# LEARNING IN COMMUNITY: USING BLOGGING TO FACILITATE AND CULTIVATE A COMMUNITY OF PRACTICE OF PROFESSIONAL LEARNERS

A Thesis Submitted to the College of

Graduate Studies and Research

In Partial Fulfillment of the Requirements

For the Degree of Master of Education

In the Department of Curriculum Studies

University of Saskatchewan

Saskatoon

By

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#### ABSTRACT

Kolb (1984) identifies learning as a process whereby knowledge is created through transformation of experience. Wenger (1998) would further suggest that education is a mutual development process between communities and its learners, well beyond mere socializing. The value of learning "in community", then, affords educators an opportunity to create the just right conditions for themselves as both teacher and learner. The success of learning communities depends on reciprocal engagement of its members to share knowledge, experiences, and skills with colleagues (Kling & Courtright, 2003). This study examined the case for blogging as a means to facilitate a self-directed community of professional learners, educators who endeavour to further develop their knowledge, understanding, and expertise of teaching and learning via the cultivation of an authentic informal online learning community. Using social learning theory as the analytical framework, this study looked at ways participation in informal, self-directed online learning communities not only encourages, but discloses potential barriers in participants' abilities to (1) develop their understanding of teaching and learning as a self-directed, informal online community of engaged professionals; (2) expand their understanding of blogging as a tool to engage and participate in informal, online self-directed professional learning; and (3) deepen their understanding of working within the context of community: self-directed professionals engaging informally online to support, enhance, and reflect critically as engaged learners, specifically through the blogging process. This study investigated various motivations and actions that might bring participants together as engaged, self-directed professional learners and better explain how and why these informal online communities might experience success. Ultimately, it was the researcher's hope this study would identify specific elements within the participants' learning, offering both insight and relevance for educators as an engaged, informal, self-directed online community of professional learners.

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#### ACKNOWLEDGMENTS

I am ever so indebted to those that provided such an abundance of support and guidance on my journey to complete my thesis. It has been a powerful learning experience for me and there are many individuals to thank along the way.

My greatest academic support came from my thesis supervisor, Dr. Dirk Morrison. He walked beside me as an experienced "guide," to ensure I was well prepared for my personal and professional learning adventure that was, at times, well outside my comfort zone. Dr. Morrison provided that just in time support, insight, encouragement, and motivation that got me to the "summit," and for that, I am eternally grateful. I would also like to thank Dr. Richard Schwier for the fundamental role he played throughout my graduate studies program. I am indebted to you both for sharing your passions as both teachers and learners. Thank you to Dr. Jay Wilson for being a member of my committee and also to my external examiner, Dr. Gale Parchoma.

I would also like to thank my participants for taking the time to invest and share their insights and understandings so freely throughout the research study. While they are extremely busy individuals personally as we as professionally, they always took the time to thoughtfully engage in our conversations that aptly captured their own experiences as established bloggers and life-long learners. Many thanks for the inspiration to blog, grow, and share a spirit of engaged learning with the world around me.

I was ever so fortunate to have the support of my school division, Saskatoon Public Schools, who provided me with a year extended professional leave to pursue my learning. That time provided clarity, understanding, and opportunities to reflect critically and think deeply. As such, so many colleagues and friends were a source of strength and support, encouraging me as both researcher and writer, in my quest as a learner.

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Finally, but most critically, I want to thank my family, for being my rock and a beacon along my path. To my parents, who have always encouraged the pursuit of academic learning with a ferocity and tenacity, thank you for helping to light that "fire" inside of me that still burns ever so brightly. To my husband Travis, you have always made me feel invincible, in no matter what I seek out as any one of my pursuits. Thank you for always accepting me for who I am, knowing that I have your unconditional love is what keeps me grounded. To my girls, Molly and Ava, I dedicate this learning to you... for your excitement, your wonder, and for the continued inspiration I find in each of you, that makes me want to be a better person, inside and out.

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# CHAPTER ONE INTRODUCTION

"My teaching is shaped by this community in the same way that my faith or my family or the books I read shape my teaching. It's subtle, but it's powerful".

## Research Participant #3 (personal communication, fall 2013)

Traditionally, institutions of education were based on assumptions that learning was a direct result of teaching and instruction (Wenger, 1998). Consequently, we have a profession accustomed to its teachers engaging in formal professional learning that is often mandated by different levels of organization within the school system. At times, there is frustration on the part of educators, to engage in professional learning that is meaningful, purposeful, and necessary to the work they uniquely do in their classrooms. Teachers have criticized professional learning opportunities being driven by an outdated standard for current student learning needs in schools. In contrast, Wenger (1998) proposes adopting a different perspective, one that places learning at the center of lived experience and participation in the world.

It is empowering for educators as professionals to embrace the knowledge that working in community provides in creating the conditions for meaningful connections, engaging collaborations, and opportunities to learn as a collective. Communities of professionals are a natural part of any organization and represent an important step in moving from theory to practice (Wenger, McDermott, & Snyder, 2002). It is the researcher's opinion that learning environments in which educators are provided authentic opportunities to investigate, collaborate, and share continue to be effective places of self-directed professional learning. Intrinsically, communities are self-organizing systems of informal learning (Gray, 2004). It seems reasonable to assume, given the right conditions, individuals are more likely to identify shared passions,

common interests, mutual understandings, and discover new learnings as they engage, problem solve and inquire together. In the researcher's view, working in community has the potential to empower a culture of motivated and self-directed professionals. Simply stated, there is power in creating, cultivating, and sustaining a collaborative, collective voice in education.

Self-directedness as a learner characteristic or orientation offers the possibility to empower meaningful engagement in learning. Choice is one of the hallmarks of self- directed learning and professionals should be encouraged to recognize the importance of making their own choices as engaged learners and professionals (Brockett and Hiemstra, 1991). With an increasing number of technologies for learning and a virtual "cornucopia" of learning resources available to learners, learning in community is an attainable reality. Consequently, engaged professionals live in an age of unlimited choice. *Information and Communication Technologies* (ICT's), including Social Media (Web 2.0 Tools, for example blogging) afford educators a new avenue for professional learning with new ways of participating and interacting online (Luehmann and Tinelli, 2008) to enhance their knowledge and skills. Winer (2003) affirms blogs, in particular, allow for self- direction (focus, purpose, method of writing) within a shared public learning space. Additionally, reflection is an important aspect of teacher practice (Ray and Coulter, 2008); online technologies, such as blogging, have the potential to develop into an extension of independent, reflective thinking and learning.

Communities of professionals come together for a variety of reasons, one of which might offer the possibility of working as a collective. An "engaged" professional is one who regularly reflects on their teaching through critical thinking (Yang, 2009). Educators who engage in collaborative learning communities have multiple opportunities to challenge their own thinking

to problem solve and reflect critically on teaching and learning. According to Paul (1993), critical thinking is not a set of skills separable from excellence in communication, problem solving, creative thinking or collaborative learning and presents a common cognitive denominator for all fields of knowledge. Subsequently, many important educational goals are deeply tied to critical thinking (Paul, 1993). Ideally then, rich opportunities for critical thinking can be embedded into teaching and learning on a regular basis.

It is reasonable to assume that opportunities that motivate and engage passionate, selfdirected learners are a necessary foundation for professionals in education. In particular, online technologies offer the possibility of working in community on a more distributed, even global, platform. Collaboration, time to connect, self-directed, and guided learning is readily available through blogging technology: a blog can be constructed to collaboratively set learning goals and objectives, regulations, and formats, and these elements distinguish blogs from other forms of digital tools (Godwin-Jones, 2003; Richardson, 2005). Additionally, a blog is interactive (Rodzvilla, 2002) in the sense that readers can respond and comment with relative ease, at their own pace (an affordance of the asynchronous nature of the medium). Blogs, then present an authentic means to connect, share, and reciprocate knowledge and understandings within a community of dedicated professionals.

To summarize, incorporating technology can also be a powerful medium to collaborate and engage with connected, professional colleagues. Luehmann and Tinelli (2008) claim online technologies, such as blogging, offer new avenues for professional learning, and provide educators with new opportunities to actively participate and engage in learning. In essence, these technologies offer the potential to encourage a disposition of reciprocity: colleagues engaging in virtual online connections to meaningfully inquire and mutually share with others. Digital

learning communities' signal a shift from a more traditionally accepted need to learn independently, isolated within the school system and facilitates a more inclusive, engaged "culture" of online collaboration. Wenger, White, and Smith (2009) aptly utilize the communities of practice perspective to best understand digital online learning environments, where community and technology intersect.

#### Need for the Study

Typically, most schools mandate professional learning for teachers based on student data collected from large-scale assessments and division directives. Kao and Tsai (2009) emphasize that teacher professional development has received much attention among educational researchers and practitioners as it is input for successful student learning. Consequently, educators need opportunities to explore self-directed, informal communities that not only support but enhance their learning as professionals. Professional learning communities can be formal, informal, face-to-face, or online and operate both inside and outside the physical school building (Dede, 2004). Kling and Courtright (2003) claim that success of individual community members is dependent on voluntary engagement of shared knowledge and experiences. Understanding the inner workings of informal, online communities offers professionals an opportunity to explore multiple learning platforms, including online technologies and web-based tools. Exploring the diverse learning communities and technology-mediated context that support professionals as self-directed, motivated, and engaged learners, beyond the scope of this investigation. Efimova and Fiedler (2003) suggest a blog can be like a small learning community; investigating blogging as a tool and process context for professional communication, collaboration, and learning for teachers, requires and is the focus of this study.

#### **Purpose of the Study**

This study examines the case for using blogging as a means to facilitate an informal community of professionals who desire to further develop their knowledge and understanding of teaching and learning and cultivate an authentic online community of collaboration. Through this study, the researcher qualitatively analyzed and framed participant narratives through semi-structured interviews, blog posts, and personal responses. The goal of this inquiry was to investigate the strengths and limits of learning in community to develop insights for bettering teacher practice, authentic online collaboration, and research in the field of professional learning.

# **Research Questions**

Educators who engaged in online conversations as self-directed, informal professionals *and* established, practicing bloggers were the focus of this research study. Through semi-structured interviews with research participants, the following questions were explored:

- 1. What elements describe and support informal, self-directed online learning communities using blogging as a tool for teacher continuing professional development?
- 2. In what ways might educators explore the characteristics of blogging as a tool and context for informal, professional development and self-directed learning?
- 3. How might engagement shape and influence meaningful opportunities for professionals to connect, critically reflect, and share their learning in informal, self-directed online learning settings?

#### Assumptions

These assumptions were present in the study:

- Utilizing a qualitative research design, specifically in-depth instrumental case study interviews, is a valid approach to analyzing data sets and assessing how educators use online technologies, specifically blogging, in professional learning.
- Research participants chosen for the study were reflective, self-directed, connected educators offering ample knowledge, understanding, and expertise in the area of blogging. As such, these individuals had a wealth of experience to draw upon from their professional praxis.
- Self-directed, motivated educators promote and reciprocate shared understandings and new knowledge as engaged, metacognitive critical thinkers who value learning as a community of professionals.
- Online, web-based information and communication technologies (including blogs) are valid tools for educators to explore as they engage in reflective, self- directed professional learning.

### **Delimitations**

This study is an instrumental case study perspective and inquiry aimed to best understand the perceptions of a small sampling of educators engaged in blogging conversations. Each participant chose to engage and subsequently connect online for a variety of experiences, mutually dependent on both personal and professional viewpoints and values. Consequently, this study does not reflect the mindset or practice of all teachers, either locally or globally, within the profession. The chosen number of participants was limited to ensure semi-structured interviews would explicitly focus and aptly capture their lived experience as educators and bloggers.

The researcher engaged in the study alongside participants as a complete insider, offering perspective and vantage points from personal and professional experiences as an engaged, practicing blogger. Engaging in online web based technologies, including blogging, has been a critical component to the researcher's own professional learning. As such, the researcher's own viewpoints and understandings have the potential to influence not only the data collection process but also subsequent analysis and findings.

There were some pre-conceived ideas that provided the framework for this study. The research suggests that self-directed, informal opportunities to learn are both empowering and compelling motivation for individuals and collective group members. Central to the research are digital learning environments, specifically blogging, to cultivate authentic, self-directed learning opportunities. The researcher's exploration of the literature indicated that informal, self-directed digital learning communities are largely unexplored by current research and, therefore, necessitated further investigation.

# Definitions

The definitions, used in this study, are provided below:

*Blog*: An online journal that users can continuously update, in their own words, online (Matheson, 2004). Often the *blogger* (individual crafting and sharing their writing) will upload images and link other websites as part of the blogging process. They write blog *posts*, which often are very similar to a singular train of thought or idea. Typically, a blog will have an area for other individuals to leave a comment or respond to the post.

*Blogger*: An individual who documents and shares their personal and professional experiences on a web based blogging platform.

*Blogging*: Is the act of writing a post for a *blog*.

*Cognitive Presence*: Garrison, Anderson, and Archer (2000) defined *cognitive presence* as the means learners are able to construct and confirm meaning, through sustained thought and discourse.

*Communities of Inquiry (CoI) Model*: A model for instructional design, based on the research of Garrison, Anderson, and Archer (2000), centered on these core elements: cognitive presence, social presence, and teaching presence.

*Communities of Practice Model*: A model for learning in community, based on the work of scholars Lave and Wenger (1991). Groups of people who share a passion for something and learn how to do it better as they interact regularly.

*Critical Thinking:* Paul (1993) defines *critical thinking* as a systematic way to form and shape one's own thinking and its most fundamental concern is excellence of thought.

*Digital Footprint*: It is the trail of data that a person creates when using the internet. This would include the websites visited, emails sent, and personal information shared online.

*Educational Reciprocity*: Built upon the underpinnings of reciprocity, *educational reciprocity* enlists a mutual cooperation and transfer of shared understandings in collegial collaboration with colleagues in the profession.

*Engagement*: Among the numerous and varied definitions that could be used, this study focused on Coates' (2007) definition of engagement as active collaborative learning, communication alongside a supportive learning community.

*Information and Communication Technologies (ICT):* The overarching term that applies to inventions or tools useful in solving problems and facilitating day to day activities. This will include personal, digital devices and web based tools.

*Metacognition*: Higher order thinking skills that enable awareness and understanding of one's own thought processes, especially when engaged in learning.

*Nvivo*<sup>TM</sup>: A qualitative data analysis software designed for researchers to classify, sort and arrange information; examine relationships in the data. The researcher can also test theories, identify trends and examine information in a multitude of ways using the search engine and query functions.

*Professional Learning Network*: A personal learning network is an informal learning environment that comprises individuals who interact with and seek knowledge from in a personal online community.

*Reciprocity*: Temple (1998) defined as "not only, a material exchange, but an exchange of attitudes quite broader and deeper. Such an obligation can be called recognition or gratitude, it must be taken here in the sense of a spontaneous movement" (as cited in Sabourin, 2013, p.307).

*Self-Directedness*: Knowles (1975) describes *self-directed learning* as "the process in which individuals take the initiative, with or without the help from others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating outcomes"(p.18).

*Social Media*: Websites and applications that enable users to create and share content or to participate in social networking on personal networks that would include Twitter, Facebook, Google+ etc.

*Web 2.0 Tools*: It is the second generation of the World Wide Web, imagined as a combination of concepts, tools, and technologies centered on user collaboration, sharing community generated content, and social networking.

# **Organization of the Study**

This research study is organized into six chapters, each presenting, in sequence, providing the structure necessary to interpret, analyze, and best understand the nature of the inquiry; the remaining chapters will look at the context of the research investigation, further examine the research data results, and discuss subsequent findings and further recommendations. Chapter Two offers a review of the literature related to the complexities of learning in community. The researcher investigated the theoretical foundations of communities, delving more deeply and connecting these findings to informal, self-directed opportunities to learn as a collective. Chapter Three provides specific details associated with research methodology and procedures used in the data collection fundamental to this study. Chapter Four reviews and analyzes the findings from the research study. Chapter Five examines and interprets the subsequent findings. Last, Chapter Six draws conclusions and offers further recommendations for research.

# CHAPTER TWO LITERATURE REVIEW

#### Background

This literature review explores how collaboration and reciprocal exchange, using blogging, can deepen current understandings of teaching and learning within self-directed, online learning communities of engaged professionals. A discussion of both context and theoretical foundations, including Social Learning Theory, provided a framework to support the research inquiry. The literature review further investigated specific elements that have the potential to engage, differentiate, and invite self-directed online opportunities for professionals to reciprocate learning and inquire together. Web-based Information and Communication Technologies (ICT's), specifically blogging, are explored within the literature to deepen professional understandings and to create a "culture" of critical thinking, reflection, and shared collaboration as educators.

Professional learning communities provide educators with opportunities to share, reflect, and think critically when coming together to learn. Accordingly, informal, online learning affords individuals a means and opportunities to create their own unique learning space (Song, Singleton, Hill, & Koh, 2004). Further investigating the potential that exists when individuals connect and collaborate online, as self-directed, motivated, engaged professionals is becoming more the *norm* in education; Chen, Cannon, Gabrio, Leifer, Toye, and Bailey (2005) suggested that new forms of social technologies are continually developing and can be put to effective use by teaching professionals. Web tools that facilitate authentic moments of connectivity (local, regional, national, international) invite the coming together of a broad community of professionals who desire to inquire, investigate, and learn from each other. One such web-based

technology is blogging, a social media tool with potential to empower teachers as digital learners. Blogging provides a space for educators to reflect and think critically about their practice in the classroom. Orevec (2005) stated that a key motivation for utilizing blogs in professional learning is for "forming and maintaining knowledge communities" (p. 229). Fundamentally, informal, online professional learning communities, with access to digital technologies, has the potential to foster communication, collaboration, and contribute to a sense of community amongst colleagues, as both teachers *and* learners, in the profession.

#### Context

Working in community has become accepted practice within in learning institutions and has the potential to create and maintain relationships that enable educators to learn from each other. Wenger (1998) inquired: "what if we assumed that learning is, in its essence, a social phenomenon, reflecting our own deeply social nature as human beings capable of knowing?" (p. 3). It is reasonable to speculate about the role of an online learning community and how participation in such a facilitated professional development environment might enhance participants' understandings about their own practice (Dede, 2004; Laferrière, Lamon, Chan, 2006; Mejias, 2005). It is critical to further investigate learning in context, as an informal, self-directed online *community of practice*, specifically, teaching professionals working together for the advancement of best practice in teaching and learning.

Wenger (1998) considered the essential need to examine a different perspective, one that places learning in our lived experience of participation in the world. Learning communities, as an organizational structure, could be designed to provide a space where new and extensive patterns

of thinking are nurtured, and where community members are continually learning how to learn together (Senge, 1990). Continuing to build on Wenger's theory, the term *community of practice* (COP) was coined to refer to the community that acts as a "living curriculum", is dynamic and involves learning on the part of everyone. According to Wenger (1998), there are three essential components to be considered in developing an empowered community of learners, namely, *domain, community*, and *practice*. It is, according to Wenger (1998), the combination of these three elements that constitutes a community of practice, and by developing these elements in parallel that one cultivates a community.

# **Communities of Practice: Domain**

When considering the domain of a learning community, it refers to a group of individuals with an identity defined by a shared interest. Wenger (1998) argued "that the learning individuals find most transforming takes place through membership in communities of practice" (as cited in Au, 2002, p. 223). Working in *community* builds relationships that enable educators to learn from each other and develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems— a shared practice. Environments in which teachers are provided supportive opportunities for inquiry and time and space to share their results, are considered more powerful than abstract seminar-style professional development experiences (Ball and Cohen, 1999).

# Communities, Professional Practice, and Inquiry

Wenger (1998) maintained that participation in communities of practice "refers not just to local events of engagement in certain activities with certain people, but to a more encompassing process of being active participants in the practices of social communities and

constructing identities in relation to these communities" (p. 4). For many educators, it is necessary to find value in their own teaching and learning, and time to connect and collaborate with colleagues. Creating settings where teachers feel they can share and learn from one another is critical in the profession. In 2006, Whitehouse, Breit, McCloskey, Ketelhut, and Dede compared and synthesized a research study that looked exclusively at data and evidence published in educational journals over a five-year period i.e., (2000-2005). In this meta-analysis:

...we encountered much work that was anecdotal, describing professional development programs or 'lessons learned'... and reviewed nearly 400 articles written primarily in the past five years ... the majority of these studies focused on program design and effectiveness with a communities-of-practice framework intended to promote collaboration and reflection (p. 2).

Kolb (1984) discusses learning as a process whereby knowledge is created through transformation of experience; Wenger (1998) would further suggest that education is a *mutual* development process between communities and its learners, well beyond mere socializing. The value of learning in community affords educators an opportunity to create a positive identity for themselves as both teacher *and* learner. Identity is a critical lens for teacher learning as it foregrounds the personal and multifaceted nature of learning in education (Alsup, 2006; Luehmann, 2007). Communities of practice need not imply homogeneity: diversity within the community is a desirable learning resource (Wenger et al., 2009).

Dewey (1933) claims that if we want to make our experience educative, it is essential to support ongoing growth in a process of continuing new inquiry. Kuklthau, Maniotes, and Caspari

(2007) claim that inquiry "espouses investigation, exploration, search, quest, research, pursuit, and study. It is enhanced by involvement with a community of learners, each learning from the other in social interaction" (p. 2). Consequently, inquiry is much more than a stance, model, or way of thinking within our current system of education. Inquiry has the potential to invite, create, and sustain a learning in *community* model wherein members "accumulate knowledge, they become informally bound by the value that they find in learning together" (Wenger, McDermott, & Snyder, 2002, p. 4-5).

It is essential to validate and nurture the individual needs of the *learner* within the community. It is critical that teachers can see themselves as members of a community of practicing professionals, individuals who inquire, ask questions, and explore their own growth as engaged learners. Empowering educators to seek new opportunities within these communities of likeminded individuals, self-selected to best suit their needs as learners, is a fundamental first step.

# **Theoretical Foundations: A Brief Review**

To better understand the theoretical foundations of this thesis, it is necessary to first investigate some of the historical underpinnings, the conceptual frameworks, and the foundational constructs that inform and support it. For example, it might be useful to review which educational researchers and theorists affected Wenger's work, his investigations, shared knowledge, understandings, and significant research that led to *communities of practice* established as a well-known learning model and educational framework.

# **Communities of Practice**

Learning in community is not a novel or unique idea. Informal communities were, as mentioned by Wenger et al. (2002), the first knowledge-based social structures that date to when we, as humans, lived in caves. Throughout history, beginning with the ancient civilizations and into the Middle Ages, craftsman, artisans formed and created guilds; tutelages to hone and perfect their trades. According to Lave and Wenger (1991) the term *community of practice* was coined in context within the studies of traditional apprenticeship.

#### Situated Learning

The concepts of situated learning and legitimate peripheral participation, the seminal work of social anthropologist Lave and social theorist Wenger, are the foundations on which the learning model Communities of Practice was built. The concept of *situated learning* helps us understand co-participation of learners, not only as individuals but also within a community of practice (Lave & Wenger, 1991). Situated cognition theory shifts the focus from the individual to the activities of learners within the sociocultural setting (Driscoll, 2004). Learning viewed as a "situated activity" has a process called *legitimate peripheral participation* as a central defining characteristic (Lave & Wenger, 1991). This process defines how a new community member situates themselves, as participants, in the learning. It marks the progress of the learner as they engage within the community to become a full participating member. Individuals regularly participate in more than one community and achieve their identity through personal trajectories of participation (Wenger, 1998). Lave and Wenger's (1991) research emphasizes and affirms how education has evolved from a theory of learning in isolation, to a more rich culture of learning in community.

# Social Development Theory

The work of psychologist Vygotsky (1978) has had a great impact on educational research and theory in cognitive development. In particular, his inquiries and investigations have laid a strong foundation on which to build *social development* as a learning theory. An important characteristic that, according to Tudge and Rogoff (1989), distinguishing Vygotsky's theory as the assertion that individual development cannot be understood without embedding the learner in the social milieu. Vygotsky (1978) contended that what is important is the ability to interact in collaboration with others and connect socially with the world; it is the community that plays a significant role in the learner's social development. Henning maintains (2004), as cited by Hill, Song, and West (2009), "knowledge is constructed while individuals are engaging in activities, receiving feedback, and participating in other forms of human interaction in public, social contexts" (p. 9). Interaction is the central focus of engaged online learning communities (Garrison & Clevland-Innes, 2005).

# Social Learning Theory

Social Learning theory is learning by *experience*. Psychologist Bandura (1977) built his research, findings, and subsequent learning theory from Miller and Dollard's classic work "Social Learning and Imitation" published in 1941. While many theories have been advanced over the years to explain why humans behave the way they do, Bandura (1977) believed most behaviors are learned, either deliberately or inadvertently, through the influence of example. Bandura believed (1977) *modeling* prominently influences human learning in everyday life by the ability to not only learn from mistakes but also to master complex behaviors such as speech and language. According to the social learning theory,

new patterns of behavior can either be acquired through direct experience and/or observing others (Bandura, 1977). The cornerstone, therefore, of social learning theory is the position knowing that modeling is an indispensable aspect of teaching and learning. Intrinsically, according to Bandura (1977):

Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action (p.22).

#### **Engaging Professional Learners**

Dewey (1929) stated that to prepare learners for future life means to give them command of themselves. Noddings (1984) would challenge that the education of educators is not all it should be. Wells (2001) affirmed there can be no universal blueprint for success in learning and teaching. In most educator's experiences, according to Sessums (2009), there are no fixed standards and no single best practice for professional learning. Accordingly, Arnell (2014) would suggest that educators working in community develop professional growth, leadership, and a continued sense of engagement as learners. Engagement (Beer, Clark, & Jones, 2010) is comprised of active and collaborative learning. Accordingly, Arnell (2014) would suggest that educators working in community develop professional growth, leadership, and a continued sense of engagement as learners. As such, learning together is dependent on trust and mutual engagement as members develop in a community of professional learners (Wenger et al., 2009).

Engagement is a necessary element in the pursuit of informal, self-directed opportunities to learn as a collective. Garrett (2011) asserted that engaging in the process of learning requires individuals to demonstrate risk taking and a willingness to be vulnerable and expose gaps in their current professional knowledge and understandings. As professionals, teachers are entrusted to pursue and engage in meaningful learning that will positively impact both themselves and the students they teach, throughout their tenure in education. Accordingly, (Sessums, 2009) real, constructive changes in practice are more likely to occur when there is a personal engagement and motivation on the part of professional learners.

Zeichner and Liston (1996) clarified, that by working in community, educators can realize their teaching goals and take responsibility for their professional development. Learner engagement can be facilitated and maintained not only in online learning environments but also through the interactions that take place between each individual learner (Beer et al., 2010). Interestingly (Wenger et al., 2009) also underscores the interplay between community and communication technologies, a powerful means of facilitating learning together. Engaging in professional conversations and authentic community connections, whether it be face to face or online, supports the criticality of educators being given autonomy, choice, and freedom to engage as professionals in learning.

#### Self-Directedness

Self-directed opportunities to creating new knowledge and solid understandings continues to be an important component to the learning process for professionals. Adult learning theory suggests that learners are resources with much to offer each other (Instone, 2005). Garrison (1997) advocated that learning *on one's own* is a repeated theme in self-directed learning. Knowles (1975) clearly stated that self-directed learning is a 'basic human competence'. It is a reflection of the individual to guide and shape their learning and, as such, their potential for self-direction (Brockett & Hiemstra, 1991). Holt and Brockett (2012) claim "the knowledge age" will continue to demand the current workforce's growth in both self-direction and using of Information and Communication Technologies (ICT's). However, Wenger (1998) and others attested that a central part of learning continues to reside in the need for social interaction. Self-directedness in learning holds the promise for engagement as individual learners, but importantly as individuals who not only invest in new learnings for themselves but work towards shared understandings as a *community* of professionals.

# **Reciprocity**

Piaget (1962) emphasized that "reciprocity is not a tit-for-tat exchange, but a mutual enrichment of partners by sharing attitudes" (as cited in Sabourin, 2013, p. 307). The principle behind *reciprocity* is mainly motivated by creating and maintaining social ties (Sabourin, 2013). Interactions (Swan, 2002) with the usual exchange of resources and information are the driving activities of online learning communities and networked professionals. Accordingly Sabourin, (2013) maintained the self-construction process of learning is created and strengthened by the *interaction*- with the student, teacher, environment and, critically, other learners. Wang and Fesenmaier (2003) noted that if an individual shares actively and freely, in turn, the community as a whole is more likely to experience success, as each member has access to information, tools, and support that no one individual might offer. Kollock (1999) further suggested that communities which exist online do so within an environment networked, digital, and literacy-rich with information. In summary, communities rely on the participation, cooperation, and

skillsets of each member to ensure success for both the community as a collective and each individual practicing and engaged self-directed professional learner.

# **Critical Thinking**

Active learning (Hudspith & Jenkins, 2001) is inquiring, exploring, discovering, and ultimately accomplishing a more sophisticated and deeper level of understanding. According to Dewey (1933), reflective thinking is "the kind of thinking that consists of turning a subject over in the mind and giving it serious and consecutive consideration" (p. 3). Intrinsically, critical thinking involves asking good questions, self-reflection, and engagement in learning (Vajoczki et al., 2011). Consequently, Paul (1993) asserted that critical thinking is not a set of skills separate from communication, problem solving, creative thinking, or collaborative learning. With the introduction of Information and Communication Technologies (ICT's) as part of more standard educational practices, the importance of critical thinking in connection to teaching and learning online is a necessary exploration. Garrison et al. (2001) described *cognitive presence* as a means by which learners can construct and confirm meaning through sustained reflection and dialogue. Garrison and Arbaugh (2007) affirmed:

Rooted in Dewey's (1933) construction of practical inquiry and the critical thinking it seeks as an outcome, cognitive presence has long been considered to be a distinguishing characteristic of higher education (Dauer, 1989, p. 161)

Invested educators and professionals consistently investigate ways in which nurturing vital critical thinking conversations in teaching and learning, both face to face and online, might support and define, and enhance their own professional praxis and practice as educators.

#### **Informal, Online Professional Learning Communities**

Teacher professional learning receives much attention among educational researchers and practitioners as it is an important input for student learning success (Kao and Tsai, 2009). It is possible, according to Dede (2006) that online teacher development programs, situated within teacher practice, could evolve to meet the needs for professional learning that is meaningful. Cochran –Smith and Lytle (1993) pointed to a growing effort among schools to provide professional development that involves "organizational structures that enable groups of teachers to come together to talk about their work, learn from one another, and address curricular and instructional issues" (p.89).

According to Garrison (2003) online learning communities are examples of *communities of inquiry*, and are made possible through authentic collaboration and reflective communication. As such, it is important to understand how a community of inquiry supports the process of learning through its interaction with other learners, technology, and content information (Kovanovic, Gasevic, and Hatala, 2014). Furthermore, Garrison (2003) argued, dimensions of higher-order learning, reflection and collaboration, are congruent with the *asynchronous, connected* characteristics of online learning communities. It is critical to mention that, according to Garrison (2003):

While the literature is replete with articles and books discussing online learning from the perspective of social and teaching presence, little progress has been made in understanding cognitive presence and higher-order learning effectiveness online (p.4).

"Cognitive presence" was defined by Garrison (2007) as "as the exploration, construction, resolution, and confirmation of understanding through collaboration and reflection in a community of inquiry" (p. 65). Establishing a collaborative culture, via appropriate use of blogging for professionals to inquire, explore, and make meaning together has the potential to fundamentally define and enable learners to come together authentically as a community.

The interplay of Information and Communication Technologies (ICT's) and the building of a learning community has a long history and the Internet itself has community roots as its foundation (Wenger et al., 2009). Investing and nurturing online learning communities provides opportunities for educators to grow as self-directed, empowered learners. Dede (2006) suggests that while there are a growing number of online professional development endeavors serving hundreds of teachers, evidence for what entails best practices for the design, implementation, and sustainability for these models of teacher *professional development* has been insufficient.

# **Blogging: A Tool and Context for Teacher Professional Development**

It is reasonable to consider the role of an online learning community and how participation in such an environment might enhance participants' understandings about their own practice (Dede, 2004; Laferriere, Lamon, and Chan, 2006; Mejias, 2005). The key activity that takes place in a blogging community is knowledge contribution (Doring, 2002; Kumar and Thondikulam, 2006). Blogs "are especially effective at supporting reflection, more so than other technologies would be" (West, Wright, and Graham, 2005, p. 1656). Blogs could become useful teaching and learning tools as they provide the learner a forum to authentically reflect and publish their thoughts, ideas, and common understandings. Ferdig and Trammel (2004) claimed

that blogging represents the potential to provide opportunities for active learning, increase higher-order skills, and improved flexibility in teaching and learning.

Luehmann and Tinelli (2008) stated emerging social networking technologies such as blogging offer potential to support professional learning through the development of selfdirected informal, motivated, like-minded communities. In creating and maintaining these communities, Wenger, White, and Smith (2009) believed technology is fundamentally expanding the possibilities of what it means to 'be together'. According to Kubal (2006), the online blogging community was over 60 times larger in 2006 than it was three years earlier. Moreover, Sattar (2015), affirms that blogging has the potential to shape and facilitate meaningful learning.

In the current age of web tools and technologies, blogging has been pervasively utilized, with the first State of the Blogosphere report in 2004 indicating new blogs being established each day. Accordingly, statistics from 2010's report showed significant growth in mobile blogging as a key trend that year. Statistics from Netcraft Web Server Survey suggest that in September 2014 there were one billion live host websites. Of this statistic, it was difficult to pinpoint the exact number of active blogging websites, and if any, were devoted solely to education. The Edublogger platform has been collecting and collating educational blogging data with annual reports dating to 2012. The State of Educational Blogging 2014 survey conducted provided rich data regarding how educators are using blogs as part of both student and professional learning. The key findings highlighted include current statistics on blog usage amongst educators and found the majority of respondents (20%) mainly using blogs for classroom websites. The percentage was higher (38%) with class blogs or student supported blogging, and approximately a third (30%) of professionals surveyed were maintaining personal or professional blogs. It is

important to note that, while the actual number of active websites and blogs are in constant flux, the total number of active websites, including blogs, continues to expand and flourish daily. Summarily, blogging has the potential to be an essential digital literacy tool, for both professional educators and learners alike.

Blogging provides an ICT environment that is more advanced than simple discussion forums. According to Kennedy (2003), blogs combine the best of technology, where work is collected, edited, assessed, all with the immediacy of publishing for a virtual audience. Similarly, O'Shea (1999) describes technology [blogging], as a means to establish both personal and intellectual ownership of new ideas, while engaging and interacting with abstract thinking. Specific to teacher professional education and blogging Cochran-Smith and Lytle (1993) maintain:

What is missing... are the voices of teachers themselves, the questions teachers ask, the way teachers use writing and intentional talk in their work lives, and the interpretive frames teachers use to understand and improve their own classroom practices (p. 93).

Using a technology such as blogging, teachers have more opportunities for critical reflection on their own ideas and others' teaching and learning (Yang, 2009).

#### The Downside to Learning in Community

Communities of practice, like all human institutions, can also have a downside (Wenger et al., 2002). There are many scenarios and barriers than can arise for learners as they come together as a community. It is critical to consider that the very qualities that make a community successful can, in the long or short term, be the same qualities that hinder the community from moving forward. A community can become its obstacle in learning, as Schwier (2002) claimed:

We assume that learners will want to come together, that they will be mutually supportive, and they will be driven to learn. But it is important to realize that communities, and particularly virtual learning communities, are not inherently good, desirable, or ideal. Sometimes learners aren't motivated, they aren't always mutually supportive and naturally collaborative, and they don't always bring the highest standards of mature conduct into their virtual learning environments. In other words, virtual learning environments don't always evolve into virtual learning communities (p. 2).

Organizations may create conditions that stifle and confine the development of a successful community of practice. Wenger et al. (2002) caution that a failed community is often worse than no community. Traditional measures of controlling an organization through highly structured rules and procedures are likely to create backlash and dissent within the community of learners. Schwier (2002) further suggested that learning communities have a "life span" and go through predictable stages. However, generally, the value of personal investment and sense of ownership that comes from forming a community far outweighs the potential risks. Communities come together out of a shared concern and, or passion. Wenger et al. (2002) proposed that being

aware of the risks will increase the likelihood of productive interactions within the community of learners and ultimately lead to a successful community of engaged professionals.

Finally, communities are a natural part of any organization and represent an important step in each individual learner moving from theory to embedded, day-to-day professional practice (Wenger et al., 2002). In all actuality, given the right conditions, individuals are likely to connect and discover they have a shared, common passion. Wenger et al. (2002) offered "cultivation" as an apt analogy to best describe working and learning in community:

Some communities of practice grow spontaneously while others may require careful seeding. Yet in both cases, organizations can do a lot to create an environment in which they can prosper: valuing the learning they do, making time and other resources available for their work, encouraging participation, and removing barriers. Creating such a context also entails integrating communities in the organization -- giving them a voice in decisions and legitimacy in influencing operating units, and developing internal processes for managing the value they create (p. 13).

The knowledge and expertise a community of learners cultivates and grows becomes, as Wenger et al. (2002) suggested, a living process rather than a static body of information. The power of these communities rests in knowing their shared interest, passion, and knowledge becomes their key to success (Wenger et al., 2002).

## Conclusion

Teacher professional learning is a complex enterprise (Sprinthall, Reiman, Theis- Sprinthall, 1996). Working in community with liked-minded individuals has, more often than not, become an integral part of our daily lives (Wenger, 1998). Continued research supports opportunities to better understand the value each individual can offer to a community of practice (Wenger, 1998).

There is a significant body of literature and evidence-based research to substantiate the power of learning in community together with engaged and motivated professionals. As new online technologies and accompanying digital literacies emerge, it is critical to consider what role they will play in the ever changing educational landscape. A limited body of knowledge exists to inform best practice in cultivating and maintaining self- directed, informal, networked communities of professional learners, especially as it pertains to K-12 learning environments.

It is important for educators to continue to advocate for and create online communities that support their development as self-directed, engaged, and motivated professional learners. Establishing a culture of learning in community affords educators the opportunity to grow as professionals. There may be a fundamental advantage in letting go of the traditional model of professional learning (i.e., face to face classes, lectures) and encourage educators to direct and shape, via web-based ICT tools like blogging, their own inspired, passionate, and empowered communities in the profession.

## CHAPTER THREE METHODOLOGY AND RESEARCH DESIGN

#### Introduction

An online learning community of practicing professionals offers an opportunity as a "site of research". ICT's, such as blogs, fundamentally expand the possibilities of what it means to 'be [learning] together' (Wenger et al., 2009). Since this research inquiry sought to explore ways in which an informal, online learning community can facilitate deeper understandings of practice and learning, social learning theory was utilized as the theoretical framework that guided decisions regarding research methodology. To better understand how an informal online learning community engages learners, this framework has been used to analyze how, using blogging, participants act individually, collectively, and within an online learning community of teaching professionals.

### Methodology

This chapter will describe the data sources and analysis techniques the researcher used for this research. The qualitative research design selected for this study used an instrumental case study methodology, intended to delve deeply and study a single phenomenon, the lived experience of the research participants, educators and experienced bloggers who are part of a networked online community; the design provides the means to interpret and understand the lived experience into a thick and rich description of evidence, allowing for critical reflection and qualitative analysis (McMillan & Schumacher, 2010). For this study, social *interaction* is at the center of ways in which participants connect and collaborate with the informal, self-directed online communities of professionals. Through extensive interviews, it was the researcher's intention to capture the essence that blogging, as context for a community of practicing

professionals, has the potential to foster a self-directed model for effective professional learning. The data from these interviews has the potential to fill current gaps in research and support future research study investigations.

Qualitative research methodology is a powerful tool for inquiry in action research. As defined by Merriam "qualitative researchers are interested in understanding the meaning people have constructed, that is, how people make sense of their world and the experiences they have in the world" (2009, p.15). According to Barbour and Barbour (2003), qualitative research has the potential to advance an ever-widening explanation, drawing on both diverse literature and even crossing disciplinary boundaries. The relationship between the researcher and participants within the qualitative research design and the evidence is consistently presented in narrative form. When considering the role of the researcher in this qualitative research design, it was one of "complete insider". McMillan and Schumacher (2010) offer a description of this type of researcher as one who establishes a role in the setting, engaging in genuine and natural participation, and becomes a member of the culture. It was the researcher's intention to engage in this instrumental case study alongside the research participants with the goal of establishing a climate of trust and a strong [working] relationship.

#### **Research Design**

This study examined a small sample set, limited to four practicing educators engaged in blogging conversations; a series of semi-structured interviews were conducted via email, transcribed by the researcher, and concluded with member checking to involve each participant to determine interview accuracy during a six-week time frame. As the nature of this study was to ascertain which elements have the potential to establish a community of inquiry using blogs as a tool for professional learning, these in-depth interviews provided insight into the participant's individual perspectives and their unique experiences as members of an online community of professional learners. Participants were chosen based on their prior experience as connected educators and bloggers. A sample size of four experienced bogging educators was used for the study. Each participant was chosen as part of the research design were active teachers in an elementary classroom setting, grades five through eight.

### **The Recruiting Process**

The recruiting process was a critical component to the research inquiry. Participants were selectively chosen from a larger grouping of connected educators that are part of the researcher's personal and professional learning networks. Each of the participants invited to take part in the study were globally connected educators who blogged and shared openly on the web. As the researcher investigated potential participants, the most relevant measure for selection was consistent, weekly blog posts to their personal or professional blogs. The researcher began with a list of ten potential candidates for the research inquiry. From there, as the criterion was met, it was possible to winnow down the candidates to four participants. Grade level, years of blogging experience, consistent postings, reflections, and commenting, as well as intentional writing that reflects relevance to classroom and student learning were critical gauges in the eventual selection process. It is significant to mention that while each of the research participants live in various states across the United States.

## Background of the Research Participants

When this study was first undertaken, it was critical that the research participants interviewed represented a diverse, yet knowledgeable cross-section of educational bloggers who regularly connect and collaborate online within their global learning community. It was important that each of the participants had enough experience to offer candid observations and critically assess the questions posed over the six week research study window. Identifying common elements was important, meaningful, and the most critical piece when selecting each individual research participant.

#### Participant #1

Research Participant #1 is an educator from Ontario, Canada with a decade of teaching expertise in a variety of classrooms at the elementary school level. Employed as a curriculum consultant, he/she continue to explore and share their learning through a variety of personal and professional blogs. Blogging and connecting on a professional level are an essential component to this participant's lifelong learning process.

### Participant #2

Research Participant #2 is an elementary educator who resides in a large metropolitan city in Texas. Throughout his/her eleven years in the teaching profession, he/she has amassed a wide range of teaching and learning opportunities. Ongoing work towards his/her doctoral program in educational leadership continues to propel him/her forward as both blogger and academic. This participant believes that his/her professional learning network has been a source of inspiration to write and share learning on a global scale.

## Participant #3

Research Participant #3 is a middle years educator from a large urban centre in Arizona with over a decade of experience teaching both students and mentoring colleagues in the role as a learning coach. An avid blogger and published author, he/she continue to strive for meaningful and authentic opportunities to learn and collaborate with teacher educators from around the world. This participant acknowledges that blogging has always led to more credible connections and learning opportunities amongst his/her peers and mentors.

# Participant #4

Research Participant #4 is employed as a Middle Years English Language Arts educator in a small, rural centre in Wisconsin. He/she has been teaching for just under a decade, and has helped to connect teachers and students in a variety of global projects and classroom learning activities. During the last four years, he/she has been sharing a myriad of topics on multiple professional blogs. Blogging for this participant, has been a positive experience. He/she has found that the more he/she shares, the more connected he/she becomes over time, which ultimately has led to more positive experiences and connections with colleagues and peers.

#### **Research Study Setting**

In order to better understand how participation in an informal, online community of practice supports a self-directed model of learning, a purposeful sampling technique (Marshall and Rossman, 1999) was employed. Marshall and Rossman (1999) confirm one of the advantages of a purposeful sample is in providing robust information to be collected and shared from corresponding data.

Finally, in terms of the study's setting, participants' were chosen based on their experience and expertise as "connected educators"; to ensure internal validity, it was critical to select educators who already engage in a connected, networked online community. While each of the participants had a grade range they teach in common, many of their own unique teaching and professional learning pursuits were diverse and unique to their school division or district. The bearing of any existing networks that participants may or may not share and the impact these relationships may have on the development and actions within this particular online learning community will not be explored in this study.

#### In-Depth Interviews

As with any meaningful dialogue, questions often become the spark to new ideas and deeper understandings. Within this research process, in-depth interviews were the foundation of the research inquiry. The greatest benefit to these types of interviews is the "use of open-response questions to obtain data on participants' meanings – how individuals conceive their world and how they explain or make sense of the important events in their lives" (McMillan & Schumacher, 2010, p. 355). Over the course of the interview process, several pre-constructed, open-ended questions were posed to invite conversations based on educational philosophy and epistemology of teaching, ways in which participants self-selected informal, professional learning opportunities, and intentional interactions with information and communication technologies (ICT's) such as blogging.

A series of semi-structured interviews were conducted and documented during a sixweek (October through November 2013) time frame. As the nature of this study was to ascertain

which elements have the potential to establish a community of practice using blogs as a tool for professional learning, interviews provided insight into the participants' individual perspectives regarding the utility of blogging for these purposes and supported a better, deeper understanding of their unique experience in the online community of learners. Participants were asked to reflect, critically analyze, and share their thoughts and feelings about the online learning community itself and what role it played in deepening their understanding of blogging as a tool for professional learning.

# **Guiding Questions**

Qualitative, guiding interview questions were the main focus for clear communication and exchange between the researcher and each of the participants. McMillan and Schumacher (2010) note that qualitative interviewing requires inviting open-ended questions (p. 357). It was important for the researcher to frame the questions to allow the participants to answer with purpose and focus. The semi-structured questions provided throughout the six-week timeframe provided an opportunity to delve into each individual's unique journey as blogger and connected educator.

These guiding interview questions were designed and developed as semi-structured questions that ensured the research inquiry was central to study. Participants were asked to reflect, critically analyze, and share their thoughts and feelings about the online learning community itself and what role it played in deepening their understanding of blogging as a tool for professional learning. Each week, a set of three new questions, was communicated between the researcher and participants and were crafted to provide a cognitive and discourse "anchor" to

clarify, referring to blogging, the learning journey undertaken by these educators. The research design employed provided an additional affordance, namely the time to review the data from week to week across the research time frame. With these opportunities there was the potential to not only stay true to course (i.e., the focused interview question), but also to be open to ask emergent questions and probe participants to ensure the rich and accurate data (i.e., to the participant's views and understandings) was collected. *Appendix C* provides a list of detailed questions asked, throughout the six week period, during the research inquiry process.

## Collecting the Data

The data was collected over a six-week time frame, from October 6<sup>th</sup>, 2013 to November 12<sup>th</sup>, 2013. Communication with participants took place via private email; to ensure anonymity and privacy of the research participants, alias University of Saskatchewan email accounts were created and utilized throughout the duration of the research study. Participants were emailed a series of three questions early Sunday evening, and had until the following Sunday to respond and reply. All questions were approved by the *University of Saskatchewan Ethics Behaviour Committee* prior to beginning the research study with participants.

#### Organizing the Data

It was important for the researcher to organize the data collected from the research study. "An essential early step in analysis is to organize the data as a means of facilitating the coding process" (McMillan and Schumacher, 2010, p.369). Making meaning of the data is one of the crucial first steps in the entire research process and a methodological and highly organized approach to data collection is core to this process. Qualitative researchers consider both data and

evidence as primary sources when investigating meaning-making activities amongst individuals and group members (Lincoln, 2002). Sifting and sorting through the data requires a means by which sense making is possible. Reading and re-reading the qualitative data collected (i.e., participant responses to the weekly questions) was a process of "getting to know" the conversations that, in turn, facilitated subsequent deeper understanding of each participant's experiences and learning. Being thorough about organizing and reviewing the data also provided the researcher with a first opportunity to look for common themes, both pre-figured and emergent, and determine the richness and thickness of the data sets collected.

## Transcribing the Data

If rigourous methods are applied, qualitative data sets usually contain an abundance of rich information. Taking the time to transcribe the data is another critical first step in the qualitative research process; "transcription prepares the data for visual review by the researcher" (McMillan and Schumacher, 2010, p.370). It is critical to mention that the usual process of transcribing audio recorded interviews, common in qualitative research, was facilitated through online email conversations between the researcher and participants; the data was already "transcribed" by the nature of the communication medium, namely, text via email. Throughout the six-week time frame, participants sent their responses, via email, to the research through an alias University of Saskatchewan student account. From here, archiving the conversations as word documents was simple and straightforward and facilitated further in-depth analysis using Nvivo<sup>TM</sup>, qualitative research data analysis software.

## Coding the Data

Coding the data was an extensive process undertaken by the researcher. At the heart of the process was the research question and sub-questions detailed within the initial research proposal. Within the initial proposal, themes and categories had emerged from the literature review. These themes, *communities of practice, blogging as a self-directed learning model*, and *blogging as a cognitive, critical thinking process* provided a necessary starting place for the research inquiry and investigations. The data collected led the researcher to explore preconceived to emergent themes that further shaped and directed the research and subsequent findings. Given this iterative research design process and further refinements of the protocol, the thesis committee deemed pilot study unnecessary, and as such, was removed from the original research action plan.

Because of the evolved and expanded conceptual framework, theme structure, question pool, and interview protocol, the researcher did *not* utilize Gunawardena, Lowe, and Anderson's (1997) Coding Scheme of Knowledge Constructions initially discussed in proposal; as the research and conversations with participants evolved, Gunawardena et al's (1997) Coding Scheme of Knowledge Constructions would *not* be an effective means of analyzing and categorizing the data research sets. As the researcher delved more deeply into Gunawardena et al's coding scheme, it became apparent that not only were there too many categories to effectively code and analyze, but also a narrowed and limited scope to efficiently support data set analysis. In further conversations with the thesis supervisor, it was advised that the researcher should allow and include emerging themes to continue to shape and determine the data coding

process, supported by McMillan and Schumacher's (2010) claim that "the key to the data coding process is to allow the data to suggest the codes" (pg. 371).

It was critical to map the appropriate next steps in the data coding process. In order to identify the important data segments, the student researcher followed the five steps outlined by McMillan and Schumacher (2010, p. 371). The first step was to get a sense of the whole through reading at least two data sets, and analyzing the data collected. Writing down the important ideas that emerged from the interviews and resulting transcripts informs the researcher regarding what the data segments might look like. In this case, the researcher began with data segments comprehensible in and of themselves, one specific idea or piece of relevant information; for the purpose of this study, these data segments were typically between two to four sentences in length. The second step was then to generate initial codes from the data by reading a segment and asking critical questions of that particular data set. Subsequently, the third step was to *compare codes for duplication*, and overlapping themes that had emerged from the analysis. Academic definitions for each of the emergent themes were investigated and these scholarly definitions were utilized extensively to analyze data collected during the research inquiry (see Table 4.1). The fourth step was to *apply the provisional coding process*. Last, and perhaps the most critical, was the opportunity to *continue refining the coding system*.

According to McMillan & Schumacher (2010), data coding is identifying and "tagging" small pieces of important data in the research study. To facilitate and aid in pinpointing important data segments, the researcher used Nvivo<sup>™</sup> qualitative data analysis software. Each data segment identified for analysis within Nvivo<sup>™</sup> was a stand-alone idea or essential piece of

relevant information. It was determined by the researcher these units of analysis would be a short paragraph that contained one discrete idea or focus. These units of analysis were then examined for the presence of research and emergent themes based on the conceptual framework, which were clearly supported by the earlier literature review and conceptual framework construction. The initial coding process (i.e., determining the sets of units of analysis) revealed multiple segments and provided a blueprint starting point to further investigate the research inquiry. Multiple iterations were undertaken as the researcher refined the coding process; with each new iteration the researcher could drill more deeply and examine emerging themes via data set analysis. The researcher revisited and refined the coding process and explored multiple iterations before the current themes investigated and presented in this research study emerged.

### Categorizing the Data

The process of this research inquiry began with the researcher's personal journey as an engaged learner and, by proxy, an established blogger. Often education professionals seek authentic opportunities to learn with and from colleagues and peers. Lincoln and Guba (1985) speak of the "confirmability" of the research; referring to the degree in which the researcher can demonstrate the neutrality of the research interpretations (as cited in Hoepfl, 1997, p. 60).

A critical component to the data collection and subsequent understandings taken from the research inquiry was categorizing each research participant's unique conversations and insights over the data collection six week time frame. Categories represent the first level of induction and deeper understanding by the researcher (McMillan & Schumacher, 2010). The initial iteration of categorizing participant's conversations (i.e., the "first" cut of data analysis) was done with the

broad themes outlined in the initial research proposal. They were: communities of practice, blogging as self-directed learning model, and blogging as cognitive, critical thinking process. It became evident to the researcher after this first iteration that further distillation would be needed. The coding process took on multiple iterations to pinpoint and refine themes, patterns, and similarities, as well as differences and data patterns between the participants.

## **Researcher's Role**

Qualitative research, according to Creswell (2007) begins with assumptions, worldview, the potential of a theoretical lens, and the study of problems as individuals inquire and make meaning in the world around them. It is also critical to note that the researcher is the primary "instrument" in data collection and analysis (Bogdan & Biklen, 1992). This study had the potential to be shaped by the role of the researcher, sharing personal experiences alongside those of each individual research participant within the study.

The role of the researcher was that of *complete insider*. The researcher recognized that both the viewpoints and understandings shared, from the participant's perspectives and experiences, had the potential to influence and shape the overall research process. A pre-existing, informal online relationship existed between potential participants and the researcher; each individual participant had a prior professional relationship with the researcher through various Information and Communication Technologies (ICT's), which included online social media (as examples, Twitter and/or Facebook). The researcher has become an avid blogger, sharing learning via blog posts for almost five years. It is possible that the researcher might have shown

bias towards the participant's responses, in a positive light or towards favourable responses towards blogging, during the research study and subsequent data analysis.

As such, it is likely the researcher did have biases not only because of prior knowledge and understandings but also the informal interactions with participants as engaged, online educators with shared personal and professional learning networks. Regardless, it is the researcher's belief that the approach to the research inquiry was both reliant and valid. Investigation of multiple data sources was used to ensure the integrity of the findings within the study, [to assure the findings are supported by more than one data source]; semi-structured interviews were the primary data source used to investigate the informal, online professional teaching and learning experiences (ie. such as blogging) among the research study participants. Data analysis required rigorous and methodical collection and analysis (eg. applying preconstructed and emergent themes) of the data. Each of these data sources more accurately represent each participant's rich narrative in the research. Accordingly, the researcher has been truthful in presenting biases and has taken the necessary steps to ensure validity, from start to finish, within the research study.

## Ethical Considerations

It is important to establish a culture of community where relationships are foundational and facilitate the personal and intimate nature of a qualitative research study. As stated by McMillan and Schumacher (2010), ethical guidelines in qualitative research include informed consent, confidentiality, anonymity, and privacy for all participants involved in the study.

Prior to undertaking the research study, it was necessary to ensure that the steps to protect research participant's confidentiality were made. Research study participant's anonymity was maintained as communication took place with participants via email. The researcher set up aliases for the participants through with the secure usask.ca account. The research participant's names were not used in transcripts from interviews, and all of the data collected from participants was archived in a document folder only to be accessed by the researcher and their direct academic supervisor. Any information or data that may have identified participants was removed or deleted. Participants were informed, through the consent process, of privacy and confidentially measures in place. Potential research participants were always contacted by email to obtain consent. The first step was to contact potential candidates and provide with background to the research study as well a copy of the organizational letter of consent (see Appendix A). This consent form explained the voluntary nature of the research study, the right to withdraw and detailed how the data collected would be collected. Once potential participants agreed to take part in the research study, an invitation to participate was sent, via a secure email account, to be signed and returned to the researcher prior to the study commencement date (see Appendix B).

## CHAPTER FOUR RESULTS

#### Introduction

This chapter will review and summarize the findings from the data to investigate which elements have the potential of establishing a community of inquiry using blogging a tool for the professional learning of educators.

This study looked at a sample set of four practicing educators engaged in blogging conversations during a six-week time frame. Participants were chosen based on their prior experience as connected educators and bloggers. A sample size of four experienced blogging educators was used, and subsequently invited to participate in the study. Each participant chosen as part of the research design was teaching in an elementary classroom setting. Participant #1 taught grade seven, participant #2 taught a variety of assignments from grade five through eight, participants # 3 taught middle school, grades seven and eight, and participant #4 taught grade five. To ensure validity, it was critical to select educators who already engaged in networked online communities. As a collective, each of the participants had been blogging for a minimum of three years. In total, they brought over twenty years of blogging experience to the research inquiry. Note, that since the study, each of the participants has moved on to a different position within their division, district, or taken on a new role out of province (ON) and states (WS, AZ, TX).

It is the researcher's view that, each participant brought a unique and divergent perspectives to the research, which ultimately led to critical conversations regarding connecting and collaborating online with colleagues and educators on a global scale. Each participant demonstrated a keen desire to write about his/her own personal learning journey and invite conversation regarding their practice and beliefs about teaching and learning. It is the researcher's opinion that all participants demonstrated the ability to be objective, thoughtful and provide insight and candour throughout the research inquiry. Their ability to engage in sincere and frank conversations throughout the research process provided valuable insight into their own praxis and epistemologies of teaching and learning, but also the research inquiry.

The semi-structured questions provided a framework to understand and appreciate the online connections and networked collaboration research participants had with his/her own personal and professional informal, online learning communities. This process enabled in-depth observations regarding not only the 'how' but 'why' participants share and vet their views and ideas of teaching and learning in such a public forum as a blog; through this process participants provided insight into how blogging per se has changed their practice and the ways in which students learn in their classrooms. Candidly, participants were invited to weigh in on and share what skills they felt were necessary for a teacher to be successful in a technology-rich learning environment. Week to week it was the researcher's goal to understand how each of these professionals engaged in conversations with their informal, online learning community, via blogging. It was important that the research reflected how this regular dialogue with peers via blogging shaped their learning, and that of the students in their classrooms.

As each week progressed, participants were asked how they began as bloggers and how they could establish, grow, and maintain their personal learning networks. They were invited to share familiar technologies and whether these technologies had led to influential experiences, either positive or negative, in regards to connecting online. They were asked to share their own personal blogging journey; their why, and how they sustain their blogging conversations. They

shared what supports were available when they first started and how their own learning has evolved since connecting and collaborating online. Semi-structured questions about choice of subjects and topics were discussed as well as how they share their blogs with a broader audience. Participants were provided an opportunity to reflect on their own pedagogy and connecting online, specifically blogging, and how it has influenced their practice and learning in their classrooms.

A substantial part of the data coding process was devoted to identifying the critical components of each conversation that emerged from the research inquiry. In terms of understanding and evaluating the depth of knowledge and interactions in online learning environments, it was critical to examine knowledge construction in blogging conversations. These types of discussions, namely posts and comments, are key indicators for understanding the extent of the community's interactions online. Please note, that any given text segment could have more than one code/node associated with the tagged text from the participant's research study transcripts; for example, a segment could reference *self-directedness*, but also reference *engagement* and *reciprocity* as the text segment also pertains directly to multiple emergent themes. See *Appendix E* for an example of a text segment with numerous nodes coded in the study transcripts.

From the researcher's perspective, the recursive analysis process was necessary to repeatedly refine and reevaluate the coding scheme. The researcher was consistent in continuously, in this first phase of analysis, refining and distilling the most salient themes that became evident throughout the coding and categorizing of the collected data sets. The general codes that the researcher started with as over-arching categories from the initial thesis proposal

progressively were regrouped and refined until the most salient themes emerged. For instance, the final categories of *self-directedness* and *engagement* were derived from an earlier, more broad iteration of Blogging as a Model for Self-Directed Learning. Also the global theme, Communities of Practice, proved much too complex to use to effectively categorize the data. With each regrouping and front-end analysis, and continued iterative refinement of the literature review, it became apparent that *Educational Reciprocity* would better fit and complement the investigative purposes of this research inquiry. Finally, because of this recursive analysis, the theme of *Blogging as a Means of Enhancing Critical Thinking* was refined during the research analysis to include the Communities of Inquiry conceptual framework, but with an exclusive focus on Cognitive Presence. As the inquiry progressed and new literature was investigated, the researcher felt this new research lens provided more objective, sharpened themes to focus the research inquiry. See Table 4.1 for a summary of the sharpened themes, emphasizing both scholarly and working definitions utilized by the researcher. It is critical to mention that the researcher investigated and scrutinized multiple scholarly definitions, and of these definitions, chose those best suited for the research inquiry; these definitions, in turn, led the researcher to the refined set of coding definitions in Table 4.1 featured below.

Table 4.1Definitions for Coding and Categorizing of Data (Scholarly & Coding Definitions)

Theme	Scholarly Definition	Coding Definition
Engagement	"Engagement (Coates, 2007) is seen to comprise active and collaborative learning, participation in challenging academic activities, formative communication with academic peers, involvement in enriching educational experiences, and feeling legitimated and supported by learning communities"(as cited in Beer, Clark, & Jones, 2010, p.76).	Willingly participates in collaborative learning community. They feel supported in conversations, activities, and discussions with peers.
Self- Directedness	"In its broadest meaning, 'self-directed learning' describes a process in which individuals take the initiative, with or without the help from others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating outcomes" (Knowles, 1975, p.18).	Initiates and takes responsibility for pursuing and actualizing learning.
Educational Reciprocity	Reciprocity can be defined as a mutual coordination of attitudes and perspectives, emotional and cognitive (Piaget, 1962). Communities, according to Schwier (2002), spring from, and are maintained by interdependence and reciprocity among members. Temple (1998) contends that reciprocity is not, or not only, a material exchange, but an exchange of attitudes broader and deeper. Such an obligation can be called recognition or gratitude, it must be taken here in the sense of a spontaneous movement.	Promotes and engages in <i>mutual</i> interaction, cooperation, & exchange of ideas.
Communities of Inquiry Cognitive Presence/	Cognitive presence is defined as the exploration, construction, resolution and confirmation of understanding through collaboration and reflection in a community of inquiry. It is defined as a cycle of practical inquiry where participants move deliberately from understanding the problem or issue through to exploration, integration and application. (Garrison, 2007)	Works to solve problems, build understandings, identify, evaluate, and act on solutions. Reflects on current understandings and strengthen new learnings.

## Analysis of the Data

This section presents the findings from each distilled theme and coding categories utilized throughout the research analysis; the interview transcripts were analyzed via NVivo<sup>TM</sup> qualitative software, to provide further clarity and understanding of distilled emergent themes and patterns in the data. Further interpretations of these findings, and relevant explanations and speculations of the researcher's understanding of the data will be included in Chapter Five, Discussion.

Figure 4.1. presents a "snapshot" overview of the research inquiry interviews, captured as a "coding tag cloud" summary and generated from and within the qualitative analysis software. It is a visual description of each individual word tagged from online conversations that took place between the participants and the student researcher; bolded colour and larger font represent the relative frequency of the tags within the transcripts. Of the hundred words analyzed for frequency, the following were ranked in the top five: blogging, blog, learning, online, and time. The reference term *blogging* was coded on ninety-three separate occasions with a weighted percentage of 2.39%. The term *blogs* followed, coded a total of eighty unique instances with a weighted percentage of 2.06%. The term *learning* was ranked third, coded fifty-seven times within the transcripts and a weighted percentage of 1.47%. The fourth term coded was *online*, which was coded forty-one unique occasions with a weighted percentage of 1.05%. Last, the term *time* was coded thirty-three separate times with a weighted percentage of 0.85%. It is important to note, as explained in NVivo<sup>TM</sup>, the number of references coded reflects the percentage of the source represented. For example, a coded section that represents 50% of the overall document indicates that half of the source has been coded at the node.

also always based become began blog blogger blogging blogs classroom community connecting connections conversations creating day digital easy education educator educators environment even example experiences facebook feel find first get go however ideas influence just know learn leagning like maintaining make many means media much need never now often One Online others part people personal place platform platforms post posts professional put read really reflect result see set share sharing since social someone something started students teacher teachers teaching technology thing think thinking thought thoughts time times tools twitter types want Way ways Week well wish work write writing Yes

Figure 4.1. Tag Cloud Summary of participant interviews

As part of a more in-depth analysis, it was critical for the researcher to further distill the "tag cloud" summary of the combined research participant's transcript results. It was confirmation, based on the researcher's data analysis, that both *blog* and *blogging* would be among the most frequent terms tagged from the research inquiry interviews. It was expected that terms specific to exploring the characteristics of blogging, both as a tool and context for informal, professional development would represent significant frequency within the results. The term *learning* was ranked third and mentioned fifty-seven unique instances accordingly throughout the research study interview transcripts. It is the researcher's opinion that, had both *blog* and *blogging* been removed as "expected" terms from the word frequency count, *learning* could be the most important term brought forward from the participant's research study

transcripts. The term *time* can also be considered significant, ranking unexpectedly in the top five terms within the tag cloud summary. Other noteworthy terms captured within the "tag cloud" summary might include any and all of the following: *professional, students, teaching, community, classroom, educators,* and *think.* 

## **Results According to Emergent Themes**

The following results are presented according to each of the research themes analyzed. Figure 4.2. presents the overall results for each of the coded themes, based on the results from each individual research participant.

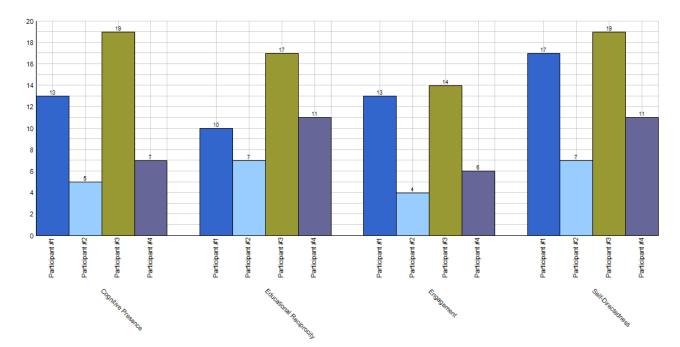


Figure 4.2. Overall Research Results

In sequence, Figures 4.3. through 4.6. represent the results presented for each of the four research participants by emergent themes. The Y axis represents the total of categorized unique references coded at the node for each theme.

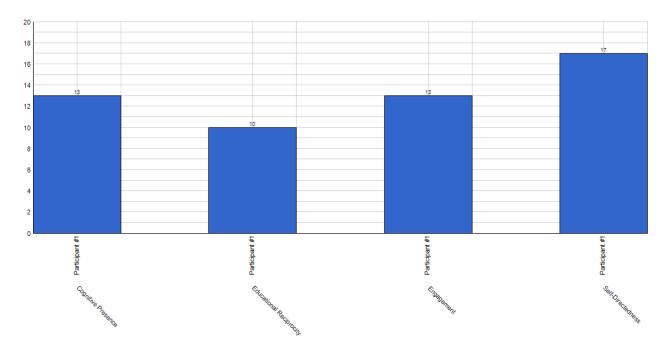


Figure 4.3. Research Participant #1

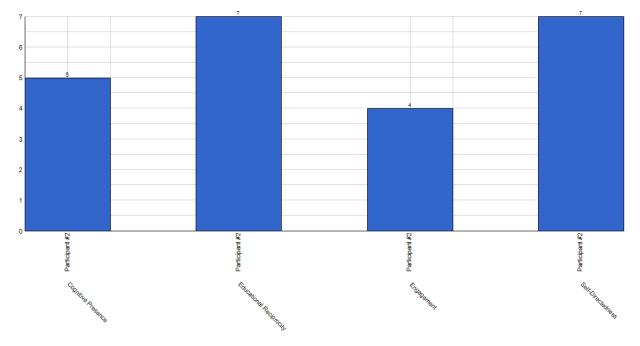


Figure 4.4. Research Participant #2

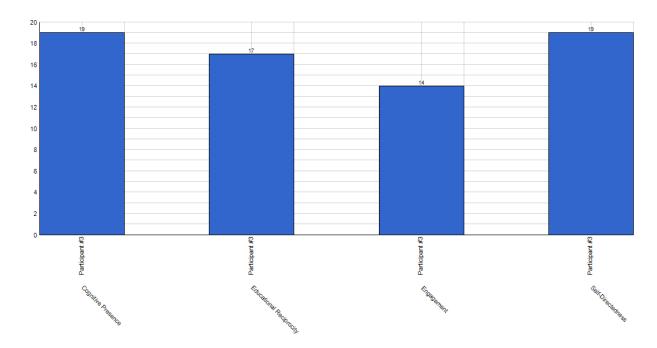


Figure 4.5. Research Participant #3

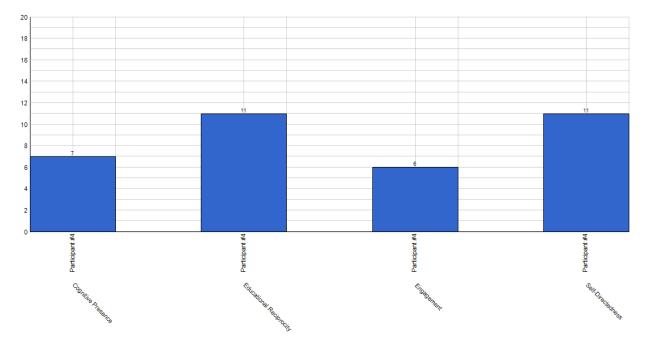


Figure 4.6. Research Participant #4

Once coding of the data sets was complete, the following order of importance as measured by frequency of data segments coded for that category emerged from the themes: selfdirectedness, educational reciprocity, communities of inquiry (cognitive presence), and engagement.

## Self-Directedness

Fifty-four (54) *unique* references to self-directedness were coded during the research inquiry data analysis. Figure 4.7 demonstrates the total for each research participant's coded transcripts for this theme. Participant #3 had the most frequent references coded [self-directedness] at the node, with 19/54 individual coded references and 36.78% of the data set text coded at the node. Participant #1 followed with 17/54 unique coded references and 42.20% of the data set text coded at the node. Participant #4 had 11/54 references coded, with 31.85% of the data set text coded at the node. Last, participant #2 had 7/54 unique reference codes, with 49.56% of the data set text coded at the node.

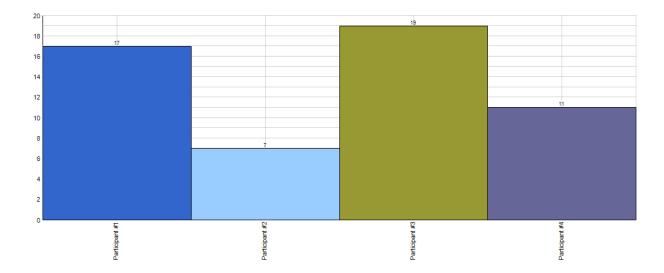


Figure 4.7. Self-Directedness

## Educational Reciprocity

Forty-five (45) *unique* references to educational reciprocity were coded during the data analysis process. Figure 4.8 illustrates the breakdown for each research participant's coded transcripts for this theme. Participant #3 had the most frequent references coded [educational reciprocity] at the node, with 17/45 individual coded references and 29.29% of the data set text coded at the node. Participant #4 followed with 11/45 unique coded references and 35.98% of the data set text coded at the node. Participant #1 had 10/45 references coded, with 28.04% of the data set text coded at the node. Last, participant #2 had 5/45 unique reference codes, with 28.88% of the data set text coded at the node.

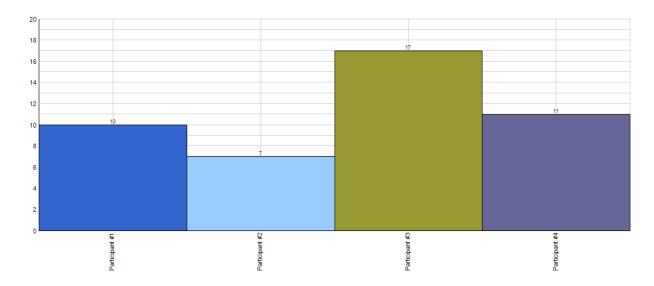


Figure 4.8. Educational Reciprocity

# Cognitive Presence

Forty-four (44) unique *cognitive presence* (as defined by CoI model) references were coded during the data analysis. Figure 4.9 illustrates the breakdown for each research participant's coded transcripts. Participant #3 had the most frequent references [cognitive presence] coded at the node, with 19/44 individual coded references and 37.99% of the data set text coded at the node. Participant #1 followed with 13/44 unique references coded, with 19.75% of the data set text coded at the node. Participant # 4 had 7/44 references coded, with 23.28% of the data set text coded at the node. Last, participant #2 had 5/44 unique reference codes, with 34.81% of the data set text coded at the node.

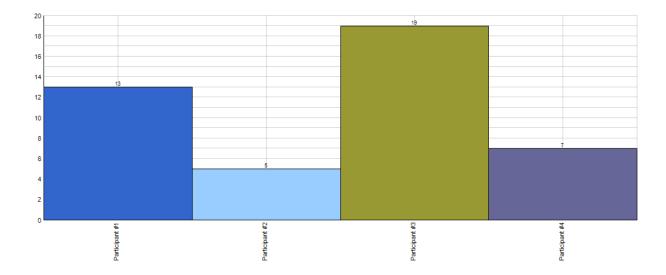


Figure 4.9. Cognitive Presence

## Engagement

Thirty-seven (37) *unique* references to engagement were coded during the data analysis process. Figure 4.10 demonstrates the breakdown for each research participant's coded transcripts. Participant #3 had the most frequent references [engagement] coded at the node, with 14/37 and 25.14% of the data set text coded at the node. Participant #1 followed with13/37 unique references, with 25.40% of the data set text coded at the node. Participant # 4 had 6/37 references coded, with 21.82% of the data set text coded at the node. Last, participant #2 had 4/37 unique reference codes, with a total percentage of 19.79% of the data set text coded at the node.

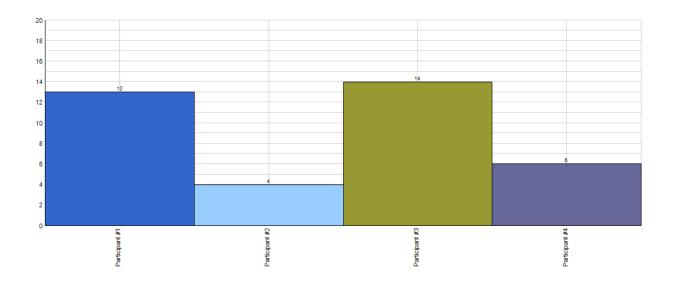


Figure 4.10. Engagement

### CHAPTER 5 DISCUSSION

### Introduction

This chapter examines and interprets the findings presented in Chapter Four, including findings regarding the conceptual framework and specific elements investigated, namely: self-directedness, educational reciprocity, communities of inquiry, and engagement. The potential of said elements to establish and facilitate a community of professional educators using blogging as a tool for continued learning are also discussed. Finally, additional commentary provides speculations regarding potential barriers to the activation and realization of the core elements described to facilitate self-directed, informal professional learning in real-world contexts.

#### **Discussion of the Results**

Throughout this inquiry, from categorizing and distilling the data, to refining emergent themes, the significance of self-directed, personalized, informal professional learning became apparent. A better understanding of which elements might facilitate educators being self-directed, inquiry-based professional learners defined the foundation, goal and scope for this investigation. The four themes of self-directedness, educational reciprocity, cognitive presence, and engagement were the core elements within the inquiry and research process. The process of refining and sorting the data-multiple times provided increasing clarity to these core elements for their potential to support and nurture an informal, self-motivated community of engaged teaching practitioners/learners.

## Engagement

#### Learner Engagement

Learner engagement has been described as a much needed, if not critical, element to quantify and qualify learning. It could be argued that without the inclination to engage in creating and sharing new information, how would it then be possible to develop a skillset to acquire new learning? A clear understanding of the term *engagement* is needed to best understand its function in an educator's day-to-day teaching and learning. However, engagement can be somewhat difficult to define, based on its broad scope and application in a variety of education contexts; the term *engagement* continues to cause ongoing discourse, even outright disagreement, not only with researchers, but academics in many fields, including education. Crafting a *universal* definition that could be used across multiple disciplines isn't readily available and has yet to be investigated. As part of the research study, the notion of engagement was not only an emergent, but a *consistent* theme across the research participants. A clear operational definition for engagement would prove requisite for further data set analysis. Interestingly, according to Linkon (2006) the challenge, in part, is defining engagement and how it relates to learning (as cited in Garrett, personal communication, 2011, p.2). Defining and understanding engagement was an important step within the researcher's inquiry process.

As part of the investigations to define engagement for this study, the researcher explored multiple academic texts to source a definition that was most applicable to education, both in teaching and in learning. Garrett (2011) provides an excellent summary in which he amassed and vetted several definitions of engagement found within the education literature. According to

Garrett (2011), few scholarly works have been focused on defining the term engagement. Of note amongst the academic literature, Barnett (2003) suggests that:

Engagement is a coming together, a merging, a fusing. Engagement points to mutual listening, to reciprocity, and dialogue but conducted in a willingness to change. It is the antithesis of separateness, of distance, of incomprehension. Engagement implies not just a coming together but an interaction (p. 23).

Engagement then, as recommended by Barnett (2003), speaks to the importance of not only working in community, but also in the reciprocal nature of learning. This rationale led the researcher to seek an explanation that pertained to educators and learners alike. Coates (2007) provides the following aggregated definition which affirms:

Engagement is seen to comprise active and collaborative learning, participation in challenging academic activities, formative communication with academic peers, involvement in enriching educational experiences, and feeling legitimated and supported by learning communities (as cited in Beer, Clark, & Jones, 2010, p.76).

Inherently, the scholarly understandings of both Barnett (2003) and Coates (2007) led the researcher to develop an operational definition to support the data analysis process, namely: engagement is: *the willingness to participate in a collaborative learning community, where learners feel supported in conversations, activities, and discussions with peers.* From the researcher's standpoint, engagement is a necessity for being a self-aware, community minded, reflective and an empowered teacher and learner.

## **Engaged Professional Learners**

Engaged, self-directed teaching professionals seek opportunities where they can hone and perfect their craft. In many cases, educators spend a considerable amount of time outside of their school day, engaging in learning that will be beneficial to themselves and to the students in their classrooms. Logically, these individuals seek professional resources that best suit their unique learning needs and, in turn, many progressive teachers have explored supports and resources recommended by fellow colleagues on their professional blogs. These often "just in time" supports can be accessed at the leisure of each individual teacher/learner. However, in addition to "consuming" information shared on various blogs, many teachers are "reciprocally engaging" with others, creating, vetting, and sharing their understanding through the process of blogging. Of note, Participant #3 remarked that "It might not even be observable, but so many of my thoughts on teaching have come from blogging and from reading other people's blogs" (reference #8).

For many educators, it becomes a conscious decision to turn to a community of likeminded professionals who they feel inspired by and connected with. More and more, teachers are creating and forming their own personal learning networks (PLNs), individuals who have become self-selected mentors, colleagues, and reputable guides within their own learning communities. As part of the research inquiry, participant #3 communicated:

In 2007, I joined a deliberate blogging community, and four years later that's when I began connecting with others. I didn't see my blog as a form of journalism and certainly didn't see it as a brand. For me it was a place where I could be myself. These weren't followers or readers; they were friends (reference #1).

This type of "grassroots orientation" (one that can grow inside a school learning environment or perhaps even division-based, germinating from a shared sense of inquiry or wonder), has the potential to nurture and cultivate successful teaching and learning. It is this researcher's view that investigating and learning together, near or far in community, provides authentic and rich opportunities to innovate and bring about meaningful change from within the profession.

More and more individuals are discovering that groups of like-minded peers are connecting and collaborating with each other online. No longer bound by time and distance, communities can benefit from a global system of interconnected modern communication technologies (e.g., blogging) to create, maintain, and together sustain a "learning tribe." This would be accurate in the experience of both the researcher, and the participants in this study. Participant #2 was able to capture this very sentiment:

I see blogging as a means of cultivating an online community. I see the blog as a hub for connecting with others. While Twitter and Facebook are powerful connection tools, the blog allows you to elaborate, share, expand, and engage in discussions on in depth posts. While I didn't create my blog to build an online community, I feel that is happening more and more because of the way more educators are gathering online to share, connect, and reflect together (reference #4).

#### Motivated to Learn- A Prerequisite for Learner Engagement

Motivation can be one of the many qualifiers used to identify an engaged and involved individual. It has been said that people who are able to create and sustain just the right conditions

to remain motivated often find themselves passionate, purposeful, and empowered as learners. They derive energy and vitality from a multitude of learning endeavours, not limited to *either* a professional *or* personal level. This was evident throughout the coding and data analysis, as the participants shared their own motivations for a continued blogging presence. While many examples of personal and professional motivation were brought to light, participant #1 aptly captured the sentiment of the group by declaring:

Blogging is one of my main creative outlets. For the past 3-4 years, I've considered it as integral part of my life as going for walks with the dog or cooking delicious and healthy meals; seemingly mundane, but a must for my balanced lifestyle...(reference #5).

Of particular note, participant #1 also spoke to the notion of how "blogging is public selfpublishing" (reference #12) and shared the process by which they hone their blogging skills.

I choose topics and subjects that compel me to write. It's pretty simple: if it's something I could talk about for ages about, then it's likely a subject to blog about too...My main goal is to clarify my own thinking, archive it, and have fun doing so...I am a practitioner of mindfulness. A lot of my ideas for blogging come in those moments. When I feel a spark of an idea, I jot it down on my Evernote app on my phone (reference #8).

# Elements of an Engaged Professional Learner

Continued efforts to sift, sort, and analyze the findings has, in the researcher's view, led to a deeper understanding of additional possible indicators for engagement within a professional learning community in education. Engagement depends upon active participation by community members who are not only self-directed and motivated, but also willing to promote independent, critically-minded, and reflective opportunities to learn. Intrinsically, these professionals advance a mutual exchange of shared understandings, knowledge, and instruction.

#### **Self-Directedness**

## Learner Self-Directedness

The term *self-directed* is often considered synonymous with terms like individuality or independence. It is an expression relied upon in education to describe an end goal for educators and learners alike. As mentioned in Chapter Two, Knowles (1975) offers a generally accepted definition of self-directed learning:

In its broadest meaning, 'self-directed learning' describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating outcomes (p. 18).

Knowles (1975) alongside scholars in the discipline of self-directed learning (Brookfield, 1986; Garrison, 1997; Long, 1991; Mezirow, 1985; Tough, 1971) provided the foundation for a workable operational definition to efficiently analyze the research data sets. To further support and clarify, the researcher was able to craft the following working definition, which states: a self-directed learner is an individual who *initiates and takes responsibility for pursuing and actualizing learning*. It is the researcher's view that self-directedness, as applied to one's lifelong learning, is one of the most critical and important qualities that self-reliant and efficacious individuals possess to succeed in the world today.

## Reflective and Autonomous Professionals- An End Goal of Self-Directedness

Teaching has become a fast-paced and ever-changing path of continuous learning to be undertaken by vigilant educators within the profession. Each new school year presents teachers with a distinctive group of students to teach and learn alongside; their students' unique strengths, abilities, and needs makes planning for instruction in the classroom a worthy challenge. For these very reasons, educators spend a considerable amount of time and energy reflecting on the day-today workings, resources, and utility of their personal learning networks (PLNs).

Blogging has the means of providing educators an opportunity to authentically explore, reflect on, and synthesize their understandings of teaching and learning on a consistent basis. As stated by Participant #3 "it might not even be observable, but so many of my thoughts on teaching (from the most personal and philosophical to the most day-to-day practical) have come from blogging and from reading other people's blogs" (reference #12). Blogging, therefore, as a medium of openly sharing thinking and learning online, can not only influence but could also have a significant impact on both teacher epistemology and perspectives on learning.

Interestingly, blogging has the potential to become an effective tool for documenting and archiving teacher self-reflection within the profession. Blogging could be an effective medium for educators to design and share professional understandings that are uniquely personalized, reflective and self-directed. According to Kennedy (2003), blogs combine the best of technologies, where reflective insights and ideas are collected, edited, and assessed, with the immediacy of publishing for a virtual audience. In the words of Participant #1, "I treat my online [blogging] presence as though it is a portfolio of learning and reflection" (reference #13). It is this

mindset, in the researcher's view, that affords educators the autonomy to guide and shape their own, self-directed professional learning opportunities best suited to their learning needs identified by reflective praxis.

Finally, Brookfield (1985) argues that a critically reflective teacher enhances the learning experience of students. Good educators spend their entire career with the ultimate goal of enhancing student learning in their classrooms. At the epicenter of the work is student achievement. Dedicated teachers work tirelessly to ensure that each child in their classroom is provided with the best education possible, one that is engaging and motivating. The researcher was struck by this statement made by Participant #1:

Blogging helps me become and stay a reflective, metacognitive, and collaborative educator. It assists me in making sense of theory, practice, and experience. Because of being part of a nurturing network of bloggers, I also practice daily what it means to be part of a blended learning environment which is self-directed (reference #17).

## Community of Self-Directed Learners

Opportunities to connect, share, and grow as learners present themselves constantly. Intrinsically, self-directed learning can be perceived as a familiar and informal approach to collaborate and share beliefs, ideals, and practices with like-minded individuals. No longer bound by conversations that could only take place within the wall of our schools, we now have the expertise of many competent and passionate colleagues at our fingertips. Physical and timebased barriers that were commonplace even a decade ago no longer exist. Schwier (2002) asserts that "for a virtual learning community to exist, it is necessary for individuals to take advantage

of, and sometimes invent, a process for engaging ideas, negotiating meaning and learning collectively" (p.1).

In essence, one such *community*, meeting all the criteria, is a connected group of bloggers; according to Efimova and Fiedler (2003) an active blog can be rivalled with a small virtual learning community. Underscoring this perspective within the research, was the notion that *each* of the study participants communicated a definite connectedness and desire to share and grow as engaged learners throughout the process of blogging. Participant #4 claimed that blogging is, "one of the best, more in-depth ways of creating a community" (reference

#8). Participant #3 takes this thread of *learning communities* a step farther, by establishing:

It [blogging] connects me to a community and lets me have necessary conversations. I never realized my need for an education community until I started blogging (reference #3).

And attests that:

Blogging has been a way to reflect on ideas, but also to have my ideas challenged by others. Those conversations have led to a richer, broader idea of what it means to learn (reference #10).

It is the researcher's experience that in numerous collegial online conversations, a similar theme continues to rise to the surface, namely that, no matter the circumstances, educators concur that professionals who engage in web based technologies recognize the benefits and advantages that working in an online learning community offers. These connections and online collaborations have had a profound impact not only on their instruction, but also on their

professional philosophy and epistemology regarding teaching and learning. Participant #2 sums up this seemingly self-evident and inherent value of online professional learning communities:

I first started connecting as a way to reflect on my teaching. I never felt like I had groundbreaking ideas to share, so I never set out to blog so that others would read it. I've always enjoyed reading others blogs, and once I started writing, I really saw and felt my teaching evolving as I enjoyed thinking deeper about what I was doing. The blog became about learning. I blogged before I was heavily connected with others online, but the two definitely influenced each other. The connections led to being part of a greater, online community. My [PLN] inspires me to write more and reading their work inspires me to learn more. It's a great circle of inspiration that lies in the connections (reference #1).

Collectively, as dedicated educators, research study participants perceived blogging as a means for continued explorations and refinement of personal expertise as motivated, selfdirected learners. It is the researcher's position that a community of connected, virtual learners potentially equal (at minimum) the self-guided learning and collaborative nature of individuals who attend and participate in formal professional development.

## **Educational Reciprocity**

## **Reciprocity in Learning**

The term "educational" reciprocity is best described as a mutual sharing of understandings, knowledge, and new learnings (Sabourin, 2013). Individuals who choose to come together, work alongside each other, and share common understandings have distinct opportunities to form new knowledge and construct further understandings, based on these collegial interactions. As early as 1962 Piaget defined reciprocity as a mutual coordination of attitudes and perspectives, both emotional as well as cognitive. Temple (1998) expands this definition by asserting that:

Reciprocity is not, or not only, a material exchange, but an exchange of attitudes quite broader and deeper. Such an obligation can be called recognition or gratitude, it must be taken here in the sense of a spontaneous movement (as cited in Sabourin, 2013, p. 307).

Another consideration in understanding the ideal of reciprocity comes from Pinker (2002) in his book *The Blank Slate*. As Coyne (2015) discussed:

Pinker compiled a list, based on the work of the anthropologist Donald Brown, of 'human universals': behaviors, beliefs, rules, and other aspects of social living seen in every culture surveyed....Brown and Pinker's list includes: empathy; ... the favoring of reciprocity; and the idea of fairness (p. 169).

Piaget, Temple, and Pinker shaped the conceptual foundation for further exploration and a deeper understanding by the research of this idea of reciprocity. Labelle (1996) proposes the use of this principle in the context of education by way of *educational reciprocity*. Labelle (2005) as cited in Sabourin (2013) wrote:

The major issues of adult education can be summarized in three inseparable words highlighted by my theory of educational reciprocity. Educating, like eating, requires others' action because I cannot rely only on myself to grow, behave and blossom. The paradox of mutuality lies in that I have to assume my personal uniqueness in wanting you to be yourself by yourself, and vice versa (translated by author, p. 318).

Each of these scholars provided valuable insight to the researcher in constructing a definition to examine and evaluate the data sets. Distilling these ideas, the researcher defined educational reciprocity as an individual who *promotes and engages in mutual interaction, cooperation, and exchange of ideas.* It is the researcher's view that educational reciprocity is an indispensable element in success of online learning communities and could be considered a key contributor to valued professional development; as Eneau (2006) and Schwier (2002) support this notion that reciprocity in educational online contexts promotes cooperation and shared responsibility in learning.

### **Professional Educational Reciprocity**

The notion of reciprocity in education is likely considered a foundational element amongst teaching practitioners. Sabourin (2013) states that "to educate is to give: to give knowledge, to transmit rules and values, to share know-hows" (p. 301). Teaching and learning are much more than concepts that subsist in tandem; rather, they reflect an interconnectedness that exists to support the other. Laval (2006) notes that what is received in education must be reciprocated. Sabourin (2013) affirms that education supports a collective dimension of reciprocal learning, networks of communities bound by social enterprise. Intrinsically, authentic collaborations amongst professionals' working communities strengthens productive dialogues and mutual appreciation of shared understandings. Prevalent in the research findings was the notion of reciprocity within the virtual communities of bloggers. The overriding sentiment was that the generosity of sharing amongst group members provides learners countless opportunities to connect and subsequently increase individual *and* collective knowledge and understandings, regardless of where they are in the world. Participant #2 refers to this sense of reciprocity:

The connections led to being part of a greater, online community. My PLN inspires me to write more and reading their work inspires me to learn more. It's a great circle of inspiration that lies in the connections (reference #1).

In the researcher's experience, it is that potential of reciprocal connecting, collaborating, and learning from the community that gives educators a sense of *empowerment* and inspires a *willingness* to continue to share and grow in their own understandings of what it means to learn. Expanding this sense of self-as-connected-to-others, and building and maintaining a professional understanding of their own epistemology and therefore knowledge, is critical for lifelong learning and professional continuing education. Participant #2 reflects this understanding by stating:

Comments, networking with other blogs, and exploring ideas through the connections that blogging lead to have been invaluable in pushing my thinking. It has also made me a stronger learner (reference #5).

Participant #4, within the same thread, makes a similar observation:

Other bloggers encouraged me to keep sharing and reflecting. I think receiving comments helped pushed my thinking and my commitment, but ultimately just getting my thoughts on paper was what was I needed so that mental clarity is what pushed me to keep going (reference #4).

Sharing reciprocal understandings within the online community appears to create a mutual sense of commitment and dedication. Sabourin (2013) is of the opinion that balanced relationships in teaching might be the touchstone to construct not only respect, recognition, confidence, responsibility, but also autonomy in learning. Participant

#2 echoes this understanding:

Yes. Blogging could definitely support a self-directed model of learning. There's a level of accountability in blogging, since your thoughts are public. Writing a post that others will see pushes your thinking. Blogging is also naturally differentiated because it allows you to reflect on what you need or want to reflect on. I am imagining if teachers had a blog and read each other's thoughts, reflecting together, it could really bring a staff together....There are days when blogging just doesn't come easy, and those are the days you need to blog the most. I'm imagining the true effects on students whose teachers blog—what better model for lifelong learning? (reference #7)

# Cultivating a Community of Open Reciprocity

In this researcher's view, learning is an undertaking that requires more than a willingness and desire to gain new understandings. Many factors must be considered as we come to better understand the process by which individuals acquire knowledge in their everyday communications. One such variable is the learning that transpires from social interaction. In Chapter Two, the researcher stated that *for this study, social interaction is at the center of ways in which participants connect and collaborate within their informal, online learning community of practice*. Driscoll (2004) suggests that the focus shifts from the individual to the larger group from within the social setting. Participant #1 holds the opinion that: There are many benefits to sharing online. It's a chance for me to take part actively, as a creator, in a community of professionals. I love having that kind of voice. It makes me feel like a more engaged, motivated professional (reference #7).

It is the researcher's position that learning alongside a community of self-directed engaged practitioners, who are mutually sharing (reciprocity) valuable thoughts and resources, has the potential to motivate, challenge, and empower individuals in their everyday teaching and learning. Cultivating an open educational reciprocity amongst individuals as they encounter barriers and obstacles in their professional endeavours can become substantially more than confidence and optimism boosters, but in addition, deepen shared understandings. From the researcher's vantage point, it is critical for educators to engage with colleagues and peers as a means of creating community in both their personal and professional lives. It becomes a powerful realization that a collective of helpful, knowledgeable individuals are true collaborators, providing collegial motivation, "just in time" support, and meaningful feedback all in an open, reciprocal way.

#### **Reciprocity and Self-Reflection**

It seems reasonable to expect that shared understandings and beliefs have consistently been the foundation of many successful partnerships within teaching and learning communities across the globe. The potential for the mutual exchange of ideas, theories, ideals, and new learnings offers the real possibility of influencing meaningful change within education. How then, do educators integrate and implement such changes to their existing practice? It is the researcher's viewpoint that real and long-lasting change is only possible when individuals are

engaged in meaningful *self-reflection*. Too often (online or offline), numerous ideas and multiple perspectives are presented, shared, even celebrated but, for many reasons, change is never implemented. Essential to the process, *deliberate reflection* on how best to implement new understandings and learnings. Active blogging is one such avenue that, according to Participant #3 has "been where I find rest and wrestle with ideas and have a community that challenges me. It has a place to reflect on teaching...." (reference #16). However, the added value that blogging provides educators goes well beyond opportunities of self-awareness and reflection; there is the definite potential that blogging has of defining and influencing both teacher pedagogy and philosophy of education. Participant #1 summarizes this mindset:

My teaching pedagogy has definitely changed because I now have thousands of 'colleagues' to borrow, bounce, and create ideas with. By blogging, I'm part of a network of blogs. So I'm getting ideas from others, and becoming much more reflective and clear in my own thinking because of having to write about it (reference #9).

## **Cognitive Presence in Communities of Inquiry**

#### *Communities of Learners*

The Communities of Inquiry (CoI) model (Garrison, Anderson, and Archer, 1999) is deeply rooted in the assertion that a collective of empowered *inquirers* is an essential component for success in online learning; these authors claim that learning occurs within such "communities of inquiry" through the interaction of three core elements: social, cognitive, and teaching "presences". For this inquiry, the researcher specifically examined the *cognitive presence* element of the *CoI* framework, which emerged as a recurring theme from the analysis of the data; this singular element was chosen because "cognitive presence", as articulated by Garrison et al., (2000), is very much a constructivist, self-directed, and reflective approach to making sense of the process of learning and was, therefore, clearly aligned with the context (blogging), purposes and focus of the research. Garrison et al. (2000) defined cognitive presence as the means learners can construct and confirm meaning, through sustained thought and discourse. Garrison (2007) later proposed this definition by asserting:

Cognitive presence is the exploration, construction, resolution, and confirmation of understanding through collaboration and reflection in a community of inquiry....As well, it is defined in terms of a cycle of practical inquiry where participants move deliberately from understanding the problem or issue through to exploration, integration and application (p. 65).

Garrison et al (2000) confirm the importance of self-reliant, formal communities of learners and made it possible for the researcher to craft a robust operational definition to facilitate the data analysis process. For the researcher cognitive presence could be clearly inferred by individuals' postings (essentially, cognitive "actions") whereby *they work to solve problems, build understandings, identify, evaluate, and act on solutions; they may reflect on current understandings and strengthen new learnings*. It is the researcher's viewpoint that of the three elements outlined in the communities of inquiry framework, cognitive presence captures the essence of engaged, self-reliant, and reflective individuals that model learning in this research context (and blogging in general).

#### **Bloggers as a Community of Inquirers**

Working together to explore ideas in an online community such as a blog, inquiring with individuals who share similar passions and ideals, can make the work of today's teachers seem not only manageable, but also, with a renewed sense of *mindfulness*. The notion of creating and sharing new knowledge by participation in such a community often requires an ability to be flexible in thinking and learning. Intrinsically, this leads most individuals to pose questions, queries and wonders to build on previous understandings. Hudspith and Jenkins (2001) attest:

Inquiry is both a process that is a method, and a set of skills. The inquiry process is about exploring, discovering, and ultimately, reaching a higher level of understanding (p. 2).

Educators who create and maintain an online community, via blogging, have, in the researcher's view, a distinct advantage over colleagues who choose not to connect and collaborate more globally. As mentioned in Chapter Two, the key activity that takes place in a blogging community is *knowledge contribution* (Doring, 2002; Kumar and Thondikulam 2006).

The experience of the researcher, validated by the participants in this study, confirms that sharing and learning through blogging creates *authentic* opportunities to learn from members of that online community. This learning is made possible by inviting a spirit of inquiry, meaningful reflection, and active dialogue, making online collaborations possible. Garrison and Archer (2000) acknowledge that meaning construction may result from an individual's self-analysis but ideas and new understandings are built through the collaboration and critical dialogue within a community of learners. Research Participant #4 substantiates this claim in affirming:

Other bloggers encouraged me to keep sharing and reflecting. I think receiving comments helped push my thinking and my commitment, but ultimately just getting my thoughts out on paper was what I needed so that mental clarity is what pushed me to keep going (reference #3).

## Blogging as a Means of Enhancing Critical Thinking

The standard description of critical thinking in action is what Paul (1993) describes as a systematic way to form and shape an individual's reasoning and thought process. Yang (2009) specifies that professionals regularly reflect on their teaching through critical thought. Deep critical thinking and self-reflection is a substantial professional investment, considering the daily workload of educators. In addition, Paul (1993) asserts there are a great deal of important educational goals deeply connected to critical thinking. In the researcher's view it begs the question, if this is such an important skill to develop, how can professionals successfully carve out opportunities for self-reflection and critical thinking on a more consistent basis? Paul (1993) affirms this train of thought in stating that "critical thinking is thinking about your thinking while you're thinking in order to make your thinking better" (p. 91). He goes on to note there are two conditions that are central to this understanding, stating that "critical thinking is not just thinking, but thinking which entails self-improvement [and that] this improvement comes from skill in using standards by which one appropriately assesses thinking" (p.91). What practices might educators investigate and adopt to make the process of metacognition, or thinking about thinking, more commonplace in their professional lives?

It can be argued, that blogging is one such practice that has the *potential* of creating the conditions for meaningful, profound critical thinking and metacognition for education

professionals. As mentioned in Chapter One, blogging has the potential to develop an extension of reflective, critical thinking and learning potentially reflected in classroom practice. As stated by Participant #1, "I have become much more reflective and clear in my own thinking because of having to write about it' (reference #12).

The act of blogging, much like most Web 2.0 tools, lends itself to the possibility of creating and cultivating a community of passionate and engaged individuals. Schrage (1995) asserts that the "act of collaboration is an act of shared creation and/or shared discovery" (p. 4). The common thread that binds educators to share in a virtual online space is a desire to self-reflect, not only to better understand problems but work towards a resolution that best supports teaching and student learning in the classroom. Garrison et al (2000) assert that "cognitive presence is a vital element in critical thinking" (p.89). Intrinsically, sharing these common goals to problem solve and create new understandings is all the more possible through an effort to connect and collaborate on the blog. It is the researcher's viewpoint that the processes and cognitive challenges inherent in blogging facilitate a critical thinking" (reference #8). Most influential are the musings of participant #3, as they concede:

I've embraced technology because i've seen the human side of it in certain blogs that I read frequently. So, while it's not necessarily an easy thing to discern in my day to day teaching, it has been more of a change in paradigms and mindsets (reference #15).

It is the act of *writing*, via blogging, that allows these self-reflective and critical thinking processes to take shape. Garrison et al (2000) speak to the importance of written communication and contends:

One such advantage is that text-based communication provides time for reflection. For this reason, written communication may actually be preferable to oral communication when the objective is higher-order cognitive learning. Some of the literature does, in fact, suggest that written communication is very closely connected with careful and critical thinking (Applebee, 1984; Fulwiler, 1987; White, 1993). These authors suggest that it is the reflective and explicit nature of the written word that encourages discipline and rigor in our thinking and communicating. In fact, the use of writing may be crucial when the objective is to facilitate thinking about complex issues and deep, meaningful learning (p. 90, 91).

## The Potential of Inquiry and Analytical Reflection

Inquiry includes both a skill set (e.g., critical thinking, metacognition skills) *and* a mindset (e.g., attitudes, orientations, motivations) that creates the foundation for analyzing and synthesizing new knowledge. Without the added step of investigating and discovering new understandings, the process of learning has the potential of becoming rote, unclear, uncertain, unguided. The researcher makes a strong and important connection between inquiry and analytical reflection. These sentiments were echoed by *all* participants as part of the research inquiry. Participant #4 captured the essence of this understanding by stating:

Blogging has strengthened my opinions and views and allowed me to reflect on my teaching practice in a more interactive way. Comments, networking with other

blogs, and exploring ideas through the connections that blogging lead to have been invaluable in pushing my thinking. It has also made me a stronger learner. I see myself as a work in progress. Each post is just redefining and solidifying my views. The best part is when I read an old post and don't agree with myself and realize just how much I have grown. I honestly can't imagine teaching without blogging now (reference #2).

Being open to the process of inquiry requires learners to pose questions and seek new knowledge opportunities. Paul (1993) believes that "in every field of knowledge, every answer generates more questions, so that the more we know, the more we recognize we don't know" (p. 95). Participant #4 extends this with the following insight:

Of course, the sheer act of reflection is what forces us to grow professionals. When you do put it all out there, you have to think through what your message is and how you will be portrayed, that means you have to slow down and think about it. Blogging can't be forced though, because it is personal, you have to be fully invested for it to work (reference #6).

Analytical reflection, somewhat synonymous with critical thinking and metacognition, is the process of thinking about thinking but in ways that are *both* meaningful and relevant. It is the researcher's view this nuanced form of metacognition, can not only provide, but also sustain the conditions for deep thinking and clearer understandings. Participant #2 underscores this by stating:

In order for true reflection to take place, one has to just openly share and reflect in a way where they are not holding back. I also wish I would have known how much blogging would help me grow as an educator, because I would have started sooner. I think about the reflections I was forced to write in my undergraduate teaching program. They went in a binder and I doubt anyone ever read them. To

me, that is the same as reflecting on a blog, but with a blog, your audience is the world and sometimes when you say something, the engagement with others can either push your thinking, solidify your thoughts, or open your mind to new ideas. Far more powerful than words in a binder (reference #4).

Shared understandings, and the action of asking questions and engaging in creation of new knowledge, together provide just the right conditions to inquire and wonder, as a collective. The potential that a common platform, such as blogs, to build a community of engaged selfdirected, and critically thinking professionals, is exciting and these possible outcomes are much needed in education. Succinctly, Participant #1 makes a convincing argument in support of blogging as a process facilitative of teacher professional development:

I treat the process of blogging like it's part of my daily life routine. I feel that it is an integral part of my praxis as a professional. It really helps me to clarify my thinking. I am more articulate and reflective educator because of it (reference #3).

#### **Barriers within the Research Inquiry**

Discussion of these research findings brought to the fore many important and valid understandings regarding the creation and maintenance of an online community of lifelong, selfdirected and motivated individuals, who use blogging to enhance their teaching and learning praxis. However, it is necessary to acknowledge and address some potential barriers that may exist for creating and maintaining an informal, self-directed online community of inquirers. Many of the barriers identified, while justifiable, have the potential to be overcome given the right supports from an established community of like-minded practitioners.

#### **Barriers to Engagement**

As part of the research inquiry, finding a scholarly definition upon which to base an operational definition was essential. A thorough review of the literature made it abundantly clear that without a common definition as the foundation, it would be difficult to identify, categorize, and analyze the data sets collected. An absence of a common definition led the researcher to speculate: how then is it possible to measure engagement and by extension, a means by which to measure engagement, in everyday teaching and learning, what would the indicators of engagement look like?

Without the establishment of clear global indicators of engagement, it becomes more apparent that the teaching profession continues to create and enable a legitimate barrier within academics in education. According to Beer et al. (2010) student *engagement*, for example, has become synonymous with the assessment of teaching and learning. Educators should be capable of distinguishing when they are engaged learners, both on a professional and personal level; as such, educators might also recognize, observe, and foster similar *engagement* from students in classroom learning communities.

It is essential for educators to understand and be able to recognize what engagement looks like for students in their classrooms. Circumventing the issue of no singular, universal, empirically-established definition of engagement (and the accompanying indicators), some scholars assert professionals formulate their own working definition of engagement (Garrett, 2011). The researcher would go one step further and put forward that for meaningful criteria to take root in education, student voice should also be considered when formulating global or local

definitions of engagement; co-construction of the criteria, for evaluating engagement, alongside even the youngest learners, creates both transparency, meaningful, and authentic engagement in learning.

A barrier to teacher-as-learner engagement is that not all educators *want* to connect and collaborate online. Creating a culture of online sharing and learning is not a formal criterion for a successful teaching tenure in the classroom. Many teachers participate in multiple professional learning opportunities that are *not* situated online and their desire to learn does *not* hinge on a commitment to establish an engaged presence online. This was a very important point made by Participant #1 when they realistically observed:

I don't think blogging is for everyone. I'm not a fan of the notion that blogging would 'fix' anything, and I'm horrified at the idea that it would ever be mandated. Blogging is public self-publishing. There are a multitude of reasons why a great educator might not need or be able to do this. I think we need to be careful as advocates of blogging not to evangelize it. In education, we have taken many great ideas and concepts and subverted them by making them systemized and 'rolled out' (reference 14).

## **Barriers to Self-Directedness**

Too often educators sideline their passion in teaching for mandated school and division based learning initiatives. Teachers are repeatedly requested to take on multiple learning agendas, either at the school or on a much larger division level. While these new understandings are of great value from a teaching and learning standpoint, it also does require educators to divert time, energy, and resources from learning they might be more inclined to pursue. Blogging

about a topic of keen interest could be one such passion that is placed on the back burner for many professionals.

In addition to competing priorities, time is perhaps one of the greatest barriers that educators encounter in their academic career. With so many unique learning needs in classrooms, school and division based initiatives, driven by data collection and standardized testing etc., teachers find themselves caught with much to attend to and very few moments left in a school day. Assessment, planning for instruction, and differentiation often becomes an add-on that falls outside of the professional learning day, happening during the evenings and weekends. Sadly, blogging about one's professional interest may become an "extra" that many simply do not have enough time to entertain, let alone actualize/activate.

Also privacy policies regarding teachers publicly sharing online has become a very real barrier for educators. For many, there are definitive restrictions in place for what and how they can share their teaching and learning online. Sometimes, legalities and policy still outweigh the positives that have come from creating and maintaining a positive digital footprint. Sadly, there is still a certain amount of fear in how learning is shared online. Participant #3 expressed one of the downsides to accessing blogging with students:

I used to have a classroom blog. However, when my new principal came in, she wanted me to avoid topics that she found to be "dark." So, no more blogging about Syria, education funding, time spent testing or immigration. At one point, she said, "have them blog about things they like, but avoid political or social issues." So, I switched to having individual students maintain their own personal blogs. I don't want to be going to a principal for approval on things that students are writing (reference 18).

Regardless of whether it be teachers sharing personal experiences or classroom led blogging activities, many educators will shy away from or avoid sharing their own or student learning online to safeguard against negative pushback they might receive from leadership within their school divisions. It is critical that educators are given professional discretion when making decisions that will both impact themselves and the learners in their classroom communities. A sense of empowerment has the potential to guide and shape self-directed opportunities that support and nurture teacher professional growth.

#### **Barriers to Educational Reciprocity**

When thinking about the term reciprocity, immediately the notion of equality, a proportionate give and take, comes to mind. The very nature of teaching and learning as a community requires creating and sharing knowledge at its epicenter. The researcher poses the question: how do educators overcome the barrier of ensuring there is at least a mostly *balanced* exchange of shared understandings and new learnings as an engaged community of practitioners?

A stark reality and barrier in educational reciprocity is a perceived imbalance of cognitive or social contribution within the community. When this balance, real or perceived, is threatened or challenged by a community member, existing confidence, trust, and fellowship is soon rendered null and void; Daniel (2002) would contend that trust is the most fundamental value residing within the community members. In many contexts, trust can be destroyed when members take advantage of the shared generosity and reciprocity within the community. What then, are the implications when members of the community potentially breach the implied "pact of reciprocity" and simply "consume" the information provided by others? Unfortunately, there is a strong likelihood these individuals may opt to collaborate and contribute shared understandings with colleagues they have already built a reciprocal foundation of trust alongside.

Related to the barrier of self-directedness, lack of time continues to be a significant obstacle for teachers as they investigate, inquire, and build a community of sharing openly online with colleagues. Schwier (2002) contends:

For a community to emerge, a learning environment must allow learners to engage each other intentionally and collectively in the transaction of transformation of knowledge (p. 1).

Without authentic opportunities to regularly share as collegial cohort members, whether it be the classroom next door or through the medium of online technologies, there is no possibility of maintaining and sustaining an engaged community of learners. Without deliberate time set aside to connect and collaborate, the purpose for community has the potential of falling by the wayside. It is this genuine communication between the members of the collective that provide much needed guidance, support, and leadership from within the community itself. Participant #3 speaks to this quandary as part of the initial research investigations:

Blogging has been a way to reflect on ideas, but also to have my ideas challenged by others. Those conversations have led to a richer, broader idea of what it means to learn (reference 10).

Lave and Wenger (1991) suggest learning is an experienced interaction with others. It is the time spent as a learning community to inquire and investigate together that makes the connections and sharing among each member a powerful contribution to the overall collective.

#### **Barriers to Communities of Inquiry**

There is no "manual" for creating the conditions for educators to come together as a community of inquirers as like-minded, passionate, empowered learners. Regrettably, there is no single set of components required when it comes to establishing and maintaining a presence within an online learning community of like-minded individuals. How then, do individuals begin establishing, for themselves, a connected, informal, online community to inquire with and learn from?

By definition, communities of inquiry have the potential to create, sustain, and maintain a culture of learning together. Their primary purpose is to wonder and question, alongside other members, to problem solve and uncover solutions that will enhance teaching and learning in the classroom. A genuine barrier for many educators materializes as they work to establish, maintain, and grow an authentic professional community to learn alongside. It is critical to note, according to Garrison et al. (2000) that "as essential as cognitive presence is in an educational transaction, individuals must feel comfortable in relating to each other" (p. 94).

Cognitive presence functions in tandem with a myriad of facets that are present within a community of inquirers. It is this ideal of working together that offers the prospect of educators working together as they inquire and learn from each other. For many, working in community requires a willingness to be open, transparent, and demonstrate a disposition of learning outside their perceived comfort zone. For many professionals it is difficult to engage alongside colleagues when they feel they cannot reciprocate shared knowledge, experience, or expertise within the community. Participant #4 contributed this insightful explanation:

I think we have to find the time to tinker with things and not be afraid to 'break' something. We get too caught up in the mindset that because we are adults we must know how to do everything... (reference #9).

It is important to concede that without the right web-based tools and technologies in place, it makes connecting and collaborating within many online communities impractical and impossible. Schrage (1995) as cited in Garrison et al (2000) affirms that technology "inevitably shapes the way people relate to each other" (p. 92).

Building on the available technologies that communities can access, it is also important to consider how members choose to share, connect, collaborate, and learn together. The very nature of virtual learning communities can be synonymous with anonymity. Often, individuals can create a persona online that is often very different from the individual they are, either personally or professionally. Participant #3 alluded to this quandary of creating an online presence by challenging that:

At times the "noise" of blogging and social media can actually get in the way. I see so many good ideas without enough sharing of failures (and vulnerability) that I have to step away, remember my context and do the best I can (reference #20).

We must be open to the real possibility that not all learning communities will thrive and prosper indefinitely online. Schwier (2002) concedes that a learning community does not always naturally grow from a virtual learning environment. Even with the right supports, engagement and commitment in place, it is possible for the community to seek new opportunities and learning spaces to connect with and learn from. There is a natural ebb and flow to creating

new knowledge and challenging existing understandings, which also applies to and includes learning within professional online environments.

## **Online Communities of Engagement: Connecting Life-long Learners**

To conclude this discussion, *learning in community* via one's personal learning network (PLN) is, in the researcher's view, the most authentic and empowering method to connect and grow new knowledge. Opportunities to be self-directed and motivated can be what truly inspire educators to collaborate and learn in community. These communities of like-minded inquirers support PLN's, as Participant #2 maintains:

The connections led to being part of a greater, online community. My PLN inspires me to write more and reading their work inspires me to learn more. It's a great circle of inspiration that lies in the connections (reference #1).

Informal, online communities have the potential to create and sustain meaningful instances for educators to connect, collaborate, share, and grow their understandings. The most effective learning communities create and maintain the ideal conditions for the members to collectively learn and grow their knowledge together. It is the researcher's perspective these informal opportunities to learn are what can have the most significant impact on teaching and student learning. Participant #2 echoes the researcher's perspective in stating:

I wish I would have always realized the need to just openly share. I think when I first started, I often held back, feeling that I had nothing to say. But that is not the purpose of blogging. In order for true reflection to take place, one has to just openly share and reflect in a way where they are not holding back (reference #8).

The opportunity to connect, collaborate, and share in a meaningful way is made possible through "just in time" access to online resources and supports. Access to Web 2.0 tools, like *blogging*, allow individuals to reciprocate and share their knowledge, abilities, and strengths as both teacher and learner with a much wider audience. No longer bound by the "four walls" of the traditional learning context (i.e., classroom), educators can now share and reciprocate learning with colleagues on a local, regional, national and international scale. Blogging "sort of requires people to learn as they go. It's about finding a voice and figuring out how to tell a story" (Participant #3, reference #4).

## CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS

Creating the just right conditions for individuals to become engaged, self-directed and empowered learners has been, is, and will continue to be a worthy goal for the majority of professionals involved in formal, non-formal, and informal education. The notion that learners can chart their own course as they inquire and reflect is a necessary and critical requisite skill for true lifelong learning to be realized. It was the researcher's goal to explore how self-directed opportunities in an informal, online learning community of engaged educators could shape and define that experiential learning and any metacognitive strategies seen as an essential part of the learning process. With access to technologies and web tools that both support and enhance the learning process, [blogging can be seen as] a logical next step in many individuals self-directed learning journey; it is one such platform that seems to facilitate meaningful and authentic opportunities to connect and learn together. Why then are not all educators actively embracing these technologies to create a community of engagement and inquiry to learn from and with one another?

The research participants in this study all spoke to the notion of *engagement*, first and foremost, as reflected in their passion for blogging, seen as a catalyst for being willing to share learning and understandings publicly online. Engagement can be a critical and significant first stage in the process of learning. It is important for learners of all ages to come to their own understandings of how worthwhile and essential these ICT-based tools, skills, strategies, and processes are to the acquisition of knowledge. A general comment, common to all participants in this study is that, it is important for educators to work towards not only creating but facilitating and maintaining positive and effective online learning environments that provide

opportunities for individuals to be critical thinkers and problem solvers. It is the promise that engagement offers in the learning process, a sense of purpose that is both authentic and meaningful. These competencies reflect the ideals that many professionals, including those of the research participants, value as tangible outcomes in education.

The perception of authentic *engagement*, purposeful teaching and learning, was foundational and well-documented within the research study. It was the connections as a community of self-selected mentors and colleagues that made all the difference to the study participants as engaged professionals. Participants articulated frequently that as educators they sought countless opportunities to feel both inspired and empowered to tackle challenges professionally. Participants discussed the importance of blogging and the role it played in both their personal and professional lives. Creating and sustaining an engaged community of practice, peers that connect and share regularly, became a core finding of the research inquiry.

The importance of *self-directedness* in learning was one such indicator of engagement, and was established early on as part of the research study. All participants spoke of mutual experiences, examples of how being a self-directed professional led to conversations with likeminded individuals. These interactions might have taken place to start on their blog, or perhaps through other social media outlets. As these conversations became more frequent, they ultimately led to meaningful connections and opportunities to learn from each other. Each individual shared that these connections provided not only just in time supports but also critical conversations that challenged their philosophies, ideals, and beliefs about education. All participants were in agreement these sustained conversations led to improvement in both their teaching and student learning in the classroom.

These shared understandings and new learnings afforded participants a platform to explore and investigate new knowledge as professionals. Blogging became both a "cognitive and experiential scaffold" for participants, as they inquired and considered other web tools and technologies to support, sustain, and maintain professional learning. There was a current of underlying inclination, a natural tendency of sorts, to embrace technology as part of their everyday teaching and learning. Of note, some participants envisioned blogging as a means of creating an online professional portfolio of learning. All research participants agreed that it was an authentic opportunity to create and sustain a positive online digital presence.

Transparency in learning became an overarching theme amongst the research participants. A celebration of both professional success and failures in their academic tenure that allowed for meaningful change to take hold. As their online presence took shape and grew through blogging, so did their desire to create transparency in their teaching and learning. Accordingly, it was a noticeable change for each participant within the research study. A willingness to be transparent raised the idea of educational reciprocity, a shared give and take of expertise in teaching and learning amongst the community.

Investing in lifelong professional learning ensures that both teachers and learners are making a significant knowledge contribution to the professional collective. Participants repeatedly mentioned the notion of blogging as a means of thinking about and improving upon teaching expertise and instruction in the classroom. Shared practice, a form of "cognitive

presence" within a community of inquirers, provides a framework for authentic queries and questions to further guide and shape learning. Professionals that investigate problems, build understandings, and act on solutions together create the conditions for critical thinking to shape future inquiries and learning endeavours.

Metacognition, or thinking about one's thinking, is an essential component and process to learning as a whole. It is the action of posing good questions that encourages investigation, inquiry, critical thinking, and self-reflection. Research participants agreed and perceived these virtual connections as essential to their own critical thinking, metacognition, and learning. Time spent thinking about, inquiring, reflecting, and connecting virtually with colleagues provided requisite for both critical conversations and deep insights regarding professional practice. Blogging, therefore, offered a "technical means" to reflect on ideas, but it also offers a much needed "process forum" to have participants' beliefs and understandings challenged; which led to a much broader and deeper set of ideas philosophy, epistemology, and the foundations of what it means to teach and learn.

#### **Implications of the Research**

More educators continue to seek professional opportunities that uniquely benefit their personal learning needs. Teachers themselves are often the best equipped to understand and investigate knowledge and new understandings that will be meaningful to their unique needs and their students in the classroom. As a collective, the research participants spoke of the importance in self-selecting and determining learning opportunities that will be most beneficial to their learning needs. While the participants discussed informal PLN's in their conversations, they also

argued the essential long term benefits that teacher voice and choice have in both formal and informal professional learning.

Universally, it is inconceivable that individuals can continue to discover and learn at the incredible pace set with the constant barrage of 'information overload." That being said, obtaining information in the digital age has the potential of providing learners with unlimited access to knowledge, new understandings and shared learnings like never before. Research participants conveyed how connecting with rich digital technologies, including blogging, provides educators with the most up to date resources and materials possible. These technological supports offer the possibility to empower critical thinking, problem solving, powerful communication skills, and a collaborative mindset. Blogging has the ability to create a segue for professionals to ask meaningful questions, seek answers, and begin a progression towards a self-directed model of learning.

Each of the research participants enthusiastically spoke to the benefits that blogging had made in both their personal and professional lives. Meaningful connections, opportunities for collaboration, learning in a community of engagement and self-reflection were positive affirmations celebrated within the research inquiry. Connecting, sharing, collaborating, and learning together can be some of the significant advantages for blogging and creating a community of engaged practitioners.

## **Limitations of the Research**

The exchange with participants was limited to the sample size involving four individuals. Participants were experienced bloggers, all individuals who had come to blogging through diverse online experiences. To ensure validity, it was critical to select educators who already engaged in global, networked online communities. Singularly, in the researcher's experience, the sample size of four professionals created logical limitations for *extensive* qualitative data collection; in other words, a larger sample size could provide more larger data sets and, therefore, likely provide a more robust (richer, "thicker") analysis of the phenomena under study.

Semi-structured interviews were conducted via email and transcribed on a weekly basis. The researcher found that conversations sometimes lacked natural *fluidity*, as the discussions were dependent solely on participant and researcher email exchange. These dialogues had the potential to make the clarification process amongst the participants and researcher somewhat constricted, as they were time dependent yet again on the email exchange.

#### **Recommendations for Further Research**

### **Continued Investigations of Communities of Inquiry**

The Internet continues to impact and shape how individuals connect, collaborate and share online. ICT's and web based tools continue to remain at the epicenter of how virtual learning communities grow, maintain and sustain a culture of learning together online. The research participants who took part in this study affirmed that opportunities to investigate shared practices, beliefs, and understandings led to improvements in professional practice. Participants felt that communities of self-directed, informal online learners continue to be more common place amongst all learning institutions, including post-secondary.

It is critical to mention that, from the researcher's investigations, research focused on communities of inquiry is typically discussed within higher education, at the university level. Of note, is the recurrent and particular focus on *instructor led* post-secondary learning environments. These environments and the learning communities that they facilitate are created primarily within formal learning managements systems (including instruction, assessment, tracking and evaluating student learning), and, therefore, often sharply contrast co-constructed learning environments characteristic of self-directed, informal learning environments such as blogs for learning. Further research investigating and supporting our understanding of communities of inquiry within an expanded set of learning contexts (including informal and formal, elementary and secondary context, etc.) would be welcomed and warranted by professionals, no matter their educational context.

## Continued Investigations of Educational Reciprocity

Educational reciprocity was, prior to investigating emergent themes, an unknown term to the researcher. Further iterative explorations during data collection and analysis identified a key emerging theme, namely educational reciprocity (a mutual exchange of information and shared understandings). This common theme shared amongst participants, led the researcher to delve into further review of the literature; leading the researcher to the concept of *educational reciprocity*, an emergent theme worthy of serious inquiry. Pinker, in Coyne (2015) points to "human universals", and reciprocity as a common cross-cultural human value. A total of forty-five *unique* educational reciprocity references were coded during the research inquiry data analysis. Because of this inquiry, it is the researcher's view that continued explorations of educational reciprocity are necessary, not only to better understand the role educators undertake as professionals but the generalized concept of reciprocity in learning that has the potential to positively impact education and society as a collective.

## Continued Investigations of Self-Directed Professional Learning

*Engagement* is the touchstone for every aspect of meaningful and worthwhile endeavours, if an individual can combine passion, meaning, and purpose as they investigate and inquire in everyday explorations and learning, many would consider them engaged learners. Participants shared common experiences of engagement throughout the many conversations exchanged throughout the research study. They shared recurrent interactions amongst members of their personal learning communities and networks that provided clarity and deeper understandings. Research participants agreed that engaging in a connected community of likeminded peers has the potential to provide guidance and support in the ongoing development of teaching and learning professionals.

Blogging has the ability to aptly connect and guide professionals as self-directed learners, providing a context and digital environment facilitative of engagement with the learning process. Each of the participants concurred that blogging (and blogs) could be considered a vital part of an educator's "learning toolkit" and, as such, have the potential to become one such platform for individuals to connect and share with a larger learning community online. Authentic online communication and collaboration allows for community members to grow and maintain real life connections as they access shared beliefs, practices and understandings on a potentially global scale. It is the researcher's recommendation that blogging has the potential to not only provide real life modeling for students as they engage the world around them, but also support and guide learners as active citizens, creating and maintaining an authentic online, digital presence.

#### **Recommendations for General Research**

The findings from this study are grounded in the beliefs, experiences, and understandings of each individual participant as part of the research inquiry. Importantly, this investigation was based on exploring the possible elements, as identified by these particular participants that, have the potential to establish an informal, online community of professionals. Blogging was the ICT instrument investigated by the researcher to delve more deeply into the lived practice of the participants. These findings can be considered a "snapshot in time", a necessary segmentation of many singular moments of insight, reflection and shared learning captured from each research participant's personal online experience. A study that revisited these same questions over a longer timeframe and with more participants/bloggers has the potential to discuss even greater in-depth knowledge and understanding of how a community of like-minded professionals connect and learn together informally online.

Also these research participants were chosen, in part, as they represented a diverse yet knowledgeable cross section of active bloggers from within the researcher's personal online learning network. It was essential that each of the participants had substantial blogging

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experience to offer candid observations and critically assess the questions posed over the sixweek research study window. For further research, it would likely prove useful to explore how a less homogeneous grouping of active bloggers, with perhaps less blogging experience as networked professionals, might provide a different or similar set of research findings.

While the researcher chose an instrumental case study methodology for this qualitative research inquiry, it would be of value to look at quantifiable data sets for further analysis. A larger quantitative emphasis might include further investigations of criteria for "what makes an effective blog post?" Conceivably, the study could, for example, investigate and collect data that measures the frequency, length or word count of posts, etc. over an extended time period, and how these influence engagement, reciprocity, perceptions of learning value, etc.

In conclusion, there are numerous findings from this research study that could be considered worthy of future investigations. As part of the research analysis, participants' shared understandings and lived practice brought forward these emergent themes: engagement, selfdirectedness, educational reciprocity, and cognitive presence. It is the researcher's view that investigating more deeply one or more of these broad understandings will create a more focused research "lens" through which both researchers and educators might better understand the unique experiences members of an informal, online community of practice engage in and benefit from.

#### REFERENCES

- Alsup, J. (2006). Teacher identity discourses: Negotiating personal and professional spaces. London: Routledge.
- Arnell, R. (2014). Teacher beliefs on personal learning, collaboration, and participation in virtual communities of practice (Unpublished doctoral dissertation). Walden University, Minneapolis, MN.
- Au, L., Reiner, D., Urbanowski, D., & Clark, D. (2002). Communities of practice. Journal of Teacher Education, 53(3), 222-227.
- Aviv, R., & Ravid, G. (2005). Reciprocity analysis of online learning networks. *Journal of Asynchronous Learning Networks*, 9(4), 3-13.

Bandura, A. (1977). Social learning theory. New York, NY: General Learning Press.

- Barnett, R. (2003) Engaging students. In S. Bjarnason & P. Coldstream, (Eds.), *The idea of Engagement: Universities in society* (pp. 251-271). London, UK: The Policy Research Unit, Association of Commonwealth Universities.
- Ball, D., & Cohen, D. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In G. Sykes & L. Darling-Hammond, (Eds.), *Teaching as the learning profession: Handbook of policy and practice*. (pp. 3-32). San Francisco, CA: Jossey Bass.
- Barbour, R. S., & Barbour, M. (2003). Evaluating and synthesizing qualitative research: The need to develop a distinctive approach. *Journal of evaluation in clinical practice*, 9(2), 179-186.

- Beer, C., Clark, K., & Jones, D. (2010). Indicators of engagement. *Curriculum, technology & transformation for an unknown future. Proceedings of ASCILITE*, Sydney, Australia, pp. 75-86.
- Bogdan, R., & Biklen, S. K. (1992). *Qualitative research: An introduction to theory and methods* (2<sup>nd</sup> ed.). Needham Heights, MA: Allyn & Bacon.
- Brockett, R. G., and Hiemstra, R. (1991). *Self-direction in adult learning: Perspectives on theory, research, and practice*, London: Routledge.
- Brookfield, S. (1985). Analyzing a critical paradigm of self-directed learning: A response. *Adult Education Quarterly*, *36*(1), 60-64.
- Brookfield, S. (1986). Understanding and facilitating adult learning: A comprehensive analysis of principles and effective practices. Milton Keynes: Open University Press.
- Chen, H. L., Cannon, D., Gabrio, J., Leifer, L., Toye, G., & Bailey, T. (2005). Using wikis and weblogs to support reflective learning in an introductory engineering design course. *Human Behaviour in Design*, 5, 95-105.
- Coates, H. (2007). A model of online and general campus-based student engagement. Assessment & Evaluation in Higher Education, 32(2), 121-141.
- Cochran-Smith, M., & Lytle, S. L. (1993). *Inside/outside: Teacher research and knowledge*. New York, NY: Teachers College Press.
- Coyne, J. A. (2015). *Faith versus fact: Why science and religion are incompatible*. New York; NY: Viking Press
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.

- Daniel, B., McCalla, G., & Schwier, R. (Eds.). (2002). Proceedings from ICCE 2002:
   *International Conference on Computers in Education*. Auckland, New Zealand: Massey University.
- Dede, C. (2004). Enabling distributed learning communities via emerging technologies: Part one. *THE Journal (Technological Horizons in Education)*, *32*(2), 12.
- Dede, C. (2006). *Online Professional Development for Teachers–Emerging Models*. Cambridge, MA: Harvard Education Press.
- Dede, C., Ketelhut, D. J., Whitehouse, P., Breit, L., & McCloskey, E. (2008). A research agenda for online teacher professional development. *Journal of Teacher Education*, *60*(1), 8-19.
- Dewey, J. (1929). My pedagogical creed. *Journal of the National Education Association*, *18*(9), 291-295.
- Dewey, J. (1933). *How we think: A restatement of the reflective thinking to the educative process*. Lexington, MA: Heath.
- Döring, N. (2002). Personal home pages on the web: A review of research. *Journal of Computer-Mediated Communication*, 7(3).
- Driscoll, M. (2005). Psychology of learning for instruction. Boston, MA: Pearson Education.
- Efimova, L., & Fiedler, S. (2003). *Learning webs: Learning in weblog networks*. In P. Kommers,P. Isaias, & M. B. Nunes (Eds.), Proceedings of the IADIS International Conference onWeb Based Communities 2004, pp.490–494, Lisbon: IADIS Press.
- Eneau, J. (2006). Autonomie, réciprocité et dévelopement organisationnel, Proceedings of the 16<sup>th</sup> Conférence de l'AGRH 2005, Paris, France: Dauphine.

- Ferdig, R.E. & Trammel, K.D. (2004). Content delivery in the 'blogosphere. *The Online Journal: Technological Horizons in Education*, 31(7), 12, 16-17, 20.
- Garrett, C. (2011). Defining, detecting, and promoting student engagement in college learning environments. *Teaching & Learning Journal*, 5(2), 1-12.
- Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, 48(1), 18-33.
- Garrison, D. R. (2003). Cognitive presence for effective asynchronous online learning: The role of reflective inquiry, self-direction and metacognition. *Elements of Quality Online Education: Practice and Direction*, 4, 47-58.
- Garrison, D. R. (2007). Online community of inquiry review: Social, cognitive, and teaching presence issues. *Journal of Asynchronous Learning Networks*, *11*(1), 61-72.
- Garrison, D. R., & Archer, W. (2000). A transactional perspective on teaching and learning: A framework for adult and higher education. New York, NY: Elsevier Science, Inc.
- Garrison, D., Anderson, T., Archer, W. (1999). Critical inquiry in a text-based environment:
  Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105.
- Garrison, D. R., & Arbaugh, J. B. (2007). Researching the community of inquiry framework:
  Review, issues, and future directions. *The Internet and Higher Education*, *10*(3), 157-172.
- Garrison, D. R., & Cleveland-Innes, M. (2005). Facilitating cognitive presence in online learning: Interaction is not enough. *The American Journal of Distance Education*, 19(3), 133-148.

- Godwin-Jones, B. (2003). Emerging technologies: Blogs and wikis: Environments for online collaboration. *Language Learning & Technology*, 7(2), 12–16.
- Gray, B. (2004). Informal learning in an online community of practice. *Journal of Distance Education*, *19*(1), 20-35.
- Gunawardena, C., Lowe, C., & Anderson, T. (1997). Analysis of a global online debate and the development of an interaction analysis model for examining social construction of knowledge in computer conferencing. *Journal of Educational Computing Research*, *17*(4), 397-431.
- Henning, W. (2004). Everyday cognition and situated learning. In *Handbook of research on educational communications and technology (2<sup>nd</sup> ed.)*, Jonassen, D. (Ed.), pp. 143-168.
  Mahwah, NJ: Erlbaum.
- Hill, J. R., Song, L., & West, R. E. (2009). Social learning theory and web-based learning environments: A review of research and discussion of implications. *The American*. *Journal of Distance Education*, 23(2), 88-103.
- Holt, L., & Brockett, R. G. (2012). Self-direction and factors influencing technology use: Examining the relationships for the 21st century workplace. *Computers in Human behavior*, 28(6), 2075-2082.
- Hoepfl, M. C. (1997). Choosing qualitative research: A primer for technology education researchers. *Journal of Technology Education*, *9*(1), 47-63.
- Hudspith, B., & Jenkins, H. (2001). *Teaching the art of inquiry*. Halifax, NS: Society for Teaching and Learning in Higher Education.

Instone, L. (2005). Conversations beyond the classroom: Blogging in a professional development course. *Retrieved on March*, 29, 2010 from

http://www.ascilite.org.au/conferences/brisbane05/blogs/proceedings/34\_Instone.pdf

- Kao, C. & Tsai, C., (2009). Teachers' attitudes toward web-based professional development,
   with relation to internet self-efficacy and beliefs about web-based learning. *Computers in Education*, 53(1), 66-73.
- Kennedy, K. (2003). Writing with web logs. Technology & Learning, 23(7), 11-14.
- Kling, R., & Courtright, C. (2003). Group behavior and learning in electronic forums: A approach. *The Information Society: An International Journal*, *19*(3), 221-235.
- Knowles, M. (1975). *Self-directed learning: A guide for learners and teachers*. New York; NY: Cambridge Books.
- Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. Upper Saddle River, NJ: Prentice-Hall.
- Kollock, P. (1999). The economies of online cooperation. In Kollock, P. & Smith, M. (Eds.), *Communities in cyberspace* (pp. 220-236). New York, NY: Routledge.
- Kovanovic, V., Gasevic, D., & Hatala, M. (2014). Learning Analytics for Communities of Inquiry. *Journal of Learning Analytics*, 1(3), 195-198.
- Kubal, L. (2006). Should you invest in web 2.0 innovations? *Venture Capital Journal*, 46(7), 33-34.
- Kuklthau, C., Maniotes, L., & Caspari, A. (2007). *Guided inquiry: Learning in the 21st century*.Westport, CT: Libraries Unlimited.

- Kumar, S., & Thondikulam, G. (2006). Knowledge management in a collaborative business framework. *Information Knowledge Systems Management*, 5, 171–187.
- Laval, C. (2006) Les deux crises de l'éducation. La Revue du Mauss Semestrielle, 28, 96-115.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Laferrière, T., Lamon, M., & Chan, C. K. (2006). Emerging e-trends and models in teacher education and professional development. *Teaching Education*, *17*(1), 75-90.
- Lincoln, Y. S. (Ed.). (2002). Paper from Annual Meeting Association for the Study of Higher Education 2002: *On the Nature of Qualitative Evidence*. Sacramento, CA.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.
- Long, H. B., & Redding, T. R. (1991). Self-Directed Learning Dissertation Abstracts 1966-1991.
   Norman, OK: Oklahoma Research Center for Continuing Professional and Higher Education.
- Luehmann, A.L. (2007). Identity development as a lens to science teacher preparation. *Science Education*, 91(5), 822–839.
- Luehmann, A. L., & Tinelli, L. (2008). Teacher professional identity development with social networking technologies: learning reform through blogging. *Educational Media International*, 45(4), 323-333.
- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research*. Thousand Oakes, CA: Sage Publications.

- Matheson, D. (2004). Weblogs and the epistemology of the news: Some trends in online journalism. *New Media & Society*, 6(4), 443-468.
- McMillan, J. H., & Schumacher, S. (2014). *Research in education: Evidence-based inquiry*. Boston, MA: Pearson.
- Merriam, S. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Mejías, U. (2005). A nomad's guide to learning and social software. *The Knowledge Tree Journal*, 7. Retrieved from http://blog.ulisesmejias.com/2005/11/01/a-nomads-guide-to-learning-and-social-software/
- Mezirow, J. (1985). A critical theory of self-directed learning. *New Directions for Adult and Continuing Education*, *1985*(25), 17-30.
- Miller, N. & Dollard, J. (1941). *Social Learning and Imitation*. New Haven, NJ: Yale University Press.
- Netcraft September 2014 Web Server Survey (2014). Retrieved from http://news.netcraft.com/archives/2014/09/24/september-2014-web-server-survey.html
- Noddings, N. (1984). The False Promise of the Paideia: A Critical Review of" The Paideia Proposal" by Mortimer J. Adler. *Journal of Thought*, *19*(1), 81.

Oravec, J. (2005). Blending by blogging: Weblogs in blended learning initiatives.

Journal of Educational Media, 28(2.3), 225-233.

Paul, R. (1993). Critical thinking: What every person needs to survive in a rapidly changing world. Santa Rosa, CA: The Foundation for Critical Thinking.

- Pinker, S. (2002). *The blank slate: The modern denial of human nature*. New York; NY: Viking Press.
- Ray, B. B., & Coulter, G. A. (2008). Reflective practices among language arts teachers: The use of weblogs. *Contemporary Issues in Technology and Teacher Education*, 8(1), 6-26.
- Richardson, W. (2005). *Blogs, wikis, podcasts, and other powerful web tools for classrooms*. Thousand Oaks, CA: Corwin Press.
- Rodzvilla, J. (2002). *We've got blog: How weblogs are changing our culture*. Cambridge; MA: Perseus Publishing.
- Royal Roads University-Centre for Teaching and Educational Technologies. (2015). *Pedagogical Underpinnings*. Retrieved from http://ctet.royalroads.ca/pedagogicalunderpinnings
- Sabourin, E. (2013). Education, gift and reciprocity: a preliminary discussion. *International Journal of Lifelong Education*, *32*(3), 301-317.
- Sattar, S. (2015). Learning via blogging: The ESL/EFL perspective. *Global Science and Technology Forum- Journal on Education*, *3*(1), 7-12.
- Schrage M (1995). *No more teams! Mastering the dynamics of creative collaboration*. New York, NY: Doubleday.
- Schwier, R. A. (2007). Shaping the metaphor of community in online learning environments. InG. Calverley, M. Childs, & L. Schneiders (Eds.), *Video for education* (pp. 68-76).London, UK: DIVERSE and the Association for Learning Technologies.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York, NY: Doubleday.

- Sessums, C. D. (2009). *The path from insight to action: The case of an online learning community in support of collaborative teacher inquiry* (Doctoral dissertation) Retrieved from ProQuest. (ERIC Number: ED513281)
- Sprinthall, N. A., Reiman, A. J., & Theis-Sprinthall, L. (1996). Teacher professional development. In J. Sikula (Ed.), *Handbook of research on teacher education*, 2nd Ed. (pp. 666-703). New York, NY: Macmillan.
- Song, L., Singleton, E. S., Hill, J. R., & Koh, M. H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *The Internet and Higher Education*, 7(1), 59-70.
- Swan, K. (2002). Building learning communities in online courses: The importance of interaction. *Education, Communication & Information*, 2(1), 23-49.
- Technorati State of the Blogosphere. (2010). Retrieved from http://technorati.com/state-of-theblogosphere-2010/
- Temple, D. (1998). Les structures élémentaires de la réciprocité. *Revue du MAUSS*, 12(2), 234–242.
- Tough, A. M. (1971). *Adults' learning projects: A fresh approach to theory and practice in adult education*. Toronto, ON: Ontario Institute for Studies in Education.
- Tudge, J., & Rogoff, B. (1999). Peer influences on cognitive development: Piagetian and Vygotskian perspectives. In P. Lloyd & C. Fernyhough (Eds.), *Lev Vygotsky: Critical* assessments: The zone of proximal development, Volume III (pp.32-56). New York, NY: Routledge.

- Wang, Y., & Fesenmaier, D. R. (2003). Assessing motivation of contribution in online communities: An empirical investigation of an online travel community. *Electronic Markets*, 13(1), 33-45.
- Waters, S. (2014). *The state of educational blogging 2014*. Retrieved from https://www.theedublogger.com/2014/10/14/the-state-of-educational-blogging2014/
- Wells, G. (2001). Action, talk, and text: Learning and teaching through inquiry. New York, NY: Teachers College Press.
- Wenger, E. (1998). Communities of practice. New York, NY: Cambridge University Press.
- Wenger, E., McDermott, R., & Snyder, W. (2002). A guide to managing knowledge: Cultivating communities of practice. Boston, MA: Harvard Business School Publishing.
- Wenger, E., White, N., & Smith, J.D. (2009). Digital habitats: Stewarding technology for communities. Portland, OR: CPsquare.
- West, R., Wright, G., & Graham, C. (2005). Blogs, wikis, and aggregators: A new vocabulary for promoting reflection and collaboration in a preservice technology integration course. In
  C. Crawford et al. (Eds). *Proceedings of the Society for Instructional Technology and Education* (pp. 1653–1658). Chesapeake, VA: AACE.
- Winer, D. (2003, May 23). What makes a weblog a weblog? Retrieved from http://blogs.law.harvard.edu/whatmakesaweblogaweblog.html
- Vajoczki, S., Watt, S., & Vine, M. M. (2011). Inquiry learning: Instructor perspectives. *The Canadian Journal for the Scholarship of Teaching and Learning*, 2(2), 3.
- Vygotsky, L. (1978). Interaction between learning and development. *Readings on the Development of Children*, 23(3), 34-41.

Yang, S. H. (2009). Using blogs to enhance critical reflection and community of practice. *Journal of Educational Technology & Society*, *12*(2), 11-21.

Zeichner, K. M., & Liston, D. P. (1996). *Reflective teaching. An introduction*. New York, NY: Routledge.

## APPENDICES

#### **APPENDIX A – INVITATION TO PARTICIPATE**

You are invited to participate in a research project titled Learning in Community: Using Blogging to Facilitate and Cultivate a Community of Practice of Professional Learners, as part of an MEd Thesis study. Please read this form carefully, and feel free to contact me with any questions you may have.

**Researcher**(s): Jana Scott Lindsay, MEd candidate, Department of Curriculum Studies, University of Saskatchewan, Ph (306)341-3431, supervised by Dr. Dirk Morrison, Associate Professor of Educational Technology and Design, Department of Curriculum Studies, University of Saskatchewan: phone (306) 966-6483.

**Purpose and Procedure:** This study will examine the case for using blogging as a means to facilitate an informal community of practice of professionals who endeavor to further develop their knowledge and understanding of teaching and learning as well as cultivate an authentic online community of collaboration. As well, the study will investigate various motivations that might bring participants together as an informal online community and better explain how and why the community might experience success.

Using Social Learning Theory as the analytical framework, this study will look at ways in which participation in an informal, online learning community of practice encourages participants' abilities to deepen their understandings of teaching and learning as a community of practice, of blogging as a model for self-directed learning and tool to facilitate the cognitive, critical thinking process of learning. The qualitative research design selected is an instrumental case study methodology, intended to delve deeply into the lived experience of research participants. Through extensive interviews, it is the intention of the student researcher to capture the essence of the learning generated from an informal online community of practice. The research study will look at a small sampling of practicing educators engaged in blogging conversations over the course of a six week time frame and individual interviews will be conducted asynchronously between the student researcher and participants through email. Participants will be given approximately one week from the time the interview question(s) have been sent to complete and return and will be asked to answer no more than 2-3 questions per email. Follow up question(s) might be needed based on the answers generated by participants. Video and/ or audio recording could be considered by the participant as an option to answer the questions being asked as part of the research study. Transcriptions of the interviews will be provided to the interviewee for revisions, additions, and deletions prior to analysis to ensure the interview transcript accurately reflects the individual's opinions.

**Potential Benefits:** Potential benefits of participation in this research are improved pedagogy and deeper understandings of informal, online teaching and learning as a community of practice. This study is useful to better understand technology-based teaching and learning tools, specifically blogging, as a model for self-directed learning. As well this study will help to facilitate the cognitive, critical thinking process of learning allowing knowledge to be constructed and informed decisions to be made as a result of research findings. **Potential Risks:** As a result of this informal, online research study, it is considered minimal risk to participants.

**Storage of Data:** Data collected from this research project will be safeguarded and securely stored by Dr. Dirk Morrison at the University of Saskatchewan for a period of 5 years, after completion of the study. This is necessary for the purpose of scholarly articles resulting from the research. After the five year time period, the data will be appropriately destroyed. This includes any audio or video recordings associated with the research study.

**Confidentiality:** The data from this research project may be published and presented at conferences; however, your identity will be kept confidential. Although we will report direct quotations from the interview, you will be given a pseudonym, and all identifying information (school, district, title etc.) will be removed from the report.

**Right to Withdraw:** Participation in this research project is voluntary and interviewed participants can choose to answer only questions they are comfortable answering. There is no guarantee that you will personally benefit from your involvement in the research study. Participants can choose to withdraw data from study up until December 31<sup>st</sup>, 2013 (due to results disseminated, data pooled, etc.) without any impact on their standings in the research study. After this it is possible that some form of research dissemination will have already occurred and it may not be possible to withdraw participant data.

**Questions:** If you are interested in learning more about this study, please contact Jana Scott Lindsay at jls389@mail.usask.ca or (306)341-3431. This research project has been reviewed and approved by the University of Saskatchewan's Behavioural Research Ethics Board on September 11<sup>th</sup>, 2013. Please feel free to contact the U of S Ethics Office at (306) 966-2084, with any questions regarding research project or rights as a participant in the research study.

#### **APPENDIX B – PARTICIPANT CONSENT FORM**

As a result of your interest, I would like to invite you to participate in a research project titled Learning in Community: Using Blogging to Facilitate and Cultivate a Community of Practice of Professional Learners, a MEd Thesis study. Please read this form carefully, and feel free to contact me with any questions you may have.

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**Potential Benefits:** Potential benefits of participation in this research are improved pedagogy and deeper understandings of informal, online teaching and learning as a community of practice. This study is useful to better understand technology-based teaching and learning tools, specifically blogging, as a model for self-directed learning. As well this study will help to facilitate the cognitive, critical thinking process of learning allowing knowledge to be constructed and informed decisions to be made as a result of research findings. **Potential Risks:** As a result of this informal, online research study, it is considered minimal risk to participants.

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**Confidentiality:** The data from this research project may be published and presented at conferences; however, your identity will be kept confidential. Although we will report direct quotations from the interview, you will be given a pseudonym, and all identifying information (school, district, title etc.) will be removed from the report.

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**Questions:** If you are interested in learning more about this study, please contact Jana Scott Lindsay at jls389@mail.usask.ca or (306)341-3431. This research project has been reviewed and approved by the University of Saskatchewan's Behavioural Research Ethics Board on September 11<sup>th</sup>, 2013. Please feel free to contact the U of S Ethics Office at (306) 966-2084, with any questions regarding research project or rights as a participant in the research study.

**Follow-Up and/or Debriefing:** Upon request, interested participants of this research project will be provided with an electronic copy of the final thesis.

## **Consent to Participate:**

## Written Consent

I have read and understood the description provided; I have had an opportunity to ask and my questions have been answered. I consent to participate in the research project, understanding that I may withdraw my consent at any time. A copy of this Consent Form has been given to me for my records.

(Name of Participant)

(Date)

(Signature of Participant)

(Signature of Researcher)

# **APPENDIX C – SUMMARY OF INTERVIEW QUESTIONS**

	List of Questions
Week One	When did you first start experimenting as a blogger and connecting with other educators online? Did one influence the other?
	For how long have you been connecting and collaborating with other educators through social media? What types of digital technologies have you experimented with and why?
	Have there been any experiences since you started connecting online that have been particularly influential, in either a positive or negative way? Could you share your experience in a little more detail?
Week Two	How did you first become involved utilizing online digital literacy tools, more specifically your current blogging platform?
	How often do you blog? Do you find it easy/ difficult to make the time to blog consistently?
	What types of supports were available to you when you first started sharing your personal and professional learning through blogging?
Week Three	What types of blogs do you maintain as part of your personal and professional learning? For example do you have a professional blog as well as a classroom blog?
	How do you choose different ideas/subjects to blog about?
	Once you hit publish, how do you go about sharing your learning with a wider audience? Do you feel there are benefits/hindrances to sharing your thinking online?
Week Four	Has your teacher pedagogy changed as a result of creating and maintaining a blog for teaching and learning? If yes, in what ways?
	Has your professional teaching philosophy/curriculum delivery and instruction been impacted as a result of sharing with a larger online community? If yes, in what ways?
	Explain how you see (or do not see) blogging as a means of creating, maintaining, and cultivating an authentic professional learning community online.

Week Five	From your perspective, has blogging had an impact in creating and implementing a technology based learning environment for students in your classroom? If yes, in what ways?	
	How, if at all, do you see your students learning differently compared to more traditional learning environments? If possible, please provide an example.	
	What skills do you see as necessary for a teacher to be successful in a technology-based learning environment?	
Week Six	Is there anything, now that you have been blogging for year(s) that you wish you would have known when you were first starting?	
	Could blogging support and enhance a self-directed model for educators to learn as professionals? If yes, under what conditions?	
	Will blogging cultivate a collaborative learning environment that actualizes and further develops cognitive and critical thinking skills? If so, how?	

# **APPENDIX D – EXAMPLE OF CODED TEXT SEGMENT**

Emergent Theme (coded at the node)	Coded Text Segment
Self-Directedness <i>Reference #10</i> (Total 19 coded references) Educational Reciprocity <i>Reference #10</i> (Total 17 coded references)	"Blogging has been a way to reflect on ideas, but also to have my ideas challenged by others. Those conversations have led to a richer, broader idea of what it means to learn. I've taken ideas from self- proclaimed "radical un-schoolers" as well as traditionalists who have offered a new perspective that I hadn't considered."
Cognitive Presence <i>Reference #9</i> (Total 19 coded references)	

Participant #3 (Week 4)