

PROFESSIONAL KNOWLEDGE “FROM THE FIELD”: ENACTING PROFESSIONAL LEARNING IN THE CONTEXTS OF PRACTICE

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ABSTRACT. Based on a qualitative case study that examined elementary teachers’ understandings of a professional development policy, we question the conceptual disconnection between professional learning and professional practices in some conceptualizations of professional learning communities. We analyse the research data using Actor-Network Theory and report that the teachers in the case study perceived a disconnection between the scenarios of professional knowledge creation and the scenarios of professional practice. Such disconnection is exacerbated due to an ambiguous treatment of the concept of professional practice in the policy documents that endorse the idea of *professional learning communities*. We conclude that a key element in the transformation of professional practices is the teacher’s awareness that his / her professional knowledge is enacted through his / her actions and practices, thereby concluding that professional learning is situated in the context of professional practices.

SAVOIR PROFESSIONNEL “DE TERRAIN”: IMPOSER LA FORMATION PROFESSIONNELLE DANS UN CONTEXTE PRATIQUE

RÉSUMÉ. Faisant suite à une étude de cas qualitative étudiant la compréhension d’enseignants du primaire à l’égard d’une politique de développement professionnel, nous questionnons la coupure conceptuelle existant entre la formation en milieu de travail et les pratiques professionnelles au cœur de certaines conceptualisations d’une communauté de formation professionnelle. Nous analysons les données de recherche en utilisant la Théorie de l’Acteur-Réseau. Nous révélons que les enseignants participant à l’étude de cas ont perçu une différence entre les scénarios de création de savoir professionnel et ceux de pratique professionnelle. Une telle coupure est exacerbée par l’utilisation ambiguë du concept de pratique professionnelle qui, dans les documents formulant les politiques, soutient l’idée de communautés professionnelles d’apprentissage. Nous en concluons qu’un élément-clé de la transformation des pratiques professionnelles réside dans la prise de conscience, par les enseignants, que leur savoir professionnel est activé à travers leurs actions et pratiques et est donc, au cœur de leurs pratique professionnelle.

In this article we aim to contribute to study of the relations among teacher's professional knowledge, teaching practices, and teacher learning. In a study conducted by Viczko (2009) on teachers' understandings of professional learning in rural Alberta, teachers reported a conceptual disconnection between their professional practices and the professional development initiatives put in place by their schools. We argue that the spatial and temporal disconnection that exists between the scenarios of professional knowledge creation and the scenarios of professional practice is problematic for professional development initiatives. We identify such disconnection in an approach to school improvement and reform that stresses teacher learning, namely, *professional learning communities*. This approach to school reform has been embraced by several jurisdictions in Canada, as evident in recent calls for school improvement through professional collaborative learning. Provincial policy documents in Alberta call for teachers and administrators to "continuously seek and share information and act on what they have learned . . . [concentrating their efforts] on improving their practice so that students can achieve the best possible results" (Alberta Commission on Learning, 2003, p. 37).

The above quote seems to suggest that professional learning in schools occurs in the context of collaborative teams and subsequently such knowledge is transferred to the context of classroom practices. Our analysis shows that embracing the conceptual distinction between scenarios of learning and scenarios of practice can lead researchers of professional learning to ask *how* to structure scenarios conducive to professional knowledge, instead of questioning *what* constitutes professional knowledge and practices in education. One such scenario has been provided by the creation of collaborative teams.

We tackle the second question by querying the assumption that the knowledge generated in collaborative groups impacts classroom practices. We support this contention by showing that there are sound theoretical challenges to the persistent conceptual separation between scenarios of knowledge creation and scenarios of professional practice.

The scholarship on teachers' professional knowledge has addressed the communitarian aspects of professional learning (Cochran-Smith & Lytle, 1993; 1999; Clandinin & Connelly, 1995; Connelly & Clandinin, 1999; Fenstermacher, 1994). However, we want to interrogate one specific approach to teachers' learning that has been endorsed with great enthusiasm by a large number of school jurisdictions and education policy-makers in Canada (Chambers, 2008; MacKay, 2007; Newfoundland and Labrador, 2008; Ontario Ministry of Education, 2007; Rubadeau, 2007; Saskatchewan Ministry of Education, 2008; 2007), that is, the idea of professional learning communities. Using an Actor-Network Theory perspective, we want to question the way professional practices and professional knowledge are conceptualized in this model. By doing so, we aim to investigate the ways in which teachers make sense of their own practices and knowledge.

PROFESSIONAL LEARNING COMMUNITIES AND THE POLICIES OF PROFESSIONAL DEVELOPMENT IN ALBERTA

In this section, we argue that the scholarship on professional development and particularly the literature on professional learning communities (PLCs) would benefit from interrogating the development of professional knowledge in schools. We exemplify our argument with some policies on professional development in the province of Alberta.

The term “professional learning community” has become commonplace in current school reform discourses (Alberta Commission on Learning, 2003; Alberta Education, 2006; Hord, 1997; Stoll et al., 2006; Williams, Brien, Sprague, & Sullivan, 2008). Nevertheless, Stoll and Louise (2007) reveal the ambiguity in the following widely accepted definition:

There is no universal definition of a professional learning community, but there is a consensus that you will know that one exists when you can see a group of teachers sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way. (p. 2)

Stoll and Louise (2007) propose their own definition based on an analysis of the terms that comprise the concept. According to their view, *professional* suggests that the knowledge held by the community is specialized and technical; such knowledge is oriented towards a “meet client needs” approach (p. 2). Professional knowledge fosters collective identity, commitment and a certain degree of control over practice and professional standards. According to Stoll and Louise, the word *learning* has been included because it signifies a collective effort towards a “common understanding of concepts and practices” (p. 3). The notion of *community* suggests an ethic of care focused on student learning: “the presence of professional community that is centred on student learning makes a significant difference to measurable student achievement. This is what gives the concept ‘legs’ to stand among other proposals for reform” (p. 3).

As stated by Stoll and Louise (2007), professional learning community is first and foremost a proposal for school reform that advocates for a conception of learning that brings about collective knowledge. Other formulations of the idea of professional learning communities follow the same line and propose the generation of collective knowledge as the means to achieve school reform. For example, Dufour (2004), and DuFour, DuFour, and Eaker (2008) proposed a model of professional learning communities that has gained widespread acceptance among schools in Canada and other countries. They define a professional learning community as educators working together in forms of collaboration and collective inquiry. Central to this approach is the assumption that “professional learning communities operate under the assumption that the key to improved learning for students is continuous, job-embedded learning for educators” (p. 14).

In DuFour et. al's (2008) model, school improvement is defined in terms of students' achievement; they indicate a positive correlation between teachers' learning and students' learning, and emphasize that teachers' learning occurs in the context of collaborative groups.

As noted in the introduction, the idea of professional learning communities has been enthusiastically embraced by several jurisdictions in Canada. In Alberta, the concept has been mentioned in several policy documents and nowadays forms part of the educational landscape in the province. We cite several examples below to show how the notion of professional learning communities has been fostered in the context of school reform in government policy documents. In doing so, we emphasize our quest in this paper to show that embracing the conceptual distinction between scenarios of learning and scenarios of practice leads to focusing on *how* to structure the scenarios conducive to professional knowledge instead of questioning *what* constitutes professional knowledge and practices in education.

At the provincial level, the Alberta government published several documents positioning teacher professional development as one key mechanism of school improvement and reform. To address capacity for teacher professional learning, the School Improvement Branch of Alberta Education published the policy document, *Improving Schools: Investing in our Future* (McEwen, 2006), providing a foundation for improving student learning and performance in schools. Linking staff development and student learning, teacher professional development was characterized as building teacher capacity for improving schools. Notions of professional development and professional learning communities were prevalent within this document as professional learning was characterized as "on-going, intentional and systemic" (p. 81).

With similar goals, the Alberta Initiative for School Improvement (AISI) aimed to improve student learning and performance through targeted funding that supported initiatives within the school jurisdiction's identified priorities. AISI funding was provided in three-year cycles to school authorities for specific local initiatives focused on improving student learning. Within the context of AISI, it was argued that teacher professional development builds capacity and influences teacher practice focused on student learning. This focus on student learning was positioned as leading to teacher inquiry and reflection, aimed at building teachers' capacity in knowledge and skills in the subject taught, pedagogical practices, and emerging technologies. Reflecting on the AISI experience, Parsons (2011) noted

during early AISI cycles, professional learning communities (PLCs) were in vogue. Although PLCs have waned, their attributes and goals live on in Alberta schools. Professional learning has grown as teachers and administrators exchange and act upon what they learn to address specific challenges. These actions enhance professional effectiveness and improve student learning. (p. 23)

Regarding the specific actions to address the educational challenges of each school, Alberta Education (2003) released a policy document requiring teachers to develop annual professional growth plans taking into consideration the educational plans of the school and the local school division. Since planning for student success is one of the characteristics of a professional learning community, the provincial requirement for professional growth plans was easily incorporated into the functioning of professional learning communities (Alberta Commission on Learning, 2003).

In October 2003, the Alberta Commission on Learning released *Every Child Learns, Every Child Succeeds* to the Minister of Education, detailing the findings of public consultations about education. In the section entitled *Excellent Teachers and School Leaders*, explicit recommendations were laid out to expand on professional development:

the vision for Alberta's schools involves every school operating as a professional learning community. This means teachers are actively engaged and involved in working together to continuously improve the outcomes for all students in the school.... For a professional learning community, teachers need experience and support in how to work collaboratively, share insights and ideas, and work as a team to achieve the best results in their schools. (p. 115)

In the report, the assertion was made that school-level control that focuses on student learning is needed in professional development for teachers, illustrating a direct relationship between “the content of staff development, the quality of staff development, and student achievement” (Reitzug, 2002, p. 241). In this way, teacher professional learning was characterized by the policy documents as locally driven, positioning teacher learning in communities as instrumental in producing knowledge to change practices that are explicitly linked to student achievement.

In the policy documents from Alberta Education, it is clear that professional learning for teachers is conceptualized as reflection and collaboration in collective settings. However, there is no understanding presented of how teachers' learning and practice should be linked. While scholars such as Cochran-Smith and Lytle (1999) have offered research to assert teacher knowledge as connected to practice, scarce attention have been paid to the link between teachers' learning and practice in the policy context, as evidenced by the policy framework in Alberta. How then should we understand the relationship between knowledge and practice in teachers' professional learning?

ACTOR-NETWORK THEORY, TEACHER PROFESSIONAL LEARNING, AND EDUCATIONAL REFORM

Fenwick (2010) has argued that an Actor-Network Theory analysis of school reform can offer concrete insights on how change processes happen within specific contexts of practice. In her view, artefacts and people interact in

ways that enact heterogeneous assemblages that are fluid, changing as people and artefacts exert influence on each other. A reform initiative can be seen as a process of struggle and negotiation among different actors that interact in the spaces of classrooms, schools, and districts. An Actor-Network Theory reading of school reform would view school change as the effect of assemblages interacting with each other. For example, Fenwick (2010) examined a case of large-scale reform initiative through the Alberta Initiative for School Improvement (AIS). In her account, AIS established itself as a “far reaching and durable network” (p. 108), comprised of teachers, administrators, and university professors linked through classroom materials, equipment, and websites. The AIS framework allowed schools to formulate and administer their own improvement initiatives as long as they pertained to the goal of student achievement. Fenwick showed how schools, universities, professional associations and government bodies generated dynamics that allowed them to interact with each other enacting the policy both at local and provincial levels. Speaking about these assemblages, Nespore (2002) said

The point is that we need to understand “school change” as at least partially about the ways school practices are made mobile, and what and how they connect as they move. What are the structures of connections or linkages? What materials are they made of? How do things change as they move? How do connections change with this movement? (pp. 367 – 368)

Nespore’s queries about these assemblages provide intriguing and salient points of conjuncture in the referenced case study. How are learning and practices assembled in the context of school reform? What are the linkages and connections between teacher professional learning and teacher practices? What materials are these connections made of? How do knowledge and practices change as they are moved between spaces? How do the connections between teacher learning and teaching practices change with this movement?

An Actor-Network Theory analysis of school reform initiatives focuses on the assemblage of interactions between actors as they are immersed in concrete situations bounded by cultural artefacts, other people, and social conventions. The practices that emerge within these assemblages enact the policy *in situ* creating a context for the reform initiative. However, according to Fenwick’s (2010) study, the reform is not external to the networked assemblages of government bodies, school districts, universities and professional associations. The reform is enacted, mobilized and spread out within these assemblages. In Fenwick’s view, Actor-Network Theory readings tend to shift from viewing “certain participants as ‘reformers’ and others as ‘contexts’ to understanding that all are part of materially heterogeneous networks that have unfolded geographically and historically and overlap and relate with one another” (Fenwick, 2010, p. 103). In Actor-Network Theory, knowledge is enacted and therefore cannot be separated from the practices in which it emerges.

In the next section, we will draw upon a case study of teacher professional learning in a school in Alberta, and examine how professional learning is conceptualized in policies and teachers' understandings of their own professional development. We will discuss the case study using an Actor-Network Theory perspective, we will draw some conclusions and then we will advance our own 'modest proposal.'

PROFESSIONAL LEARNING AT VALLEYVIEW SCHOOL

Valleyview School (the name has been changed to preserve anonymity) is a public Kindergarten to Grade 12 school in mid-eastern rural Alberta. Valleyview School staff consists of 18 teachers plus a principal and vice-principal and has an enrolment of 289 students. While the data presented in this paper is part of a larger study, the interview data was collected in 2009 over an eight-week period with eight elementary teacher participants. One male teacher and seven female teachers participated in the study; one was part-time and seven were full-time teachers.

The semi-structured interviews involved open-ended questions meant to provide opportunities for the teachers to describe the various aspects of their professional learning, the policies in the school, school district, and province that related to their professional learning, and the aspects of their professional learning which were meaningful and helpful to their overall teaching. The interviews lasted between 30 to 60 minutes. Additionally, given that most of the professional learning in the school occurs in "communities" or group settings, a focus group session was held with all of the research participants following the scheduled interview sessions, providing an opportunity for the teachers to talk about their professional learning and reflect on their colleagues' perspectives. The interviews began with some initial questions for the teachers to reflect on their professional development. While each teacher referred to his/her own experiences, there were some commonalities between how they spoke about professional learning. The interviews were transcribed and the data were analyzed for emerging themes in the teachers' understanding of their own professional learning. We have chosen to keep quotations lengthy so as to allow the reader a contextual engagement with the teachers' points of salience about what professional learning meant for them. Also, we wanted to preserve the teachers' terminology in order to offer a more lively account of their experiences. With respect to terminology, the teachers in this study referred to the events of professional learning in the school as professional development (PD).

In Valleyview school, PD activities were divided into three levels: school-division level PD, school level PD and individual teacher PD. The school-division level PD was planned by the school division PD Committee, consisting of teachers and division office staff. They operated on a three-year PD plan based on the

school division priority area, which in this case was assessment. The school division was currently on year two of this three-year cycle. The school level PD was largely delivered through embedded PD time with two-fold priorities; most of the PD time was devoted to assessment related activities at school level, while other sessions might involve in-service PD to timely relevant topics, for example, public health. Individual teacher PD was characterized as needs-based and was embedded in the teacher's growth plan. Most of the elementary teachers chose to work in groups during this time, focusing on addressing the school priorities.

In reflecting on the organizational aspects of teacher professional development, the teachers often referred to how they thought a group-oriented structure was conducive to their learning; in fact, group work was often the focus of PD in both the school and school district level. Furthermore, the teachers indicated that they often chose to work in a group format for their individualized PD time, although this was not a required structural arrangement. One teacher was clear on this arrangement as she began discussing the whole school PD time. She highlighted how the group-oriented activities in her individual PD time were the most effective PD she had experienced.

So the other PD days include sometimes the whole staff working on school goals, or we might have a guest speaker come in to talk to us about a topic.... So we have a variety of things to look at, but I'm finding the group work the most beneficial directly to my class for right now because it's what you wanted to work. It's what you feel that you need to have in your program. And the others are very helpful and they kind of give us the backbone and the background knowledge we need to accomplish these projects in our groups, so I think it's a good mix right now.

One group of interviewed teachers were working on a project that addressed the math priority area of the school division and the assessment priority area of the school. During the individual PD time, they chose to work as a group to find ways to write curriculum outcomes in "child-friendly language." This was identified as best practice in their school-level PD, and the teachers felt it was something tangible they could achieve in their individual PD time. In talking about this project, several teachers expressed their own and others' expectations that their learning during individual PD time was most beneficial because they chose to work collectively. Working with others in this capacity outside of teaching time resulted in a "constructive, organized day where we got something done and accomplished."

Another teacher echoed these sentiments when speaking about how the teachers were using ideas learned as a group in a specific workshop to change their teaching practices in the classroom: "Most of us are trying to work on our new math curriculum and work on the outcomes... we had a phenomenal guest speaker, Wendy Davidson, and we're trying to incorporate some of her ideas into our classrooms."

In talking about the same project, another teacher elaborated that working together in groups was a means for her to talk about and share strategies that could be used in classroom teaching. The idea that what they do in PD should be connected to their practice in the classroom was another key theme that emerged.

And now this year with our structured PD, the assessment is moving into things that are much more helpful, like where can you go to find rubrics that might help you plan a better rubric for your class. Where could you go to get “I Can” statements, which is really effective for my posters, right?

In talking about what effective PD meant to one teacher, she indicated that she found PD to be most relevant when it applied directly to her classroom teaching.

I guess it’s because, “Oh I can use that in my classroom. That’s a great idea. I’m going to write that down and I can start using that right away.” Some of them, again I’m just thinking of convention and the PD opportunities there. Some of them are the happy-go-lucky feel good about yourself sessions, which are good because you need that too. And some are the meat and potatoes, this is what you can do to teach this strategy, this is what you can do to teach this outcome. And when you have things like that it makes you go, “Ah-ha, I hadn’t thought of that.” It just makes it easier.

She later confirmed her belief in the importance of connecting her PD to practice. When asked what makes PD effective and meaningful, she focused on the connection to her own practice in the classroom.

I guess different things. Whether or not it makes your teaching job easier by, “This is a great technique in order to teach this outcome.” Or it makes your life easier as in, “This is a good planning strategy on how to plan to make sure that you’re encompassing all of these outcomes.”

Similarly, when asked to talk about a time in which PD was not effective or meaningful, one teacher expressed her frustration that the learning was not linked to her own practice.

We got [sic] some theory and sort of PowerPoint presentations on why we do PD. And, you know, we just kind of sat there for a while. And that was really frustrating for me. I wanted to see us get going on it, you know. Like everything that we believe, let’s do something about it. Let’s get going on it... We can’t just sit and say, “PD is good, we need PD. We want to be professional. We need to learn. We need to do this so the kids are better.” Okay, I agree with that. So what’s our plan to make that happen?

In talking about the school level PD time, another teacher indicated that effective PD was structured so that teachers could get something useful to use in the classroom, denoting a significance to applying what was learned in PD time outside of the classroom to practice in the classroom: “but then it’s just having that time to make use and practice.” Later, this teacher elaborated,

well, I think you have to try and make an effort to learn something that, hopefully that's something that you can concretely apply to your classroom, but if not at least maybe it's something that's given you kind of a nudge to think of something in a different way. Like the assessment thing, you know I didn't really get the idea of it, but then after you think that, "Well maybe there are things that I could be assessing differently or better?"

One theme that emerged from the teachers' discussions on professional development was their interest in connecting the professional development activities with their classroom practice. There was a particular emphasis on how the work on collaborative groups contributed to dealing with problems of practice. In particular, the teachers showed interest in the area of assessment, thereby reflecting the provincial move towards teachers' accountability in terms of student performance and achievement. In fact, one teacher talked about the professional development initiative in terms of the goals of reform, "it just seems like we're being held more accountable now, that 'Yeah we want to see some results and we want to see it in the classroom'."

Regarding the production of professional knowledge, the teachers' responses suggested that the production of professional knowledge in schools is a complex and multifaceted process that involves the interaction of different scenarios in which the teachers' professional practice unfolds. As we indicated previously in this article, the provincial policy documents (Alberta Education, 2003; 2006; McEwen, 2006) suggest specific directions regarding the structure and functioning of professional development initiatives in schools, such as the implementation of professional learning communities (Alberta Education, 2003).

There is a marked focus on connecting teacher professional learning and school reform, both in the policy documents and in the teachers' reflections. One consequence of reading professional learning communities within the framework of school reform is that such an interpretation seems to lead to the conclusion that teachers are the subjects of reform because the professional learning community model focused on transforming the teaching practices in order to attain the overarching goal of student achievement (Wood, 2007). Teaching practices are conceptualized as problematic and collaborative learning initiatives are presented as the solution. Furthermore, as we will show in the next section, the policy discourse positions teacher learning in communities as instrumental in producing knowledge to change practices. Indeed, according to common formulations of professional learning communities, student achievement is portrayed as influenced by effective instructional methods; therefore, it is implied, improving instruction through collaborative initiatives becomes the means to the goal of reform, namely student achievement. Yet, such conceptualizations leave us with questions about the "what" of teacher learning and knowledge. That is, what is teacher learning and what is teacher knowledge in the context of schools? We want to call attention to the treatment of the concept of professional knowledge within the literature on professional

learning communities. We argue that the scholarship on professional development and particularly the literature on professional learning communities would benefit from interrogating the development of professional knowledge in schools. We want to question the connections and also the disconnections between professional learning and professional practice in order to argue that the notion of *enactment* provides an integrative framework to study professional knowledge in schools.

THE SCENARIOS OF CLASSROOM PRACTICE AND THE SCENARIOS OF TEACHER LEARNING

One theme that emerged from the teachers' testimonies was an apparent conceptual separation between the scenarios of professional development and the spaces of classroom practices. This was evidenced in the teachers' talk about the effect that some professional development initiatives have had in their classroom practices and particularly on their discussion about how their work in collaborative groups was reflected in their classroom practices. This seemed to suggest that the scenarios of professional learning, in which the teachers' professional knowledge was created, were perceived as disjointed from the scenarios in which their professional knowledge was being translated into practice. The events of professional learning and the events of professional practice are apparently conceived as separated in the teachers' description of the development of their professional knowledge.

The particular way teachers talked about professional development suggests that the opportunities for professional development materialized outside the classroom space. Teachers saw their professional knowledge as transformed within the space of collaborative groups, and they reported that they brought this knowledge to the classroom in order to attain certain instructional goals. In this view, the classroom seems to be perceived as a scenario for professional practice that is influenced by the knowledge originated in the context of collaborative groups. One teacher was explicit in this regard when she indicated that PD was meaningful to her "because I came back and I could use it the next day. It wasn't something that I had to figure out, 'Where am I going to put this?'"

Some teachers also suggested that there are opportunities for developing professional knowledge outside the space of collaborative groups. They carried on professional development initiatives on their own and applied their knowledge to their classroom needs. One teacher, in talking about individual PD time, envisioned a connection to classroom practice. This teacher dedicated the individual PD time to technology, looking for materials and programs that could be used to enhance teaching skills in the classroom.

...I can apply it to a lesson that I can use for the kids that I think can be beneficial, they're going to learn something here today or this might help

with reading comprehension or maybe this will pique their interest a little bit just to change things up sometimes.

Similar to the collaborative group situation, the teachers who worked on individual projects described the context of professional practice and the context of professional learning as separated in time and space. The action of teaching in the classroom was not described in terms of a learning opportunity for the teachers but in terms of an opportunity to put in practice the knowledge generated through their individual projects of professional development.

A PROPOSAL: PROFESSIONAL KNOWLEDGE AS ENACTMENT

According to Fenwick and Edwards (2010), knowing is a situated, embodied, and distributed process “brought forth and made visible through circulations and connections among things” (p. 24). Knowing is not static or episodic; it is not a psychological object picked up by the individual who represents the world in her inner mind. Knowing is a situated process influenced by material and discursive contexts; it is also embodied because what we know depends on the characteristics of our bodies and the way our bodies relate with artefacts. Knowing is a distributed process because objects and other people exert influence and mediate the knowing process. Fenwick and Edwards indicated that, “classroom learning activities, for example, can be traced to appreciate the knowing practices that emerge through heterogeneous combinations of discursive and material things with various relations and joint actions” (p. 25).

According to Latour (2005), persons, objects, knowledge, and locations are included as relational effects. For example, Fenwick and Edwards (2010) have showed how the teacher is not a distinct actor who “pre-exists.” Rather, her “teacheriness,” or the teacher’s particular being, is produced in the “materially heterogeneous relations of activities in which she is involved and engaged” (Fenwick & Edwards, 2010, p. 17), including her interactions with the other actors in the classroom (i.e. teaching materials; configurations of desks and walls; bells to indicate subject and activity change; students, parents, administrators, university instructors; and curriculum documents to name a few). Fenwick and Edwards (2010) summarized this idea, saying, “nothing is given in the order of things, but all performs itself into practice” (p. 11), meaning actors only become actors in the context of practice, and there is no essential attribute for something or someone to become an actor.

The study of learning as an activity situated in institutional contexts is not new; Lave and Wenger (1991) introduced the concept of *legitimate peripheral participation* to explain how learning takes place in the context of communities of practice. In their view, learning is not just a located mental process inside the individual’s head; instead, learning is situated in the contexts in which individuals participate collaboratively. This evidently implies a change of focus

because their question is not what kind of *cognitive processes* are involved in learning, but what kind of *social practices* can be characterized as learning.

The idea of community of practice has been explored in the field of professional development and policy enactment (Wenger, McDermott, & Snyder, 2002). For example, Coburn and Stein (2006) used this concept to study how a community of practitioners put a particular instructional policy in practice. These authors indicated that the fact that practitioners had their own learning dynamics in their communities had an impact in the way the policy was enacted in the classroom. Communities are *emergent* rather than *designed* and the understanding of the policy is mediated by the institutionalized practices in particular communities. Coburn and Stein suggested that policy makers must “design policy for participation rather than for use” (p. 43) because communities play a more active role than just passive receivers of policy documents.

Lave and Wenger’s work substantiates the claim that what is known is known in the context of a practice. This principle is taken one step further by Latour (2005) who argued that the interaction between human beings and artefacts generate the conditions for action. In a similar fashion, Weick (2003) argued that when people act, they structure their own environment, and the environment so structured constrains people’s actions. Also, Maturana and Varela (1992) used the concept of *enactment* to indicate that human beings among other biological entities continuously generate the conditions for their own action by *enacting* an environment. As biological organisms, human beings adapt to the environment by operating in the environment and adapting it to their needs. Yet, the conditions for this adaptation are at the same time constrained by some features in the environment. So according to Maturana and Varela, an organism’s capacity to know the world depends on the organism’s capacity to act in the world. The interaction between an organism and its environment is the mechanism by which both the environment and the organism change.

Bringing these ideas to the case in point, it can be said that teachers come to learn about their profession by enacting an environment in which they can make sense of their professional knowledge. This means that the classroom as a context of professional practice provides meaningful opportunities for learning in action. Teachers’ professional knowledge is enacted through their actions in the classroom.

We believe that a key element in the transformation of professional practices is the teachers’ awareness that their professional knowledge is enacted through their actions and practices. This does not reject collaborative practices out of hand; in fact, we suggest that teachers learn about their profession by acting in multiple contexts such as formal / informal interactions with students and colleagues (Boud & Middleton, 2003; Schugurensky, 2000), interactions with objects (such as curriculum documents, reading materials aimed at teacher

improvement, or professional growth plans) (Fenwick & Edwards, 2010), or by personal reflection and discovery. The idea that teachers enact an environment in order to generate knowledge about their own practices provides a novel way to reconnect teacher learning and classroom practices.

Our analysis aims to make sense of the idea that collaborative groups build teacher capacity. We add to this picture an analysis of professional development initiatives that shows that there is a continuum between the classroom context and the context of collaborative groups. Consequently, we see teacher learning as a process that spans in time and space in the scenarios of teacher discussion and also in the scenarios of classroom practice. Teachers learn about their profession when they enact scenarios of practice in their classrooms, but also when they discuss their experiences with peer teachers in collaborative settings. We do not see a sound reason to assume that teacher learning starts or ends at some point within the continuum of classroom practices and collaborative groups of teachers.

We argue that teachers do not import knowledge to the classroom. Furthermore, we see the scenarios of dialogue, collaboration, and classroom practice as an assemblage (Latour, 2005) in which learning takes place as teachers and knowledge circulate within the assemblage. For example, analyses that draw upon Actor-Network Theory suggest that knowledge is generated as the teacher interacts with her students, with curriculum documents, with computers, with teaching materials, with her classroom as a teaching and learning environment, and with other people including colleagues, parents, and administrators. Fenwick and Edwards (2010) noted that Actor-Network Theory “helps us to unpick practices, processes and precepts to trace how things come to be” (p. 12). That is, the daily forms of knowledge that are circulated and enacted are important to teacher learning. As new policies on school reform based on teacher collaboration are introduced, it is imperative to pay attention to the connections among the teacher, the students, and the objects in the classroom. It is in these connections where knowledge is produced and can be traced. Current models of professional learning in communities would benefit from exploring what teachers’ knowledge is and how it is connected to classroom practices.

REFERENCES

- Alberta Commission on Learning. (2003). *Every child learns, every child succeeds*. Edmonton, AB: Author.
- Alberta Education. (2003). *Accountability in education: Teacher growth, supervision and evaluation*. Edmonton, AB: Author.
- Alberta Education. (2006). *Professional learning communities: An exploration*. Edmonton, AB: Author.
- Boud, D., & Middleton, H. (2003). Learning from others at work: Communities of practice and informal learning. *The Journal of Workplace Learning*, 15(5), 194-202.

- Chambers, D. (2008). *District review report: School District No. 39 (Vancouver)*. Victoria, BC: Ministry of Education.
- Clandinin, D. J., & Connelly, F. M. (1995). *Teachers' professional knowledge landscapes*. New York, NY: Teachers College Press
- Coburn, C., & Stein, M. (2006). Communities of practice theory and the role of teachers' professional community in policy implementation. In M. Honig (Ed.), *New directions in education policy implementation: Confronting complexity* (pp. 65-82). Albany, NY: SUNY Press.
- Cochran-Smith, M., & Lytle, S. L. (1993). *Inside/outside: Teacher research and knowledge*. New York, NY: Teachers College Press
- Cochran-Smith, M., & Lytle, S. L. (1999). Relationships of Knowledge and Practice: Teacher Learning in Communities. *Review of Research in Education*, 24(1) 249-305.
- Connelly, F. M., & Clandinin, D. J. (1999). *Shaping a professional identity: Stories of educational practice*. New York, NY: Teachers College Press
- DuFour, R. (2004). What is a "Professional Learning Community"? Three big ideas guide this school reform effort: Commitment to student learning, a culture of collaboration, and a focus on results. *Educational Leadership* 61(8), 6-11.
- DuFour, R., DuFour, R. B., & Eaker, R. E. (2008). *Revisiting professional learning communities at work: New insights for improving schools*. Bloomington, IN: Solution Tree.
- Fenwick, T. J. (2010). (Un)doing standards in education with actor-network theory. *Journal of Education Policy*, 25(2), 117-133.
- Fenwick, T. J., & Edwards, R. (2010). *Actor-network theory in education*. New York, NY: Routledge.
- Government of Newfoundland and Labrador. (2008). *Building learning communities: A handbook for school councils*. St. John's, NL: Author.
- Hord, S. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, TX: Southwest Educational Development Laboratory.
- Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. Oxford, UK: Oxford University Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- MacKay, A.W. (2007). *Connecting Care and Challenge: Tapping Our Human Potential*. Fredericton, NB: Department of Education. Retrieved from <http://www.gnb.ca/0000/publications/mackay/Summary%20Document%20MacKay%20Report.pdf>
- Maturana, H. & Varela, F. (1992). *The tree of knowledge: The biological roots of human understanding* (Revised Ed.). Boston MA: Shamabala.
- McEwen, N. (2006). *Improving schools: Investing in our future*. Edmonton, AB: Alberta Education.
- Nespor, J. (2002). Networks and contexts of reform. *Journal of Educational Change*, 3(3-4), 365-282.
- Ontario Ministry of Education. (2007). *Professional learning communities: A model for Ontario schools* (Secretariat: Special Edition #3). Toronto, ON: Author. Retrieved from: <http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/PLC.pdf>
- Parsons, J. (2011, June). Eleven years of teacher action research: How AISI affects education. *ATA Magazine*, 4(91). Retrieved from <http://www.teachers.ab.ca/Publications/ATA%20Magazine/Volume91/Number4/Pages/Eleven-years-of-teacher-action.aspx>
- Reitzug, U. C. (2002). Professional development. In A. Molnar (Ed.) *School reform proposals: The research evidence*. Greenwich, CT: Information Age Publishing.
- Rubadeau, R. (2007). *District review report: School District No. 91 (Nechako Lakes)*. Victoria, BC: Ministry of Education.

- Saskatchewan Ministry of Education. (2007). *Saskatchewan Learning assessment for learning program: Supporting data-guided decision-making to improve student learning*. Regina, SK: Author.
- Saskatchewan Ministry of Education. (2008). *A time for significant leadership: A strategy for implementing First Nations and Métis education goals*. Regina, SK: Author. Retrieved from <http://www.education.gov.sk.ca/ATFSL>
- Schugurensky D (2000) The forms of informal learning: towards a conceptualization of the field. *NALL Working Paper*, 19. Retrieved from <https://tspace.library.utoronto.ca/bitstream/1807/2733/2/19formsinformal.pdf>
- Stoll, L., & Louise, K. S. (2007). *Professional learning communities: Divergence, depth and dilemmas*. Maidenhead, UK: McGraw-Hill/Open University Press.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional Learning Communities: A review of the literature. *Journal of Educational Change*, 7(4) 221-258.
- Viczko, M. (2009). *A comparative case study of teacher professional learning in Alberta and England* (Master's Thesis). Retrieved from: <http://hdl.handle.net/10048/482>
- Weick, K. E. (2003). Enacting an environment: The infrastructure of organizing. In R. Westwood and S. Clegg (eds.), *Debating organization* (pp. 184-194). Oxford, UK: Blackwell.
- Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston, MA: Harvard Business School.
- Williams, R., Brien, K., Sprague, C., & Sullivan, G. (2008). Professional learning communities: Developing a school-level readiness instrument. *Canadian Journal of Educational Administration and Policy*, 74, 1-17.
- Wood, D. (2007). Teachers' learning communities: Catalyst for change or a new infrastructure for the status quo? *Teachers College Record*, 109(3), 699-739.

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