

A Constructivist Lens for Professional Learning

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The Reluctant Teacher

I am a reluctant teacher. Like many, I spent my undergraduate years not knowing exactly what I wanted to do and the question loomed larger as I neared the end of my degree. This was a greater concern for my father, who couldn't fathom what I would do with a history degree. I wasn't sure either, but I enjoyed history so much I pushed those questions and thoughts out of my mind for the time being. I knew one thing; I wasn't going to be a teacher. My mother was a teacher, her uncles were teachers, our family friends were teachers, but it wouldn't be me. I was determined to break the cycle, but how?

Technology was my answer. I always had a fascination with computer technology, so after finishing my undergraduate degree I enrolled in a graduate-level information technology diploma program. At the time I didn't know this would actually become the catalyst that would spark my teaching career. An internship was required and I ended up working as an information technology consultant for my local school district. It was here that I was first introduced to the Newfoundland and Labrador technology education curriculum and professional development - both of which would become great influences on my future teaching career. One of my tasks during this time was to prepare technology education resources for professional development. More than preparing the material, I was also asked to deliver professional development sessions to teachers. This was my introduction to teaching in a professional setting, and to my surprise, it wasn't that bad.

Moving forward I had choices to make. With little work available for technologists at the turn of the century, and based on my exposure to teaching during my internship, I reluctantly started to think about an education degree. This was a humbling experience as I had stated publically for years, to my entire family and social circle, that I would never be a teacher. My mother even tried to discourage me, but I moved forward and graduated a year and half later with a speciality in technology education.

With my shiny new credentials, I managed to land a job with the Avalon West School District working at Amalgamated Academy in Bay Roberts Newfoundland and Labrador as a learning resource and social studies teacher. At the time, information and communication technology (ICT) skills were in great demand throughout the school system. The federal government had incentive programs to encourage the integration of technology at the school level and the district's plans were focused on the same. In retrospect, I'm pretty sure I was hired for my technological and not my teaching ability,

as I had little of the latter. In my first year teaching, I was asked to develop and deliver an ICT professional development session for the district. Twelve years and a Master's degree later, I'm still very active in professional development, or to use the current moniker, professional learning. Professional learning facilitation has become like a second job. It's from this point of view that I've developed a frame of reference for one area of possible inquiry that overlaps directly with my primary professional role – that of a teacher with constructivist leanings.

My Constructivist Stance

I've categorized myself generally as a constructivist teacher and I realize that this statement is very value laden and vague, so before moving forward I should clarify my stance. Constructivism can be framed as a way of understanding the nature of knowledge and learning and is an epistemological and ontological underpinning of many educational practitioners and scholars, but it is by no means a simple idea. Generally speaking, I believe learning happens when knowledge is constructed by individuals through activities and that knowledge is not neutral. Knowledge isn't something to be discovered, it's something that is made and constructed (Cunningham & Duffy, 1996; Efran, McNamee, Warren, & Raskin, 2014; Fosnot & Perry, 1996). This is a simple definition and there is still considerable debate surrounding the ideas of individually created, socially created, or the combination of both individually and socially created knowledge (Phillips, 1995). I'd like to think I fall within the combination camp of this debate and from here it becomes easier to analyze my grounding assumptions about teaching and professional learning in general.

Cunningham and Duffy (1996) state that grounding assumptions are just that, assumptions. They can never be proven, but they are important in forming the basis for our understanding of the world.

Although I'm not entirely comfortable with the idea of filling the role of a researcher, any of my future research aspirations have been directly influenced by my development as a student and teacher. From my earliest classroom experiences to my graduate work, I have been exposed to learning environments that have been purposefully engineered with constructivist ideals in mind. I remember student-centered social studies projects in elementary school, many student-led science experiments and projects in intermediate and high school, and design projects in university. As a teacher, I've naturally gravitated towards working with colleagues that share this pedagogical view and have actively worked to re-construct and improve on the models that I lived through as a student and teacher. These experiences have had a huge influence not only on my teaching practice, but now on my emerging identity as a pragmatic participatory educational researcher (Gill, 2015).

Conceptualizing Inquiry

Teaching has not come easily to me. Heated conversations with students, internal and external conflicts regarding curriculum delivery, the politics of school leadership, and the

demands of meeting the needs of every individual student have all shaped me as an educator. It is through the combination of my past and present experiences that my personal pedagogy is continually developing – that of taking a student-centered approach where learning is accomplished through doing rather than passively engaging in out of context lessons (Gill, 2015). As my personal pedagogy has continued to develop, I've also brought these ideas into the area of professional learning. It is through this connection that I've arrived at my potential inquiry - the idea of merging the lessons I've learned from creating student-centred constructivist learning environments into the sphere of professional learning. Although hardly novel (Brand & Moore, 2010; Keiny, 1994; Wilson & Berne, 1999), it is germane in my local community and is deeply rooted in my professional persona.

One of the historical issues with professional learning in my jurisdiction has been its lack of alignment with classroom practice. There has been an oxymoronic approach that has seen persons of authority dictate, through instructionist methods, visions of constructivist classroom practice – basically an attempt to inject constructivist practices into the classroom through an instructionist lens. From my observations and countless collegial conversations this has been viewed as a self-defeating strategy. With these things in mind, my inquiry could focus on the relationship between constructivist professional development and changing teacher practice within the context of local professional learning communities. More specifically, from a design-based research perspective, I am assuming this inquiry could possibly contribute to both basic and applied forms of knowledge creation (McKenney & Reeves, 2012) in the area of learning theory and the development of a professional learning framework. My hope is that this work will enable educators to manage educational change in a much more self-initiated, self-directed and context dependent manner.

Design Based Research and Professional Learning

One of my challenges as an educational researcher, interested in the development of meaningful professional learning, is to try and understand the relationship between what is known in terms of learning in a school setting and the learning of adults in professional settings. If we want schools to embrace the idea that students need to create and recreate while taking an active role in their learning (Edutopia, 2009), then we may have to invest some serious thought, time, and resources into teacher learning – both pre-service and in-service. I don't think it's enough to offer isolated, context independent professional development based on an instructionist model. It's time to immerse professional learning in the very practice that it seeks to promote in the classroom. But this statement itself may only be conjecture, as my educational jurisdiction may very well already be moving in this direction. Certainly my involvement in coordinating systemic, meaningful, and context dependent professional learning gives me a biased perspective. To really grasp the theoretical underpinnings of this issue, I'll have to move from conjecture into the realm of evidence and theoretical principles as outlined by McKenney and Reeves (2012). With this in mind, educational design-based research may be suitable for framing the problem and articulating a solution.

Gardner (2011) states that “the number of variables entailed in describing educational systems is so enormous that any hope of controlled experimentation, or of scientific modeling, must be suspended” (p. 348). This statement rings true for me within the framework proposed by design-based research proponents and my personal experiences as a teacher. Education is a messy business, and the possibility of isolating discrete variables that will have global implications seems farfetched. If design-based research is suitable, and I move forward with this approach to inquiry, I take comfort in its flexibility and focus on theory and application (Barab & Squire, 2004). In my role as a design teacher, the concepts of the regulative research cycle are familiar. McKenney and Reeves (2012) outline that all educational design research models tend to follow three phases: First, the initial orientation phase which involves the exploration and analysis of an existing situation – professional development in my jurisdiction may be out of balance with current constructivist understanding about the nature of learning. Second, the design or development phase which involves the drafting and prototyping of solutions – my attempt to develop constructivist professional development learning environments in the context of my local community. Third, the evaluation or empirical testing phase where the results are feed back into the design cycle – my tweaking of the system based on teacher feedback, observations and analysis before the next iteration. These ideas parallel the design problem scenarios that I teach on a daily basis and I feel very comfortable with this aspect of educational design research. Sometimes I wonder if I’m too comfortable with these ideas and if this bias will blind me to new and innovative ways of implementing educational design research. On the other hand, I have no experience articulating basic theoretical principles from applied design solutions, and in true constructivist fashion, I believe the only way I can satisfactorily come to grips with this is to actually go through the process in a meaningful and grounded way. As the radical constructivist Ernst Von Glaserfeld noted in a 2005 interview, good teachers have always known that students need to build their own knowledge and that knowledge isn’t something that is ready made and can be transferred to the learner (Lombardi, 2010).

It is from this perspective that I feel I need to engage in educational design-based research rather than simply continuing to read about it.

The Reluctant Researcher

The transformation from teacher to researcher is going to be a challenge, a challenge I think about almost constantly now. Researcher is such an imposing title and it’s one that I’m not comfortable with at this moment. Within my professional community, I know that the title researcher can still hold negative connotations related to the outsider, the observer, the meddler, and the know-it-all – someone not grounded in the contextual reality of the group they are trying to study. Even so, Anderson and Shattuck (2012) assertion that design-based research may not be meeting the challenge of moving tested interventions to a wider audience intrigues me. From my professional experience educational interventions have a tendency to pay lip service to their professional learning components. Is this a gap in the research? If it is, could my proposed inquiry possibly help close this gap? In my profession, moving away from classroom and school experiences tend to degrade one’s credibility. With this in mind, two questions remain: if

I immerse my emerging identity within a pragmatic, participatory paradigm based on a constructivist epistemology, is there hope that I can live in both worlds and can the design-based research approach facilitate such a life?

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