiqued conventional notions of PD delivery in some way. Included in this *critical* category was research that attempted to do any one of the following: focus on learning experience, critique the context for learning or draw on important features from the key PL literature briefly summarised at the beginning of this article. Most of this critical research took place in teaching (66%; 17 out of 26 articles), not surprisingly, as other professions seem virtually unaware of the value of this body of research. For example, in research into PD from the health profession, empirical research accounted for 22% (21/73) of the evaluative research but only 4% (1/26) of the critical research in this scan.

Table 2: *Categorization of Professional Development Empirical Research Literature*

Professional Categories	Evaluative Research	Critical Research	Total Empirical Research
Teaching	27	17	44 (44%)
Health	21	1	22 (22%)
Business	11	5	16 (16%)
Social Sciences	9	2	11 (10%)
Sciences	5	1	6 (6%)
Totals	73 (74%)	26 (26%)	99 (100%)

A similar pattern was found in the professional commentary literature (see Table 3). The majority of the commentaries (81%) reinforced the traditional notions of PD critiqued through this article, with only 19% involving some form of critical reflection on PL or the context for learning. Once again the majority of commentaries that moved beyond reports of PD programs were from the teaching profession (55%; 11/20).

Table 3: *Categorization of Professional Development Commentary Literature*

Professional Categories	Program Commentary	Learning Commentary	Total Professional Commentary
Teaching	26	11	37 (35%)
Health	28	2	30 (29%)
Business	15	5	20 (19%)
Social Sciences	9	1	10 (10%)
Sciences	6	1	7 (7%)
Totals	84 (81%)	20 (19%)	104 (100%)

Evaluation of Professional Development Literature. All professions refer to the vital significance of PD and in many professions require evidence of attending mandatory PD activities for continuing registration (e.g. W. P. Apple & Horace, 2006). Regardless of this emphasis, much of the professional literature concerning PD is anecdotal; a description of PD

activities and delivery methods rather than empirical research. These commentary articles can include valuable reports about innovative aspects of practice (e.g. Vandeweghe & Varney, 2006), but often were prescriptive reports stressing PD responsibilities (e.g. Block, Singh, Kanaris, & McGrath, 2007). A significant number of commentaries discussed four areas in particular: the role of PD schools in the USA, support for early career graduates in health and education, the role of PD in maintaining professional standards in health and education, and the potential for online learning in PD across professions.

With respect to the current empirical research into PD examined in this scan, the majority is evaluative (e.g. Eckstrom, Homer, & Bowen, 2006; Hicks, Bagg, Doyle, & Young, 2007) rather than critical (e.g. Hunter et al., 2007; Sharoff, 2006). Evaluative research often compares methods of delivery of PD through evaluating learning outcomes, focusing on evaluating solutions to the problem of learning rather than questioning assumptions about learning. The focus is on expert intervention to “develop” professionals rather than on supporting ongoing PL. In addition, the majority of this research focuses on specific factors affecting PD (the program, learner or context) rather than studying the holistic, situated experience of learning.

In summary, the majority of this PD literature across professions in this scan, both research and practice based, has a focus on programs and content rather than on learning experiences. In fact PD practices have been critiqued as “mired in update and competency approaches” (A. Wilson, 2000, p.78). An update perspective stresses the obsolescence of present knowledge that accompanies rapid change. This perspective reinforces the view of learning as “filling up” a reservoir of knowledge in a professional’s mind that will run dry if left too long. Moreover, much of the examined literature is not congruent with findings from key research into PL. Even when reflection, collaboration and context were explored (usually in teaching), only a few researchers went beyond conventional evaluation of such collaboration, by critiquing assumptions about knowledge or context (e.g. Sandholtz & Scribner, 2006; Wood, 2007). Moreover, it is apparent that the teaching profession has much to offer other professions with respect to innovative research and practice in PD.

By reporting these results, I am not seeking to denigrate this literature. There is no doubt that research evaluating the delivery and outcomes of PD has made enormous contributions to knowledge and practice. Evaluative research of PD has an important place, enabling justification of the substantial expenditure of time and resources in PD, vital within this current climate of fiscal accountability. In addition, many commentaries have an important role, sharing innovative aspects of PD programs and examples of best practice.

My intention in scanning the extensive range of current literature is to add quantitative weight to the assertion that, despite decades of research into effective PL, little has changed in PD research and practice across most professions. The lack of change is not surprising when a scan of this literature reveals that the discourse of PD is focused on the development of professionals through delivering programs rather than understanding more about the experience of PL in order to support it more effectively. It is perhaps understandable that the conventional conceptualization of PD, and the implicit assumptions underlying this notion, are rarely questioned. It is certainly difficult to step outside of the taken-for-granted notion that well designed PD programs with good facilitators will result in PL and change in the quality of professional practice. Arguably, as educational researchers, we must question this notion.

Reconceptualizing Professional Development

There are limitations in the way that PD is conceptualized in much of the current literature informing PD. Limitations are evident in the discourse and focus of PD and the implicit assumptions underlying these. Firstly, the term PD is part of a discourse that focuses on the professional as deficient and in need of developing and directing rather than on a professional engaged in self-directed learning. This discourse, and the professional context of control and standardization that perpetuates it, are rarely questioned in research or commentary about PD. Secondly, the focus of much research and practice in PD is atomistic, considering the professional and learning context as separate though related. Consequently, research often examines a specific factor: the PD activity and its outcomes, the context for learning, the learner and his or her preferences, or professional knowledge per se. Research is required that views the learner, context and learning as inextricably inter-related rather than acknowledged as related, yet studied separately. The “experience” of learning in everyday 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” as constructed and embedded within authentic professional practice.

Underlying these two limitations are philosophical assumptions that are rarely examined. Implicit in most current PD literature is an objectivist epistemology that views knowledge as a transferable object. Thus professionals’ knowledge can be “topped-up” by undertaking PD activities. This perspective implicitly conceptualizes professional knowledge as primarily cognitive, “acquired” through learning and able to be studied separately from the socio-cultural context in which the knowledge is used. Thus many studies also assume a dualist ontology that implies professionals can be studied in a meaningful way separate from their professional practice. Reframing this conceptualization of PD requires moving from a focus on “development” to “learning” and from an “atomistic” perspective to a “holistic” approach.

Learning Rather Than Development. The first important aspect of reframing PD is to focus on learning rather than development. In higher education there has been a shift in focus from teaching to learning (Ramsden, 2003). Similarly, in the workplace, the concept of “workplace learning” is being embraced (Senge, 2006). However, discussions about professionals learning at work rarely use that term. Words used reflect organizational terminology (e.g. *staff training, staff development, performance review, CE*) or more developmental terms (e.g. *PD or lifelong learning*).

Most of these terms, other than the nebulous and overused *lifelong learning*, imply that something is done to the professional. That is, professionals are in need of “training” or “developing” through knowledge being “delivered” to them in courses. Not only does this approach tend to imply a transmission model of teaching and learning, but it also moves the emphasis from the “knowledge-deficient” professional to the “knowledge-possessing” provider. As Erica McWilliam (2002, p.289) highlights, in drawing comparisons between professional development and third world community development, such a perspective also determines what knowledge is legitimized, often undervaluing “local and context-sensitive knowledge”.

Reframing PD as CPL moves the focus away from training, education or development towards PL. It also avoids the separation between moment-to-moment workplace learning and PD programs that is apparent in the literature (e.g. Beckett & Hager, 2002; Day, 1999). The implication of this separation is that learning at work is different from learning through attending a PD workshop. Although the activities may differ, if the professional learns from either or both

experiences, then this separation is artificial; a convention reinforced by prevailing discourse. A focus on CPL can refer to any experience where professionals consider they have learnt.

A focus on learning with a shift of emphasis from passive development to active learning implies a different conceptualization of knowledge. Implicit within much of the development discourse is the concept of the professional as a container for a commodity called knowledge. As a separate object, for example, knowledge is sometimes referred to as having a “half-life” (Aubrey & Cohen, 1995) that will degrade unless more knowledge is transferred to the professional from a PD provider. This “container” concept of knowledge has been widely debunked in the educational literature since Lave’s (1988) seminal research (e.g. Dall’Alba, 2004; McGill & Brockbank, 2004; Putnam & Borko, 2000). Thus a shift in conceptualization from PD to CPL is more than a change in terminology. Such reframing also represents a move away from an objectivist epistemology and dualist ontology that underpins much of the current research into, and support for, the continuing learning of professionals.

Holism Rather Than Atomism. The second shift in reframing PD is to consider PL as a holistic experience rather than as a combination of interrelated “factors”. It is widely accepted that learning is dependent upon an interaction between the learner, the context and what is learnt (Jarvis & Parker, 2005), yet many research and practice approaches attempt to control or deal with these factors separately.

Although research that analyses separate factors in PD can be useful, it often reinforces perceived dichotomies within this area. Learning is conceived as formal or informal, individual or group-based, specific to a context or transferable. For example, it is acknowledged that a link exists between formal learning from PD programs and informal learning at work, yet research often ignores this nexus or fails to illuminate it by focusing on one or the other. Similarly, PL is acknowledged to be socio-cultural, yet research often has a focus on either individual narratives or the collaborative learning of a community of practice. Context is acknowledged as an integral feature of PL, but research and practice often separate the learner from the context in which learning occurs, or specifically examines features of the context.

Vygotsky highlighted the problem of atomistic approaches in studying learning, stressing that experience needs to be considered in its full complexity, although various aspects may be fore-grounded for different purposes (Rogoff, 1995; Moll, 1990). In considering this problem of studying complex experiences, the need for more situated research into PD has been proposed by educational researchers such as Hilda Borko (2004). She, and others, call for a variety of methodological approaches to deal with the difficult dilemma of how to undertake research that is “situated” or “holistic,” taking a variety of perspectives into account. As the area of PL and practice is complex and can be examined in many ways, attempts to be holistic often means dividing experiences into different factors for analysis, looking at the inter-relationship between factors (e.g. Hodkinson & Hodkinson, 2005; Mishra & Koehler, 2006; Pillay & McCrindle, 2005). It is extremely difficult to find words, let alone methods, to describe and research complex experiences in a holistic manner without such divisions. Empirical, interpretive research approaches such as ethnography or phenomenology are examples of situated research approaches that maintain the holistic nature of the experience studied and can be useful for research into learning (e.g. Dall’Alba, 2004; Giorgi, 1999; Wenger, 1998).

My argument, then, concerns the need to understand more about CPL from the perspective of professionals themselves, within the context of everyday professional practice with its attendant workplace agendas. Through choosing to focus on understanding the

experience of CPL rather than evaluating the delivery of PD, and by using holistic, situated research approaches to investigate CPL, this reframing of PD challenges the problematic nature of much current research in this area. Such research seeks to understand professionals' experiences of learning in a way that respects and retains the complexity and diversity of these experiences, with the aim of developing insights into better ways to support professionals. Such research needs to draw from the fertile body of established empirical research into PL. In the second section of this article, this seminal educational research is revisited to examine the philosophical assumptions underlying what we already know about PL and knowledge as used in contemporary practice.

Section 2: Understanding Authentic Professional Learning

Firstly, the notion of authentic PL requires clarification. The term *authenticity* is used in education with respect to authentic tasks as genuine and embedded in real life (Brown, 1989; Cranton, 2001; Darling-Hammond & Snyder, 2000; Laursen, 2005). In this article, I use the term *authentic PL* to describe the lived experience of continuing to learn as a professional and will expand upon the implications of this notion in section 3. Section 2 examines what we know about authentic PL from key research that has attempted to understand its complex, diverse and situated nature. In considering *what* changes in learning, professional practice knowledge is examined; in considering *where* learning occurs, the contemporary context for PL is examined; and in considering *how* learning occurs, the process of learning is examined.

What We Know About Professional Practice Knowledge

The question of what changes through learning is contentious, but typically research into PL has focused on changes in professional practice knowledge. The concept of knowledge is a slippery notion. Since ancient Greek times, there has been a tradition in western epistemology of viewing knowledge as an object or commodity. As such, it can be separated from the knower, and its complex nature more easily grasped and examined through division into categories. There are problems with such an objectivist epistemology that may act to “blinker” researchers, limiting their ability to perceive ontological implications about the knower in PL. To argue this position, let us examine how knowledge is usually understood in research into PL.

Knowledge as a Commodity. In an objectivist epistemology knowledge is viewed as a commodity akin to information that can be produced, managed or transferred. Moreover, in the contemporary context, knowledge is described as a valuable economic commodity (Rothberg & Erickson, 2005). As an object, knowledge can be compartmentalized for analysis and research. Within education, taxonomies such as Bloom's are traditionally used to describe cognitive, psychomotor and affective domains of learning involving propositional, procedural and dispositional knowledge. By extension, professional knowledge is often conceived of as separate though inter-related domains of knowledge (Eraut, 2004). There are limitations with an objectivist perspective of knowledge for researching learning. Compartmentalization is useful for analysis, but poses a problem when it is assumed to represent reality.

The problem for researchers investigating PL is that professional knowledge as used in practice is exceedingly complex, surpassing efforts to “capture” it. In education, Jean Clandinin and Michael Connelly (1995) introduce the metaphor of “professional knowledge landscapes” to

indicate the breadth and complexity of teachers' practice knowledge with its mix of personal, ethical, intellectual and social dimensions. Within the health sciences, Joy Higgs and Angie Titchen (2001) describe professional practice knowledge as a complex interaction of propositional, professional craft and personal knowledge.

These researchers, like many others (e.g. Beckett & Hager, 2002; Benner, Tanner, & Chesla, 1996; Tripp, 1993) attempt to capture the richness and messiness, complexity and diversity of knowledge as used by the professional in practice. Donald Schön (1983, p.vii) attempted to do this twenty years ago when he moved from descriptions of professional knowledge to describe "knowing-in-practice". The problem with most representations of professional knowledge in the twenty years since Schön's work is that although the complexity of knowing-in-practice is recognised by adding extra dimensions to cognitive representations, the totality of the experience of knowing is still difficult to evoke.

Knowing-in-Practice. In arguing for a holistic conception of professional knowing for research into CPL, it is worth returning to Schön's 1983 text. In this text he argued for an epistemology of practice as a counter-perspective to "technical rationality". The latter perspective, where propositional knowledge is valued above more implicit forms, has powerfully shaped professional education. He argued that previous conceptions of professional knowledge didn't capture the complexity of the messy swamp of practice problems. His conception of knowing-in-practice was ground-breaking in its acknowledgment of artistic, intuitive and emotional features, stimulating the emergence of research acknowledging these qualities (e.g. Kezar, 2005; Neumann, 2006; Noddings, 2002; Sharoff, 2006).

Through re-conceptualizing knowledge in practice, Schön challenged the theory-practice divide as artificial and many have concurred with him since (Eraut, 2004). Although Schön's work has been influential in professional education, a separation remains today between what is perceived to be theoretical knowing and practical know-how. This separation persists in PD and is perpetuated in professional discourse (Horsfall, Byrne-Armstrong, & Rothwell, 2001). Why are such divisions perpetuated? One answer may lie in the epistemological assumptions implicit in much research into PL, including Schön's work.

Schön's (1983) description of reflection-in-action as the means of decision making in practice is insightful yet potentially incomplete. Although he moves from knowledge to knowing, highlighting knowing as embedded in practice, he describes problem solving during practice with a focus on the practitioner's mind (e.g. p.50). There are two problems with Schön's description. One is that the speed required for decision making in the "hot action" of practice raises doubt about the reflective nature of decisions (Eraut, 1994). In addition, Schön's work implies the practitioner is separate from (but related to) her practice and its context. As Robin Usher and colleagues (Usher, Bryant, & Johnston, 1997) argue, Schön's fore-grounding of cognition and underplaying of the impact of socio-cultural context in his descriptions of knowing-in-practice are problematic.

Embodied Knowing. Despite some limitations in Schön's work, his critique of technical rationality as an unsuitable framework to examine the messy complexity of knowing-in-practice was prescient. His critique is almost as valid today as then, as the impact of technical rationality on professionals persists (Craig, 2006). To challenge this impact, it is important to examine and disrupt common philosophical assumptions about professional knowledge. If knowledge is to be thought of as more than a commodity and knowing as involving more than an individual's mind,

then knowing cannot be separated from the embodied experiences of the person as a social participant in the world. Arguably, knowing and learning involves the whole person.

One useful way to encompass the holistic experience of knowing-in-practice is to talk of it as embodied. The embodied nature of knowing has been referred to extensively, by researchers from socio-cultural, cognitive and philosophical frameworks (Beckett, 2004; Cheville, 2005; Lakoff & Johnson, 1999), often with reference to the work of phenomenologist Maurice Merleau-Ponty (1945/2002), who illuminates the essential nature of our experience as embodied. Drawing on his phenomenology, Dall’Alba and Robyn Barnacle (2005) coined the concept “embodied knowing”. A notion of knowing and learning as embodied shifts the emphasis of research away from the mind of an individual towards a socially constructed practice, and potentially shifts the focus of CPL towards support for such authentic lived practice. Conceiving knowing as embodied reminds us that authentic PL is not only an epistemological concern about what the professional knows and does, but is also an ontological concern about who the professional is (Dall’Alba & Sandberg, 2006).

What We Know About the Professional Practice Context

Understanding authentic PL also requires some appreciation of the impact of the relatively recent global changes on education and work (Barnett, 2004; Beckett & Hager, 2002; Fullan, 2003; Giddens, 2002; Hargreaves, 2003). One consequence of these changes has been increasing pressure for assuring professional standards, measurable outcomes and accountability of practice (Beijaard, Meijer, Morine-Dershimer, & Tillema, 2005; Bury & Mead, 1998; Mott & Daley, 2000; Rodrigues, 2005). How does this pressure impact on learning?

Tensions from competing workplace agendas and consequent dilemmas for PL can be discussed in terms of a tension between “certainty” and “uncertainty” (Helsing, 2007; Mullavey-O’Byrne & West, 2001). There is a “quest for certainty” from organizations seeking measurable outcomes at lower cost, from professional organizations seeking the certainty of evidence-based practices, and from practitioners themselves acting to minimise the stress of change. Co-existent with drivers towards certainty are those that increase uncertainty. Organizational re-structuring, changes in consumer expectations and the inherent uncertainty and complexity of professional practice involving people mean that the context in which many professionals learn can lead to doubt and anxiety. The contemporary context for PL is examined, below, exploring evidence for the notion of a quest for certainty in the guise of regulatory forces controlling practice, coexistent with increasing uncertainty in a rapidly changing, complex working context.

Certainty Through Regulation and Control. A significant issue in the quest for certainty at work is regulation of professionals and control of knowledge. In what has been called a knowledge economy with economic rationalist policy drivers, employees as “human capital” are key resources of an organization (Garrick & Clegg, 2000; Ingham, 2006; OECD, 1998a). Within this discourse, the value of CPL to an organization is seen in terms of the professional’s ability to apply knowledge to produce outcomes contributing to organizational goals. The concept of knowledge as a commodity influenced by economic pressures was originally critiqued by Jean-François Lyotard (1984) as “performativity” in his analysis of knowledge in postmodern society.

The focus of many critiques of performativity is on power dynamics. In a performative working context, power resides with the employer to determine what is valued, rewarded and considered justifiable to learn. Consequently, an issue of concern in CPL is the concept of “legitimate knowledge” (Alvesson, 2004; M. Apple, 2000; Garrick & Rhodes, 2000a). Within a

performativity discourse, learning outcomes related to legitimate knowledge are aligned to organizational goals with learning opportunities provided to increase employees' "capacity". The use of language describing employees as resources is merely one example of the pervasive influence of the performativity agenda. Language is powerful; its regulatory effect is usually implicit (Brockbank et al., 2002).

As well as viewing people and their knowledge as resources, another aspect of control of professionals is the increasing standardization of their practice (Freidson, 2001). Commenting on escalating control of higher education in Britain, Susan Weil (1999) proposes that one reason for increased regulation is an attempt to provide structural solutions to resolve complex challenges in practice arising from change and uncertainty. She states that, "the tendency is to order the mess, through increasing standardisation, specification of outcomes and centralised control" (p.171). But as Linda Darling-Hammond (1997, p.67) points out with respect to teaching practice, "bureaucratic solutions to problems of practice will always fail" because practice is inherently uncertain and unpredictable.

A consequence of the drive to regulate practice is that professional standards, as a means of ensuring competence, are being scrutinised by professional associations and government authorities. Whilst there is a need for professional accountability and standards, the definition of professional competence and its standard measurement has been a matter of debate over the past decade with varying perspectives from stakeholders in governments, workplaces and academia (Beckett, 2004; Darling-Hammond, 1997; Eraut, 2004; Friedman, Durkin, Phillips, & Davis, 2000). Within a performative framework, the onus shifts towards workers to verify their competence in an observable way (Barnett, 2000; Usher & Edwards, 1994). Observable, measurable professional skills may be valued over more ephemeral qualities such as empathy.

A prevailing view in this regulation is that there is a stage-based progression in competence from novice to expert (Dreyfus & Dreyfus, 1986). The assumption that through continuing learning professionals will maintain competence and develop expertise is the basis on which much current PD is predicated. This assumption is also implicit in current moves towards the requirement of mandatory PD for ongoing registration in many professions. There is increasing awareness however that competence and expertise are context dependent (Beckett & Hager, 2002; Glazer & Hannafin, 2006). That development occurs is not in question; whether it is stage based and linear has been challenged by those who acknowledge its situated nature (Dall'Alba & Sandberg, 2006). Professionals develop competence in different ways depending on the context of their practice and their understanding of that practice.

A question of importance here is what role does PD play in the maintenance of competence and development of expertise? Whether professional standards primarily foster continuing learning of professionals, maintain their competency, or regulate and deliver outcomes is debatable (Sachs, 2003). What is clear is that there are varying perspectives about the value and purpose of PD from stakeholders (Cervero, 2000; S. Wilson & Berne, 1999). In addition, there is increasing debate about tensions between the performative focus on legitimate knowledge in PD and the value of CPL to the professional and his or her practice (Brockbank et al., 2002). The current pressure towards the instrumentalization of learning for efficiency purposes promotes a narrow and dangerous perspective (Rhodes & Garrick, 2000).

Uncertainty Related to Change and Complexity. In addition to the moves towards certainty, uncertainty has been identified as a feature of the current workplace. Regardless of how these features are related to each other, it is widely acknowledged that both are related to

global changes (Weil, 1999). Change has always been part of being human, but the increasing pace and breadth of the current “rapid and sweeping” change has been commented on in relation to the need to keep learning (Knapper & Cropley, 2000). Uncertainty and complexity, rather than change per se, has been highlighted as the crux of difficulties professionals face (Barnett, 2004).

In higher education, Ronald Barnett (1999, p.40) uses the term *supercomplexity* to describe the current working context as “multiple, conflicting and ever-emerging frames of understanding and action” that may challenge current assumptions and beliefs. In a similar vein, the working environment for teachers has been described as characterized by complexity and uncertainty (Campbell, 2007; Fullan, 2007; Hargreaves, 2003). Social researchers have also commented on a perceived acceleration of time and compression of space in life today with a focus on immediate action and short response times at work (Giddens, 2002). The perceived lack of time and increased complexity has consequences for CPL (Hargreaves, 1994).

Increasing pressures in the workplace referred to so far have been described as part of the “intensification of work” (Burchell, Ladipo, & Wilkinson, 2002). It has been argued that these pressures on the time and energies of workers act to minimise resistance to change and the ability of workers to proactively act to alter their situation (Davies, 2003). Research has shown that workplace culture can act powerfully to foster or deter continuing learning (Billett, Fenwick, & Somerville, 2006). For example, established hierarchies in some workplaces may view learning in terms of an apprenticeship where certain skills should be learnt, thereby discouraging practitioners from critically evaluating their practice (Richardson, 1999).

Change and complexity in the workplace, together with increasing regulation and work intensification has led to a significant amount of research about the way work interacts with other features of people’s lives. The tenuous act of balancing work and home demands has been referred to as a “collision” between work and family life (Hochschild, 1997; Pocock, 2003). Such a pressured environment impacts on the time and space available to reflect on and discuss work. Not only does the contemporary working context impose challenges related to balancing time and energy for professionals, it may also challenge perceptions of self. There are complex interconnections in western society between learning, work and people’s identities (Alvesson, 2004; Billett & Somerville, 2004; Rhodes & Scheeres, 2004; Wenger, 1998). Workplace learning is implicated in the continuing construction of the self (Beckett, 2004). But such construction may be subverted by attempts to align worker’s identities with organizational goals (Garrick & Usher, 2000).

In this changing climate continuing learning may impose pressure on professionals to make significant shifts in their understanding of professional identity as well as professional practice. Teachers, for example, have been called on to move from teacher as instructor to teacher as a learning facilitator, whilst dealing with increasing attendant social and health issues of students (Rodrigues, 2005). Challenges to underlying assumptions involved in adapting to significant change in practice may lead to an “implicit rejection of the worth and value of the rest of a teacher’s repertoire, and of the life and the person that has been invested in building it up” (Hargreaves, 1994, p.61). In other words, PL that involves a challenge to change understanding may challenge a “professional way of being” (Dall’Alba, 2004). Such changing, complex and uncertain conditions may be seen as overwhelming by professionals involved and certainly impact on their learning.

As a feature of society and part of the context for professional practice and learning, both uncertainty of practice and a quest for certainty from regulators are unlikely to change in the near future. Awareness of such contextual issues is important in understanding authentic PL. In most

professions, the impact of these complex contextual concerns on learning is not widely discussed, let alone challenged by researchers or practitioners, as the scan in section one demonstrates. Exceptions occur in teaching. For example, in recent empirical research Judith Sandholtz and Samantha Scribner (2006) investigated PD programs for teachers that were designed using the consensus principles of effective PL discussed earlier. Despite this careful design, they found that the bureaucratic professional context “paradoxically undermined and contradicted these principles” (p.1104). Moving to focus on the holistic experience of authentic PL rather than important factors in programs to develop professionals gives an opportunity to investigate implications of contextual features such as certainty and uncertainty for learning.

What We Know About How Professionals Learn

Against this background, what is known about how professionals learn? Dewey (1933) has had a profound influence on the understanding of and research undertaken into learning. Dewey’s conception of learning was holistic, maintaining it was untenable to separate thought from experience. He also maintained that the learner was integral to the experience of learning, rather than a “spectator” looking on to experience (Garrison, 2006, p.20). Through his conceptions of “creative action” and “theory of inquiry,” our understanding of the centrality of experience, reflection and context in learning has evolved (Boyles, 2006; Schön, 1995). Educational researchers currently support the notion that PL is active, situated, social and constructed (Putnam & Borko, 2000). Research findings have indicated that professionals learn through practice experience, that reflection has a valuable role in learning that requires change, and that such learning is contextually mediated (Day, 1999; Garet et al., 2001; Lieberman & Miller, 2001). To examine how this research informs our understanding of PL, it is worth retracing the origins of, and evidence for, these assumptions.

Learning Through Experience. What does learning through experience mean for a professional? Research into experiential learning, investigating the way that learners make sense of experience, has been influential in understanding PL. Yet there is little systematic empirical evidence that examines how professionals learn from experience (S. Wilson & Berne, 1999). Attempts to understand experiential learning often draw upon Barbara Rogoff’s concept of microgenetic development as “moment-by-moment” learning (1990) or variations of the “experiential learning cycle” from Kurt Lewin’s work (1951/1997).

Researchers such as Stephen Billett (2001a, b) have built upon Rogoff’s work within a Vygotskyian framework to investigate how engagement in everyday practice at work affords varying learning experiences. In other words, the workplace can either support or hinder PL. He and other researchers have highlighted strategies for supporting learning at work, such as staged or scaffolded participation involving mentoring or modelling (Billett, 2001a; Brockbank & McGill, 2006; Gold, 2002; Hampton, Rhodes, & Stokes, 2004). Yet time or social constraints at work may limit participation or interaction that supports learning (Ball & Cohen, 1999; Sandholtz & Scribner, 2006). In addition, workplaces may afford more value to the learning and development of some practices than others (Wenger, 1998). For teachers, for example, the ability to engage and challenge may be valued in some contexts, whereas the ability to spend time quietly listening is important in others.

Lave and Wenger’s (1991) influential research also built upon the concept of learning as a socio-cultural experience. Their concept of “communities of practice,” describing how learning occurs through social interaction, has been widely embraced within the PL literature but is often

accepted uncritically. Typically, use of this concept pays scant attention to inherent power structures in organizations (Fox, 2000) or that workers are often involved in multiple, changing groupings of people (Boud & Middleton, 2003). In some management discourses the original concept has been diluted to glib recipes for project teams (e.g. Lesser & Storck, 2001; McDermott, 1999). The social, situated nature of PL is widely referred to in the literature (Borko, 2004; Burbank & Kauchak, 2003; Garet et al., 2001; Stoll et al., 2006). Yet, for many professionals, workplace learning is still predicated on individual cognitive effort; as individual learning contracts in staff training or performance reviews attest.

The second seminal influence on our understanding of learning from experience is influenced by understanding of the experiential learning cycle, where learning is described as a cyclic process involving active experience, observation and reflection, formulation of concepts, and applying and testing these in practice (Kolb, 1984). Such models of experiential learning have been critiqued as simplistic in their conception of reflection as separate from action, and their lack of attention to context (Boud, Cohen, & Walker, 1993; Fenwick, 2001a; Jarvis & Parker, 2005; Usher et al., 1997). Nevertheless, variations of this model have influenced innovative pedagogical practices in higher education, workplace learning and PD, with a focus on active engagement of the learner with experience. These practices are often described as action learning or action research (Ariizumi, 2005; Dilworth & Willis, 2003; Smith & O'Neil, 2003a, 2003b). Both strategies are based on a cyclic and iterative approach that involves some form of planning, action, evaluation and reflection (Carr & Kemmis, 1986; Reason & Bradbury, 2001; Sankaran, Dick, Passfield, & Swepson, 2001). Both are ways of structuring active engagement with experience, whilst accounting for the importance of context, dialogue and collaboration. Both have been proposed as effective strategies for supporting authentic PL, especially where social change or improvement is a desired outcome (Macintyre, 2000; McGill & Brockbank, 2004; Murrell, 2001; Walker, 2001). These strategies highlight the importance of reflection as well as active participation in PL.

Learning From Reflective Action. In educational research, reflection has been considered integral to learning, once again since Dewey's (1933) contributions. It was Schön (1983, 1987) however, who highlighted the notion of reflection as central to professional practice. Subsequently Schön's work has had significant impact on professional education across disciplines with generation of a substantial literature on the value of reflective practice in learning (e.g. Cranton, 1997; Moon, 1999; Pollard, 2002; Ruth-Sahd, 2003; Tripp, 1993).

A salient feature linking Schön's reflective professional practice and the proponents of learning from experience just mentioned is the concept that action and reflection are linked in ongoing PL. David Boud and colleagues (Boud, Keogh, & Walker, 1985, p.7) argue that active engagement with experience is not sufficient and that it is reflection that transforms experience into learning; with reflection described as "an active process of exploration and discovery". A limitation of experiential or active learning cycles described above is the separation of reflection and action in learning. Jack Mezirow's (1990) term *reflective action* stresses this interaction as well as highlighting that reflection in learning can be a purposeful and active process leading to change.

In the research literature, reflection is used to describe a range of activities, from individual contemplation to vigorous critical dialogue between people. In professional education, an "ability to critically reflect" is a learning objective of many courses, yet there is confusion and empty rhetoric about the term "critical reflection" and what being a reflective practitioner entails

(Clouder, 2000; Smyth, 1989; Tomlinson, 1999). Many researchers have attempted to clarify the ambiguity surrounding reflection by describing different levels, based on empirical research and theoretical analysis (Brockbank et al., 2002; Day, 1993; van Manen, 1977). Some important insights for learning have been gained from descriptions of reflection levels, but as disagreement persists a better way may be to describe different functions of reflection. Basic functions of reflection have been described as instrumental (e.g. planning or analytical problem solving), whereas for reflection to have a critical function, questioning and challenging of assumptions needs to occur (e.g. about self, others, work or ethical issues). Indeed Dewey maintained that genuine thinking begins “only when there is a tendency to doubt” (Garrison, 2006, p.3).

The value of critical reflection in CPL is the possibility of transformative change for the learner and those with whom they are engaged, through questioning of assumptions that underlie habitual patterns of thought and action. Mezirow (1990, p.18) coined the phrase *transformative learning* to refer to reflective learning that involves “reassessing the presuppositions on which our beliefs are based and acting on insights derived from the transformed meaning perspective that results”. Through such transformative change learners may conceive aspects of their world or themselves differently, allowing them to reinterpret experience from a new perspective and act to change situations (Brookfield, 1987; Freire, 1974; Murrell, 2001). Challenging assumptions involves conscious awareness of them, however, as they are usually taken-for-granted. In fact Stephen Brookfield (1995) maintains reflection begins by “hunting assumptions”.

Learning Mediated By Context. The possibility of challenging assumptions through reflective action in PL is mediated by context. Context is “perhaps the single most important influence on reflection and learning,” but is rarely examined in any depth in research (Boud & Walker, 1998, p.196). Yet, learning always occurs in a context, as has been highlighted by the range of research into the social, situated nature of learning discussed so far.

Context implies more than the obvious physical locations and structures, and even more than social interactions with communities of practice. It includes implicit workplace expectations hidden as discourses. Different professions and organizations have their own discourses as evidenced by shared jargon, behaviour, practices and expectations (Gee, 1990). Such discourses identify a professional as an insider within a group, but also act to exclude others; determining what is valued, what counts as legitimate knowledge and whose decisions are privileged (M. W. Apple, 2000; Bourdieu, Passeron, & Saint Martin, 1994; Rhodes, 2000; Stevenson, 1997). Boud and Walker (1998) argue that because context, both broad and local, permeates every aspect of learning, it is invisible on a daily basis and taken-for-granted. Thus questioning the context for learning is difficult as professionals (including research and academic professionals) are socialized into certain ways of thinking and acting. There is a body of research describing how socialization shapes professionals through legitimizing certain knowledge, attitudes and practices as the norm (Hunter et al., 2007; Luke, 2003; Viskovic, 2006). Such socialization shapes professional ways of being and learning through discourse “imbued with power relations which impact on how people are defined and granted or not granted voice, resources and decision-making powers” (Brockbank et al., 2002, p.7).

Within most professions, the individual and his or her knowledge and practice has been the focus of research into PL, albeit with recent recognition of the importance of community and context. There is limited debate about the normalization of professional knowledge and practices through organizational and disciplinary discourses (Horsfall et al., 2001). The voice of critique about links between power and knowledge that is raised in robust debate in the teaching

profession (e.g. M. Apple, 1999; Davies, 2003; Oakes et al., 2006) is only rarely heard in others (e.g. Trede, Higgs, Jones, & Edwards, 2003).

There is still much to understand about the lived experience of CPL. In summarizing section 2, research findings have led to a general consensus that professionals learn from experience and that learning is ongoing through active engagement in practice. Research also indicates that the changing contemporary context may create tensions and dilemmas for professionals learning at work. It is accepted that critical reflection has the potential to powerfully shape learning, yet how to support transformative learning remains poorly understood. We need to understand more about ways of supporting critical inquiry amongst communities of practitioners that allow awareness and disruption of taken-for-granted discourses in practice. The range of such inquiry could include questioning the forces of performativity and professional socialisation, and issues surrounding authentic questions of social importance for students, patients and clients of professionals.

Section 3: Arguing for a Paradigm Shift in Professional Development

Summarizing the Argument

In arguing for a shift in discourse and focus, from how best to deliver programs to “develop” professionals, to seeking insights from the authentic experience of professionals as they learn, this article has reviewed a considerable range of research. Section one considered the breadth of relevant research from a number of different areas of educational inquiry, arguing that although some innovative PD practices drew from across these areas, a significant proportion did not. The scan of current PD literature was not meant to be definitive, its purpose being illustrative. The scan did highlight that in professions other than teaching, and to some extent health, notions of PD were more traditionally bound in didactic practices. Moreover, it indicated a considerable focus on PD programs and their evaluation, perhaps understandable in the contemporary climate of economic accountability. This was in contrast to significantly fewer articles critically inquiring into the current, situated experience of PL.

In contrast to the breadth of research covered in section 1, section 2 focused on depth. It examined research from the past two decades that has been influential in shaping our current understanding of PL as actively constructed through practice. As researchers, it is fruitful to revisit and reflect on the origins of established research, especially the assumptions on which they are based. The argument was made that although this research had led to a number of innovative approaches to supporting PL, a surprisingly high number of PD programs, as well as research into PD, perpetuated discredited notions. The implicit assumptions underlying many PD programs and research is that knowledge can be transferred to practitioners’ minds to be then enacted in practices, and that learning can be mandated, if not through attendance, then certainly through engagement in PD programs. Such assumptions are problematic, limiting critical inquiry and perpetuating the status quo.

There are two components to the argument for a paradigm shift made in this article. First, I argue for a simple yet potent shift in terminology around supporting and shaping the continuing learning of professionals. As argued at the end of section one, changing from development to learning (PD to CPL) has potentially powerful implications. Words are more than labels, carrying linguistic weight in the form of hidden discourses embedded within each term (Klein, 2001). Development of professionals implies a deficiency discourse, where professionals are incapable ingénues needing authoritative shepherding, akin to notions of engagement with third-

world communities. This discourse is not congruent with a notion of professionals as engaged, agentic individuals, capable of self-directed learning.

Second, I argue for more situated, holistic research that seeks to understand the authentic lived experience of CPL from the perspective of professionals working in the contemporary context, with insights developed to enhance support for professionals as they learn. If we accept that professional knowing is embodied, contextual and embedded in practice; that the change of learning occurs through practice experience and reflective action within contexts that may pose dilemmas; that CPL is situated, social and constructed; then research into CPL and support for CPL should reflect these assumptions, or at least acknowledge the difficulties and limitations in researching such experience. Apart from innovative examples, only lip service is paid to these notions in many PD programs, with a lack of congruence between what we say we understand learning to be and how we seek to support it.

Investigating the Experience of Professional Learning

One way to research authentic PL that is congruent with the seminal research described in this article is to conceptualize it as embedded and constructed in the experience of being a professional in practice. Here practice is not a situation separate from the professional, but a social, dynamic and integral part of being a professional working in the current context. Such a conceptualisation is congruent with many qualitative research approaches involving an holistic socio-cultural orientation.

As an example of how such a research conceptualization can lead to insights about authentic PL, I draw briefly from my own research, details of which are reported elsewhere (Webster-Wright, 2010). A key finding was the identification of a significant dissonance between the reality of participants' experiences of learning and the rhetoric of stakeholders' expectations about PD. Much stakeholder rhetoric around PD focuses on professional responsibilities with respect to standards, accountability, efficiency and evidence-based outcomes (e.g. Kelleher, 2003; Van Achterberg, et al., 2006). Participants in my study were enthusiastic learners who took these professional responsibilities seriously, but considered their continuing learning to be richer and more complex than this narrow PD interpretation. In validating these findings as part of this study, other professionals (teachers, engineers and social workers) corroborated with similar experiences.

Dissonance around conceptions of PD has also been reported in a large research project undertaken by Andrew Friedman and Mary Phillips (2004). The authors were seeking to clarify confusion surrounding stakeholders' conceptions of PD. This empirical, mixed methodological study involved a survey of professional associations throughout the UK, in addition to focus groups and interviews with individual professionals. Professionals described most PD as "training" or "keeping-up-to-date". In addition, many of those interviewed expressed aversion to the usual framework of PD programs which they saw as part of a drive to regulate and structure professional practice (p.367). Professional associations described the role of PD in supporting the maintenance of professional standards and competence, but they also assumed that PD was about lifelong learning. Dissonance was noted between professionals and other stakeholders in that the professionals did not equate PD with continuing to learn. Professionals in my study also described many PD programs as "next to useless," because they subsequently "forgot half" of what they had learnt, and described much PD as "keeping up-to-date". It was only when the participants in my study were asked to describe situations where they *had* actually learnt that the rich, diverse descriptions of authentic PL emerged.

The point I wish to stress here is that in primarily focusing on improving PD programs to enhance learning, we miss the opportunity to develop insights found when we listen to professionals describing how they learn. Listening to descriptions of experiences of learning is different, incidentally, from asking professionals to choose which PD activities they find most useful, as often occurs when attempts are made to engage professionals in PD research.

Although there may be a need for education to introduce research findings to practice, mandatory PD to monitor professional standards, or staff training to implement organizational changes, these interventions should not be confused with authentic PL. Learning may, or may not, occur through such activities. Yet the rhetoric of PD from stakeholders often mistakenly assumes that PD and PL are the same. The basic premise of this assumption, that well-designed PD programs will lead to PL and improvements in practice, is rarely critically examined.

Throughout this article I have argued against categorization of different learning experiences. Continuing to learn, as described by participants in my research, included a broad range of experiences, as diverse as attending a course, talking informally with colleagues or thinking about difficult workplace dilemmas at home. Participants described learning through formal PD activities as well as informal everyday learning; through learning to work with others as well as learning about specific professional skills. Continuing to learn was experienced in a holistic way rather than as differentiated and well-defined factors that can be separated. Interestingly such a range of diverse learning experiences mirror Dewey's (1927) thoughts about the value of a broad base for knowledge construction in social inquiry, through integration of theory, social practice and everyday lived experience (for further discussion, see Oakes & Rogers, 2007).

Other researchers are exploring interesting ways to meaningfully represent and understand situated PL experiences. There are examples of recent research, both empirical and theoretical, that stress the discourse of learning rather than development, highlighting professionals' individual agency in directing their learning. Some refer to learning in contexts other than professional practice, but employ frameworks that may be useful in reframing PD.

For example, Nicky Solomon and colleagues (2006), in their examination of the nexus between social interactions and work activities, discuss the "in-between" nature of learning spaces in a way that seeks to avoid simplistic dichotomous divisions in analysis. Cathrine Fowler and Alison Lee (2007) argue, with examples from their research, for a more complex, embodied, cultural and relational conceptualization to understand and support learning in community nursing. Although the focus of Stephen Billett's (2008) recent research is vocational, he details the way that individuals' socio-cultural experiences direct their agentic interaction with their working context, thereby shaping how and what they learn. In higher education, Dall'Alba and Barnacle (2007) argue that professional education should move from its current epistemological focus on learning to integrate ontological perspectives of learning through engaging students, as whole people, in their "knowing, acting and being." A similar argument could be made for supporting CPL. As differing professional ways of being shape experiences of PL, it can be argued that authentic PL is as much about ontology (who the professional is) as it is about epistemology (what the professional knows). (See also Dall'Alba, 2005). Theoretical frameworks such as these attempt to illuminate lived experience, so that through holistic, situated research perspectives we can attempt to *understand* more about the experience of CPL from the unique perspective of professionals themselves.

Implications for Enhancing Support for Professional Learning

Reframing PD is not merely a theoretical exercise. Dewey considered the value of theoretical conceptualization as a constructive process that assists understanding and guides creative action (Garrison, 2006). It is important that researchers and those who support professionals are cognisant of the realities of authentic PL so that innovative ways of supporting professionals as they learn can be encouraged.

Although PL can't be controlled, in that no one can make another person learn, professionals can be supported to continue to learn in their own authentic way, whilst taking into account the expectations of their working contexts. This balance between accountability and agency is not only an issue in learning, but also of importance in other areas of contemporary professional life (Borko, Liston, & Whitcomb, 2007). This balance has similarly been framed as between supporting community and competence in PL (Lieberman & Miller, 2008).

In seeking a way forward to support professionals in their continuing learning, guidelines are required that are congruent with professionals' authentic experiences of learning, yet cognisant of the realities of the workplace with respect to professional responsibilities. Constructive strategies need to be developed to enable change from the current practice of delivering PD to that of supporting authentic PL.

As discussed in section 2, the impact of the current context of professional regulation on learning is significant. Attempts to regulate practice and maintain standards through PD are likely to increase, placing serious pressure on accountability measures. Thus learning activities amenable to measurable outcomes are more likely to be officially supported and their research and evaluation to be funded. Yet measurement of activities and outcomes does not necessarily equate with learning. Learning involves meaning making (Katz et al., 2005), a quality not always amenable to measurement (Biesta, 2007). If the agentic roles of professionals in shaping their learning is to be taken seriously, then a framework of support needs to account for this whilst working within contextual constraints. Exploring this balance is a work in progress. This paper does not purport to provide answers to this dilemma, merely argues that understanding authentic PL can form the starting point, towards an authentic PL framework for support.

Such a framework needs not only to support professionals as they learn, but also find ways to encourage a spirit of critical inquiry where professionals can gain insight into their own learning and the assumptions they hold about their practice. In collaboration with stakeholders in areas such as academia and the community, critical inquiry can facilitate transformative learning. Such learning has the potential to not only alter ways of being a professional (Dall'Alba, 2005; Billett & Somerville, 2004), but also effect positive social change and improvement (Hyland & Meacham, 2004; Oakes & Rogers, 2007).

I have already drawn on McWilliam's (2002) analogy between professional development and third world community development. In extending this analogy, it is worth noting that small scale interventions led by local communities, but supported by outside agencies, have been demonstrated to be highly successful, in comparison to the failure of many blanket one-size fits all programs of aid (Hickey & Mohan, 2004). In a similar vein, local action research projects, led by practitioners in collaboration with community members and framed around issues of authentic social concern, are emerging as a useful framework for supporting authentic PL. For example, Jeannie Oakes and John Rogers (2007) describe their notion of "learning power" with respect to their work with teachers, students and communities, collaborating to address issues of social justice, inequality and diversity. They describe how students (and teachers) together "learn about power, explore the power of learning, and learn to be powerful".

Other examples of socially important forms of community-based PL, engaging with issues of social inequality, are emerging in urban based teaching reform. Nora Hyland and Susan Noffke (2005) describe how action research projects have not only enabled them to support the authentic PL of teachers, but also led them to question and develop “new understandings” about their own practice. Indeed, it behoves all of us as educational researchers to reflect on our own learning and the assumptions we bring to our practice of research (see also Solomon, Boud, Leontios, & Staron, 2001).

Future Directions for Research into Professional Learning

The importance of continuing learning, like many areas of education, is recognized across professions and nationalities as a truly global enterprise. In answering current calls for re-evaluation of PD, it is important that research from different fields of educational inquiry and across professions be encouraged. Such interdisciplinary collaboration not only allows important research findings to be shared, but is best placed to disrupt assumptions about PD practices and allow deeper understanding of the experience of learning to develop. There is currently a limited amount of research investigating similarities and differences of continuing learning across professions (e.g. Axford, 2005; Daley, 2001). Interdisciplinary, collaborative and critical research into learning is important, particularly when examining the potential for CPL to support the common social good (Sullivan, 1995).

Many research approaches have the capacity to enhance and advance understanding in this area, as Borko (2004) highlights, but the challenge posed in this article is to critically examine assumptions about PD when using any approach. To investigate the lived experience of learning as a professional rather than an aggregate of factors in developing the professional leads to a different understanding of continuing learning. I argue in this article that the current focus, discourse and implicit assumptions about PD contribute to a lack of change in PD practices. This article highlights a different conceptual framework for investigating PL as embedded within professional life. I argue for the value of focusing on learning rather than development, in a holistic rather than atomistic manner that is congruent with what we currently know about PL. Such a theoretical framework and empirical methodology allows the complexity of learning to be understood while issues about learning in the current context can be analysed.

The focus of current support for PL, on the development of knowledge and skills through the delivery of PD programs, tends to overlook the implications of both context and ontology in learning. In arguing for a shift in conceptualization and practice from development to learning, it is important to understand dilemmas in the current context for learning, and individual variability in professional ways of being that shape learning. In critiquing the assumptions and practice of PD, this article argues for a shift in the conceptualization of, and support for, learning; from continually developing professionals to supporting authentic PL.

Much of the research reported here reveals most professionals as enthusiastic learners who want to improve their practice. Let us listen to their experience and work to support, not hinder, their learning. Rather than deny, seek to control or standardize the complexity and diversity of professional learning experiences, let us accept, celebrate and develop insights from these experiences to support professionals as they continue to learn.

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References

- Alsop, A. (2000). *Continuing professional development: A guide for therapists*. Oxford: Blackwell Science.
- Alvesson, M. (2004). *Knowledge work and knowledge-intensive firms*. Oxford; New York: Oxford University Press.
- Antonacopoulou, E. (2004). The dynamics of reflexive practice: The relationship between learning and changing. In M. Reynolds & R. Vince (Eds.), *Organizing reflection* (pp. 47-64). Hampshire, UK; Burlington, VT: Ashgate.
- Apple, M. W. (1999). *Power, meaning, and identity: Essays in critical educational studies*. New York: P. Lang.
- Apple, M. W. (2000). *Official knowledge: Democratic education in a conservative age* (2nd ed.). New York: Routledge.
- Apple, M. W. (2001). *Educating the "right" way: Markets, standards, God, and inequality*. New York; London: RoutledgeFalmer.
- Apple, W. P., & Horace, H. S. I. (2006). An agent-based framework for personalized learning in continuing professional development. *International Journal of Distance Education Technologies*, 4(3), 48.
- Ariizumi, Y. (2005). *Five empowering principles of action research that lead to successful personal and professional development*. Lanham: University Press of America.
- Aubrey, R., & Cohen, P. M. (1995). *Working wisdom: Timeless skills and vanguard strategies for learning organizations*. San Francisco, CA: Jossey-Bass.
- Axford, B. (2005). Entering professional practice in the new work order: A study of undergraduate students and their induction into professional work. *The Australian Educational Researcher*, 32(2), 87-104.
- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 3-32). San Francisco, CA: Jossey-Bass.
- Barnett, R. (1999). Learning to work and working to learn. In D. Boud & J. Garrick (Eds.), *Understanding learning at work* (pp. 29-44). London: Routledge.
- Barnett, R. (2000). Working knowledge. In J. Garrick & C. Rhodes (Eds.), *Research and knowledge at work : perspectives, case-studies and innovative strategies* (pp. 15-31). London; New York: Routledge.
- Barnett, R. (2004). Learning for an unknown future. *Higher Education Research and Development*, 23(3), 247-260.
- Barr, H. (2000). Working together to learn together: Learning together to work together. *Journal of Interprofessional Care*, 14(2), 177-179.
- Barr, H., Koppel, I., Reeves, S., Hammick, M., & Freeth, D. (2005). *Effective interprofessional education: Argument, assumption and evidence*. Oxford: Blackwell.
- Beckett, D. (2004). Embodied competence and generic skill: The emergence of inferential understanding. *Educational Philosophy and Theory*, 36(5), 497-508.
- Beckett, D., & Hager, P. J. (2002). *Life, work, and learning: Practice in postmodernity*. London; New York: Routledge.
- Beijaard, D., Meijer, P., Morine-Dersheimer, G., & Tillema, H. (Eds.). (2005). *Teacher professional development in changing conditions*. Dordrecht: Springer.
- Benner, P., Tanner, C. A., & Chesla, C. A. (1996). *Expertise in nursing practice: Caring, clinical judgement and ethics*. New York: Springer.

- Biesta, G. (2007). Why "what works" won't work: Evidence-based practice and the democratic deficit in educational research. *Educational Theory*, 57(1), 1-22.
- Biggs, J. (2003). *Teaching for quality learning at university: What the student does* (2nd ed.). Philadelphia, PA: Open University Press.
- Billett, S. (2001a). *Learning in the workplace: Strategies for effective practice*. Crows Nest, N.S.W.: Allen & Unwin.
- Billett, S. (2001b). Learning through work: Workplace affordances and individual engagement. *Journal of Workplace Learning*, 13(5), 209-214.
- Billett, S. (2004). Learning through work: Workplace participatory practices. In H. Rainbird, A. Fuller & A. Munro (Eds.), *Workplace learning in context* (pp. 109-125). London; New York: Routledge.
- Billett, S. (2008). Subjectivity, learning and work: Sources and legacies. *Vocations and Learning*, 1(2), 149-171.
- Billett, S., Fenwick, T., & Somerville, M. (Eds.). (2006). *Work, subjectivity and learning: Understanding learning through working life*. Dordrecht, The Netherlands: Springer.
- Billett, S., & Somerville, M. (2004). Transformations at work: Identity and learning. *Studies in Continuing Education*, 26(2), 309-326.
- Block, A. A., Singh, J., Kanaris, A. M., & McGrath, B. P. (2007). Equipping our front-line managers: A national program for the professional development of registrars. *Medical Journal of Australia*, 186(7), S22.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.
- Borko, H., Liston, D., & Whitcomb, J. (2007). Conversations that renew. *Journal of Teacher Education*, 58(4), 263-268.
- Boud, D., Cohen, R., & Sampson, J. (Eds.). (2001). *Peer learning in higher education: Learning from and with each other*. London: Kogan Page.
- Boud, D., Cohen, R., & Walker, D. (Eds.). (1993). *Using experience for learning*. Buckingham, UK: Open University Press.
- Boud, D., Keogh, R., & Walker, D. (Eds.). (1985). *Reflection: Turning experience into learning*. London: Kogan Page; New York: Nichols Pub.
- Boud, D., & Middleton, H. (2003). Learning from others at work: Communities of practice and informal learning. *Journal of Workplace Learning*, 15(5), 194-202.
- Boud, D., & Solomon, N. (Eds.). (2001). *Work-based Learning: A new higher education?* Philadelphia, PA: Open University Press.
- Boud, D., & Walker, D. (1998). Promoting reflection in professional courses: The challenge of context. *Studies in Higher Education*, 23(2), 191-206.
- Bourdieu, P., Passeron, J. C., & Saint Martin, M. (1994). *Academic discourse: Linguistic misunderstanding and professorial power* (R. Teese, Trans.). Cambridge, England: Polity Press.
- Boyles, D. (2006). Dewey's epistemology: An argument for warranted assertions, knowing, and meaningful classroom practice. *Educational Theory*, 56(1), 57-68.
- Bringle, R. G., Phillips, M. A., & Hudson, M. (2004). *The measure of service learning: Research scales to assess student experiences*. Washington, DC: American Psychological Association.
- Brockbank, A., & McGill, I. (2006). *Facilitating reflective learning through mentoring and coaching*. London, Philadelphia, PA: Kogan Page.

- Brockbank, A., McGill, I., & Beech, N. (Eds.). (2002). *Reflective learning in practice*. Aldershot, Hants, UK; Burlington, VT: Gower.
- Brookfield, S. (1987). *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting*. San Francisco: Jossey-Bass.
- Brookfield, S. (1995). *Becoming a critically reflective teacher*. San Francisco, CA: Jossey-Bass.
- Brookfield, S. (2005). *The power of critical theory for adult learning and teaching*. Maidenhead: Open University Press.
- Brown, J. S. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42.
- Burbank, M. D., & Kauchak, D. (2003). An alternative model for professional development: Investigations into effective collaboration. *Teaching and Teacher Education*, 19, 499-514.
- Burchell, B. J., Ladipo, D., & Wilkinson, F. (Eds.). (2002). *Job insecurity and work intensification*. London: Routledge.
- Bury, T. J., & Mead, J. M. (Eds.). (1998). *Evidence-based healthcare: A practical guide for therapists*. Oxford; Boston: Butterworth Heinemann.
- Butin, D. W. (Ed.). (2005). *Service-learning in higher education: Critical issues and directions*. New York: Palgrave Macmillan.
- Butler, J., Scott, F., & Edwards, J. (2002). Evaluating organisational change: The role of ontology and epistemology. *Tamara: Journal of Critical Postmodern Organizational Science*, 2(2), 55-67.
- Campbell, E. (2007). Glimpses of uncertainty in teaching. *Curriculum Inquiry*, 37(1), 1-8.
- Carr, W., & Kemmis, S. (1986). *Becoming critical: Education, knowledge, and action research*. London; Philadelphia, PA: Falmer Press.
- Cervero, R. M. (2000). Trends and issues in continuing professional education. In V. W. Mott & B. J. Daley (Eds.), *Charting a course for continuing professional education: Reframing professional practice* (pp. 3-12). San Francisco, CA: Jossey-Bass.
- Cervero, R. M. (2001). Continuing professional education in transition, 1981-2000. *International Journal of Lifelong Education*, 20(1-2), 16-30.
- Cheville, J. (2005). Confronting the problem of embodiment. *International Journal of Qualitative Studies in Education*, 18(1), 85-107.
- Clandinin, D. J., & Connelly, F. M. (Eds.). (1995). *Teachers' professional knowledge landscapes*. New York: Teachers College Press.
- Clark, C. (Ed.). (2001). *Talking shop: Authentic conversation and teacher learning*. New York: Teachers College Press.
- Clouder, L. (2000). Reflective practice: Realising its potential. *Physiotherapy*, 86(10), 517-122.
- Coffield, F., Moseley, D., Hall, E., & Ecclestone, K. (2004). *Learning styles and pedagogy in post-16 learning: A systematic and critical review*. London: Learning & Skills Research Centre.
- Craig, C. (2006). Why is dissemination so difficult? The nature of teacher knowledge and the spread of curriculum reform. *American Educational Research Review*, 43(2), 257-293.
- Cranton, P. (2001). *Becoming an authentic teacher in higher education*. Malabar, FL: Krieger.
- Cranton, P. (Ed.). (1997). *Transformative learning in action: Insights from practice*. San Francisco, CA: Jossey-Bass.
- Daley, B. J. (2001). Learning and professional practice: A study of four professions. *Adult Education Quarterly*, 52(1), 39-54.

- Dall'Alba, G. (2004). Understanding professional practice: Investigations before and after an educational programme. *Studies in Higher Education*, 29(6), 679-692.
- Dall'Alba, G. (2005). Improving teaching: Enhancing ways of being university teachers. *Higher Education Research and Development*, 24(4), 361-372.
- Dall'Alba, G., & Barnacle, R. (2005). Embodied knowing in online environments. *Educational Philosophy and Theory*, 37(5), 719-744.
- Dall'Alba, G., & Barnacle, R. (2007). An ontological turn for higher education. *Studies in Higher Education*, 32(6), 679-691.
- Dall'Alba, G., & Sandberg, J. (1996). Educating for competence in professional practice. *Instructional Science*, 24, 411-437.
- Dall'Alba, G., & Sandberg, J. (2006). Unveiling professional development: A critical review of stage models. *Review of Educational Research*, 76(3), 383-412.
- Darling-Hammond, L. (1997). *The right to learn: A blueprint for creating schools that work*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L., & Snyder, J. (2000). Authentic assessment of teaching in context. *Teaching and Teacher Education*, 16, 523-545.
- Darling-Hammond, L., & Sykes, G. (Eds.). (1999). *Teaching as the learning profession: Handbook of policy and practice*. San Francisco, CA.: Jossey-Bass.
- Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies That Support Professional Development in an Era of Reform. *Phi Delta Kappan*, 76(8), 597-604.
- Davies, B. (2003). Death to critique and dissent? The politics and practices of new managerialism and of "evidence-based practice". *Gender and Education*, 15, 91-103.
- Day, C. (1993). Reflection: A necessary but not sufficient condition for professional development. *British Educational Research Journal*, 19(1), 83-92.
- Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. London: Falmer Press.
- Dewey, J. (1927). *The public and its problems*. London: Allen & Unwin.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston: Heath.
- Dilworth, R. L., & Willis, V. J. (2003). *Action learning: Images and pathways*. Malabar, FL: Krieger.
- Dreyfus, H. L., & Dreyfus, S. E. (1986). *Mind over machine: The power of human intuition and expertise in the era of the computer*. New York: Free Press.
- Duncan, C., Duff Cloutier, J., & Bailey, P. H. (2007). Concept analysis: The importance of differentiating the ontological focus. *Journal of Advanced Nursing*, 58(3), 293-300.
- Easterby-Smith, M., Crossan, M., & Nicolini, D. (2000). Organizational learning: Debates past, present and future. *Journal of Management Studies*, 37(6), 783-796.
- Eckstrom, E., Homer, L., & Bowen, J. (2006). Measuring outcomes of a one-minute preceptor faculty development workshop. *Journal of General Internal Medicine*, 21(5), 410.
- Eraut, M. (1994). *Developing professional knowledge and competence*. London: Falmer Press.
- Eraut, M. (2004). Informal learning in the workplace. *Studies in Continuing Education*, 26(2), 247-273.
- Fenwick, T. (2001a). Experiential learning: A theoretical critique from five perspectives. Retrieved 20/02/2006, from http://www.cete.org/acve/mp_fenwick_01.asp

- Fenwick, T. (Ed.). (2001b). *Sociocultural perspectives on learning through work*. San Francisco, CA: Jossey-Bass.
- Foucault, M. (1980). *Power/knowledge: Selected interviews and other writings, 1972-1977* (C. Gordon, Trans.). New York: Pantheon Books.
- Fowler, C., & Lee, A. (2007). Knowing how to know: Questioning "knowledge transfer" as a model for knowing and learning in health. *Studies in Continuing Education*, 29(2), 181-193.
- Fox, S. (2000). Communities of practice: Foucault and Actor-Network theory. *Journal of Management Studies*, 37(6), 853-867.
- Freidson, E. (2001). *Professionalism: The third logic*. Chicago: University of Chicago Press.
- Freire, P. (1974). *Education for critical consciousness*. London: Shead and Ward.
- Friedman, A., Durkin, C., Phillips, M., & Davis, K. (2000). *Continuing professional development in the UK: Policies and programmes*. Bristol, UK: Professional Associations Research Network.
- Friedman, A., & Phillips, M. (2004). Continuing professional development: Developing a vision. *Journal of Education and Work*, 17(3), 361-376.
- Fullan, M. (2003). *Change forces with a vengeance*. London; New York: RoutledgeFalmer.
- Fullan, M. (2007). *The new meaning of educational change* (4th ed.). New York: Teachers College Press.
- Gallego, M. A., Rueda, R., & Moll, L. C. (2005). Multilevel approaches to documenting change: Challenges in community-based educational research. *Teachers College Record*, 107(10), 2299-2325.
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.
- Garrick, J., & Clegg, S. (2000). Knowledge work and the new demands of learning. *Journal of Knowledge Management*, 4(4), 279.
- Garrick, J., & Rhodes, C. (2000a). Legitimising knowledge at work. In J. Garrick & C. Rhodes (Eds.), *Research and knowledge at work* (pp. 1-12). London; New York: Routledge.
- Garrick, J., & Rhodes, C. (Eds.). (2000b). *Research and knowledge at work: Perspectives, case-studies and innovative strategies*. London; New York: Routledge.
- Garrick, J., & Usher, R. (2000). Flexible learning, contemporary work and enterprising selves. *Electronic journal of sociology*, 5(1).
- Garrison, J. (2006). The "Permanent Deposit" of Hegelian thought in Dewey's theory of inquiry. *Educational Theory*, 56(1), 1-37.
- Gee, J. P. (1990). *Social linguistics and literacies: Ideology in discourses*. London; New York: Falmer Press.
- Giddens, A. (2002). *Runaway world: How globalisation is reshaping our lives* (2nd ed.). London: Profile.
- Giorgi, A. (1999). A phenomenological perspective on some phenomenographic results on learning. *Journal of Phenomenological Psychology*, 30(2), 68-93.
- Glazer, E. M., & Hannafin, M. J. (2006). The collaborative apprenticeship model: Situated professional development within school settings. *Teaching and Teacher Education*, 22(2), 179-193.
- Gold, S. (2002). Mentoring as a learning strategy: Framework for a mentoring program. *Action Learning and Action Research Journal*, 7(1), 29-39.

- Graham, G. (2006). Lifelong learning for engineers: a global perspective. *European Journal of Engineering Education*, 31(3), 273.
- Gravani, M. (2007). Unveiling professional learning: Shifting from the delivery of courses to an understanding of the processes. *Teaching and Teacher Education*, 23, 688-704.
- Hagar, P. (2004). Conceptions of learning and understanding learning at work. *Studies in Continuing Education*, 26(1), 3-17.
- Hampton, G., Rhodes, C., & Stokes, M. (2004). *A practical guide to mentoring, coaching and peer-networking: Teacher professional development in schools and colleges*. London, New York: Routledge.
- Hara, N. (2007). Information technology support for communities of practice: How public defenders learn about winning and losing in court. *Journal of the American Society for Information Science and Technology*, 58(1), 76-87.
- Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age*. London; New York: Cassell; Teachers College Press.
- Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York; London: Teachers College Press.
- Hargreaves, A. (Ed.). (1997). *Rethinking educational change with heart and mind*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Hargreaves, A., & Fullan, M. (2000). Mentoring in the new millennium. *Theory into Practice*, 39(1), 50-56.
- Hawley, W. D., & Valli, L. (1999). The essentials of effective professional development: A new consensus. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 127-150). San Francisco, CA: Jossey-Bass.
- Hayward, L., Priestley, M., & Young, M. (2004). Ruffling the calm of the ocean floor: Merging practice, policy and research in assessment in Scotland *Oxford Review of Education*, 30(3), 397-415.
- Helsing, D. (2007). Style of knowing regarding uncertainties. *Curriculum Inquiry*, 37(1), 33-70.
- Hickey, S., & Mohan, G. (Eds.). (2004). *Participation, from tyranny to transformation?: Exploring new approaches to participation in development*. London; New York: ZED Books; Palgrave Macmillan.
- Hicks, E., Bagg, R., Doyle, W., & Young, J., D. . (2007). Canadian accountants: Examining workplace learning. *Journal of Workplace Learning*, 19(2), 61.
- Higgs, J., & Titchen, A. (Eds.). (2001). *Practice knowledge and expertise in the health professions*. Boston: Butterworth-Heinemann.
- Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. Berkeley, CA: University of California Press.
- Hochschild, A. R. (1997). *The time bind: When work becomes home and home becomes work*. New York: Metropolitan Books.
- Hodkinson, H., & Hodkinson, P. (2005). Improving schoolteachers' workplace learning. *Research Papers in Education*, 20 (2), 109-131.
- Honey, P., & Mumford, A. (1992). *The manual of learning styles* (3rd. ed.). Maidenhead: UK: Peter Honey.
- Horsfall, D., Byrne-Armstrong, H., & Rothwell, R. (2001). Embodying knowledges: Challenging the theory/practice divide. In J. Higgs & A. Titchen (Eds.), *Professional practice in health, education and the creative arts* (pp. 90-102). Oxford: Blackwell Science UK.

- Hunter, A.-B., Laursen, S., & Seymour, E. (2007). Becoming a scientist: The role of undergraduate research in students' cognitive, personal, and professional development. *Science Education, 91*(1), 36.
- Hyland, N. E., & Meacham, S. (2004). Community knowledge-centred teacher education: A paradigm for socially just educational transformation. In J. L. Kincheloe, A. Bursztyrn & S. R. Steinberg (Eds.), *Teaching teachers: Building a quality school of urban education* (pp. 113-134). New York: Peter Lang.
- Hyland, N. E., & Noffke, S. E. (2005). Understanding diversity through social and community inquiry: An action-research study. *Journal of Teacher Education, 56*(4), 367-381.
- Imel, S., Gillen, M. A., & English, L. M. (2000). *Addressing the spiritual dimensions of adult learning: What educators can do*. San Francisco, CA: Jossey Bass.
- Ingham, J. (2006). *Strategic human capital management: Creating value through people*. Amsterdam; Boston: Butterworth-Heinemann.
- Jarvis, P. (2004). *Adult education and lifelong learning: Theory and practice* (3rd ed.). London: RoutledgeFalmer.
- Jarvis, P., & Parker, S. (Eds.). (2005). *Human learning: An holistic approach*. Milton Park, Abingdon, UK; New York, NY: Routledge Falmer.
- Jones, A. (2007). Looking over our shoulders: Critical thinking and ontological insecurity in higher education. *London Review of Education, 5*(3), 209-222.
- Katz, S., Sutherland, S., & Earl, L. (2005). Toward an evaluation habit of mind: Mapping the journey. *Teachers College Record, 107*(10), 2326-2350.
- Kelleher, J. (2003). A model for assessment-driven professional development. *Phi Delta Kappan, 84*(10), 751-762.
- Kezar, A. (2005). What do we mean by "learning" in the context of higher education. *New Directions for Higher Education, 131*, 49-59.
- Klein, J. T. (2001). *Transdisciplinarity: Joint problem solving among science, technology, and society: An effective way for managing complexity*. Basel; Boston: Birkhäuser Verlag.
- Knapper, C. K., & Cropley, A. J. (2000). *Lifelong learning in higher education* (3rd ed.). London: Kogan Page.
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (Rev. ed.). Wilton, CT; Chicago: Association Press ; Follett Pub. Co.
- Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, N.J: Prentice-Hall.
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to Western thought*. New York: Basic Books.
- Laursen, P. F. (2005). The authentic teacher. In D. Beijaard, P. Meijer, G. Morine-Dersheimer & H. Tillema (Eds.), *Teacher professional development in changing conditions* (pp. 199-212). Dordrecht: Springer.
- Lave, J. (1988). *Cognition in practice: Mind, mathematics, and culture in everyday life*. Cambridge; New York: Cambridge University Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lesser, E., & Storck, J. (2001). Communities of practice and organizational performance. *IBM Systems Journal, 40*(4), 831-842.
- Lewin, K. (1951/1997). *Resolving social conflicts and field theory in social science*. Washington, DC: American Psychological Association.

- Lieberman, A. (1995). Practices That Support Teacher Development. *Phi Delta Kappan*, 76(8), 591-596.
- Lieberman, A., & Grolnick, M. (1997). Networks, reform, and the professional development of teachers. In A. Hargreaves (Ed.), *Rethinking educational change with heart and mind* (pp. 192-215). Alexandria, Va.: Association for Supervision and Curriculum Development.
- Lieberman, A., & Miller, L. (Eds.). (2001). *Teachers caught in the action: Professional development that matters*. New York: Teachers College Press.
- Lieberman, A., & Miller, L. (Eds.). (2008). *Teachers in professional communities: Improving teaching and learning*. New York: Teachers College Press.
- Lingard, L., Garwood, K., Schryer, C., & Spafford, M. (2003). A certain art of uncertainty: Case presentation and the development of professional identity. *Social Science and Medicine*, 56(3), 603-617.
- Luke, H. (2003). *Medical education and sociology of the medical habitus: "It's not about the stethoscope"*. Dordrecht: Kluwer Academic.
- Lyotard, J.-F. (1984). *The postmodern condition: A report on knowledge*. Minneapolis: University of Minnesota Press.
- Macintyre, C. (2000). *The art of action research in the classroom*. London: David Fulton.
- Madden, S. J. (Ed.). (2000). *Service learning across the curriculum: Case applications in higher education*. Lanham, MD.: University Press of America.
- Mazmanian, P. (2005). Reform of continuing medical education in the United States. *Journal of Continuing Education in the Health Professions*, 25(3), 132-133.
- McDermott, R. (1999). Nurturing three-dimensional communities of practice: How to get the most out of human networks. *Knowledge Management Review*, 11.
- McGill, I., & Brockbank, A. (2004). *The action learning handbook: Powerful techniques for education, professional development and training*. London ; New York: RoutledgeFalmer.
- McRae, D., Ainsworth, G., Groves, R., Rowland, M., & Zbar, V. (2001). *PD 2000: A National Mapping of School Teacher Professional Development*. Canberra, AUS: Commonwealth Department of Education, Training and Youth Affairs.
- McWilliam, E. (2002). Against professional development. *Educational Philosophy and Theory*, 34(3), 289-299.
- Merleau-Ponty, M. (1945/2002). *Phenomenology of perception*. London; New York: Routledge.
- Mezirow, J. (Ed.). (1990). *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning*. San Francisco, CA: Jossey-Bass Publishers.
- Mezirow, J. (Ed.). (2000). *Learning as transformation: Critical perspectives on a theory in progress*. San Francisco, CA: Jossey-Bass.
- Mishra, P., & Koehler, M. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054.
- Moll, L. C. (Ed.). (1990). *Vygotsky and education: Instructional implications and applications of sociohistorical psychology*. Cambridge; New York; Melbourne: Cambridge University Press.
- Moon, J. A. (1999). *Reflection in learning and professional development: Theory and practice*. London: Kogan Page.
- Mott, V. W., & Daley, B. J. (Eds.). (2000). *Charting a course for continuing professional education: Reframing professional practice* (Vol. 86). San Francisco, CA: Jossey-Bass.

- Mullavey-O'Byrne, C., & West, S. (2001). Practising without certainty: Providing health care in an uncertain world. In J. Higgs & A. Titchen (Eds.), *Professional practice in health, education and the creative arts* (pp. 49-61). Oxford: Blackwell Science UK.
- Murrell, P. C. (2001). *The community teacher*. New York: Teachers College Press.
- Neumann, A. (2006). Professing passion: Emotion in scholarship of Professors at research universities. *American Educational Research Journal*, 43(3), 381-424.
- Noddings, N. (2002). *Educating moral people: A caring alternative to character education*. New York: Teachers College Press.
- Oakes, J., & Rogers, J. (2007). Radical change through radical means: Learning power. *Journal of Educational Change*, 8, 193-206.
- Oakes, J., Rogers, J., & Lipton, M. (2006). *Learning power: Organizing for education and justice*. New York: Teachers College Press.
- OECD. (1998a). *Human capital investment: An international comparison*. Paris: Organisation for Economic Co-operation and Development.
- OECD. (1998b). *Lifelong learning: A monitoring framework and trends in participation*. Paris: Organisation for Economic Co-operation and Development.
- Penz, K., L., & Bassendowski, S., L. (2006). Evidence-Based Nursing in Clinical Practice: Implications for Nurse Educators. *The Journal of Continuing Education in Nursing*, 37(6), 250.
- Pillay, H., & McCrindle, A. (2005). Distributed and relative nature of professional expertise. *Studies in Continuing Education*, 27(1), 67-88.
- Pocock, B. (2003). *The work/life collision: What work is doing to Australians and what to do about it*. Annandale, N.S.W.: Federation Press.
- Pollard, A. (2002). *Reflective teaching: Effective and evidence-informed professional practice*. London: Continuum.
- Putnam, R., & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 29(1), 4-15.
- Rainbird, H., Fuller, A., & Munro, A. (Eds.). (2004). *Workplace learning in context*. London: Routledge.
- Ramsden, P. (2003). *Learning to teach in higher education* (2nd ed.). London; New York: RoutledgeFalmer.
- Reason, P., & Bradbury, H. (Eds.). (2001). *Handbook of action research: Participative inquiry and practice*. London; Thousand Oaks, CA: Sage.
- Rhodes, C. (2000). 'Doing' knowledge at work; Dialogue, monologue and power in organisational learning. In J. Garrick & C. Rhodes (Eds.), *Research and knowledge at work : perspectives, case-studies and innovative strategies* (pp. 217-231). London; New York: Routledge.
- Rhodes, C., & Garrick, J. (2000). Inside the knowledge works: Reviewing the terrain. In J. Garrick & C. Rhodes (Eds.), *Research and knowledge at work: Perspectives, case-studies and innovative strategies* (pp. 271-277). London; New York: Routledge.
- Rhodes, C., & Scheeres, H. (2004). Developing people in organizations: Working (on) identity. *Studies in Continuing Education*, 26(2), 175-193.
- Richardson, B. (1999). Professional development: 2. Professional knowledge and situated learning in the workplace. *Physiotherapy*, 85(9), 467-474.

- Rodrigues, S. (Ed.). (2005). *International perspectives on teacher professional development: Changes influenced by politics, pedagogy and innovation*. New York: Nova Science Publishers.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York; Oxford: Oxford University Press.
- Rogoff, B. (1995). Observing sociocultural activity on three planes: Participatory appropriation, guided participation, and apprenticeship. In J. V. Wertsch, P. d. Rio & A. Alvarez (Eds.), *Sociocultural studies of mind* (pp. 139-164). Cambridge; New York: Cambridge University Press.
- Rothberg, H. N., & Erickson, G. S. (2005). *From knowledge to intelligence: Creating competitive advantage in the next economy*. Boston: Elsevier Butterworth-Heinemann.
- Ruth-Sahd, L. A. (2003). Reflective practice: A critical analysis of data-based studies and implications for nursing education. *Journal of Nursing Education*, 42(11), 488-497.
- Sachs, J. (2003). Teacher professional standards: Controlling or developing teachers? *Teachers and Teaching: Theory and Practice*, 9(2), 175-186.
- Sandholtz, J. H., & Scribner, S. P. (2006). The paradox of administrative control in fostering teacher professional development. *Teaching and Teacher Education*, 22, 1104-1117.
- Sankaran, S., Dick, B., Passfield, R., & Swepson, P. (Eds.). (2001). *Effective change management using action learning and action research: Concepts, frameworks, processes, applications*. Lismore, N.S.W.: Southern Cross University Press.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Aldershot, UK: Arena.
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA; London: Jossey-Bass.
- Schön, D. A. (1995). Knowing-in-action: The new scholarship requires a new epistemology. *Change*, 27(6), 27-35.
- Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization* (rev. ed.). New York: Doubleday/Currency.
- Sharoff, L. (2006). A qualitative study of how experienced certified holistic nurses learn to become competent practitioners. *Journal of Holistic Nursing*, 24(2), 116-124.
- Smith, P. A., & O'Neil, J. (2003a). A review of action learning literature 1994-2000: Part 1 Bibliography and comments. *Journal of Workplace Learning*, 15(2), 63-69.
- Smith, P. A., & O'Neil, J. (2003b). A review of action learning literature 1994-2000: Part 2 Signposts into the literature. *Journal of Workplace Learning*, 15(4), 154-166.
- Smyth, J. (1989). Developing and sustaining critical reflection in teacher education. *Journal of Teacher Education*, 2-9.
- Solomon, N. (1999). Culture and difference in workplace learning. In D. Boud & J. Garrick (Eds.), *Understanding learning at work* (pp. 119-131). London: Routledge.
- Solomon, N., Boud, D., Leontios, M., & Staron, M. (2001). Researchers are learners too: Collaboration in research on workplace learning. *Journal of Workplace Learning*, 13(7/8), 274-282.
- Solomon, N., Boud, D., & Rooney, D. (2006). The in-between: Exposing everyday learning at work. *International Journal of Lifelong Education*, 25(1), 3-13.
- Stevenson, J. (1997). Legitimate learning. *Australian and New Zealand Journal of Vocational Education Research*, 5(2), 77-96.

- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7, 221-258.
- Sullivan, W. M. (1995). *Work and integrity: The crisis and promise of professionalism in America*. New York: HarperCollins.
- Tierney, R. D. (2006). Changing practices: Influences on classroom assessment. *Assessment in Education*, 13(3), 239-264.
- Tomlinson, P. (1999). Conscious reflection and implicit learning in teacher preparation. Part 1: Recent light on an old issue. *Oxford Review of Education*, 25(3), 405-424.
- Trede, F., Higgs, J., Jones, M., & Edwards, I. (2003). Emancipatory practice: A model for physiotherapy practice? *Focus on Health Professional Education*, 5(2), 1-13.
- Tripp, D. (1993). *Critical incidents in teaching: Developing professional judgement*. London; New York: Routledge.
- Usher, R., Bryant, I., & Johnston, R. (1997). *Adult education and the postmodern challenge: Learning beyond the limits*. London; New York: Routledge.
- Usher, R., & Edwards, R. (1994). *Postmodernism and education*. London; New York: Routledge.
- Van Achterberg, T., Holleman, G., Van de Ven, M., Grypdonck, M. H. F., Eliens, A., & van Vliet, M. (2006). Promoting evidence-based practice: The roles and activities of professional nurses' associations. *Journal of Advanced Nursing*, 53(5), 605-612.
- Van Manen, M. (1977). Linking ways of knowing with ways of being practical. *Curriculum Inquiry*, 6(3), 205-228.
- Vandeweghe, R., & Varney, K. (2006). The evolution of a school-based study group. *Phi Delta Kappan*, 88(4), 282.
- Viskovic, A. (2006). Becoming a tertiary teacher: Learning in communities of practice. *Higher Education Research and Development*, 25(4), 323-339.
- Walker, M. (Ed.). (2001). *Reconstructing professionalism in university teaching: Teachers and learners in action*. Philadelphia, PA: Open University.
- Ward, C., & McCormack, B. (2000). Creating an adult learning culture through practice development. *Nurse Educ Today*, 20(4), 259-266.
- Webster-Wright, A. (2010). *Authentic professional learning: Making a difference through learning at work*. Dordrecht: Springer.
- Weil, S. (1999). Re-creating universities for 'Beyond the stable state': From 'Dearingsque' systematic control to Post-Dearing systematic learning and inquiry. *Systems Research and Behavioral Science*, 16(2), 171-194.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge; New York: Cambridge University Press.
- Willis, P., Smith, R., & Collins, E. (Eds.). (2000). *Being, seeking, telling: Expressive approaches to qualitative adult education research*. Flaxton, Qld.: Post Pressed.
- Wilson, A. (2000). Professional practice in the modern world. In V. W. Mott & B. J. Daley (Eds.), *Charting a course for continuing professional education: Reframing professional practice* (Vol. 86, pp. 71-79). San Francisco, CA: Jossey-Bass.
- Wilson, S., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, 24, 173-209.
- Wood, D. (2007). Teachers' learning communities: Catalyst for change or a new infrastructure for the status quo? *Teachers College Record*, 109(3), 699.

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