INQUIRY PLC WITH EXPLORATORY TALK

Student-Centred Inquiry Professional Learning Communities Using Exploratory Talk

By

Scott Belshaw
Bachelor of Arts – History University of Victoria, 2002
Bachelor of Education – University of Victoria, 2005

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Abstract

This project focuses on the development of exploratory talk in an inquiry context for teachers. The project provides a professional development informational session, which can lead to a collaborative professional learning community that concentrates on support for teachers interested in the implementation of exploratory talk and inquiry into a classroom setting. The initial professional development session will address the importance of exploratory talk and inquiry where the participants can discuss and derive modes to incorporate an alternative to the conventional paradigm of the classroom. Exploratory talk is the participation in critical and constructive thinking amongst peers to create critical, yet constructive conversations to drive and further learning (Mercer, 2008). Student-centred inquiry focuses on the development and learning of the student through questioning and research via active participation; individual facilitation with authentic exploration and applying, planning and evaluating their acquired knowledge (Marshall & Horton, 2011). The review of literature addresses a lack of professional development opportunities relating to exploratory talk. Halbert and Kaser’s (2013) research explores the professional learning through collaborative inquiry, as well as the benefits of utilizing theories and modes to implement these principles. The professional development workshop will delve into comparisons between conventional pedagogical approaches and the research supporting new paradigms and will provide an opportunity for teachers to become learners who will metacognitively consider the benefits of the implementation of both exploratory talk and inquiry.

By the end of the professional development session, approximately an hour and twenty minutes, teachers will have experimented with inquiry process while using exploratory talk and will have an opportunity to create resources that support them in moving forward with inquiry practice in the classroom. After the information session, the interested teachers will form a
collaborative professional learning community for those who are interested in pursuing exploratory talk and inquiry further where we can discuss successes and challenges where the participants provide support for each other as we move forward with the implementation of these philosophies. Finally, the reflection piece of the project will discuss my delivery of the professional development information session and my metacognitive experiences developing the PLC sessions. I will attempt to consider the encouraging and favorable aspects of the experience as well as examine the limitations of the process, through a brief participant survey and my personal reflection, in order to change the exercises for future informational opportunities based on feedback. As a result of my own learning in this process, I hope to facilitate future meetings where the professional learning group can come together and discuss the experiences with exploratory talk and student-centred inquiry.
Dedication

I would like to dedicate this Masters of Education project to Brian and Melissa Lim. Their unselfish, generosity made my learning possible. If I had not had such dedicated, charitable and altruistic friends who provided a study space free of distraction, I may not have completed this project or MEd. Brian and Melissa altered their lives and routines, welcomed me with open arms and treated me like a family member while I invaded their space. I will appreciate their commitment to helping me for the rest of my life and their conscientiousness is credited to my learning and success. I am in debt to them forever.
Chapter 1: Introduction

I am a teacher with a learning mindset and am willing to implement new ideas into my everyday teaching practices. My philosophical educational ideals centre on peer discussions, building rapport, establishing as safe environments and the expression of individual opinions. I approach inservice opportunities with an open mind and positive demeanor no matter the topic, the venue, or the facilitator. I generally select workshops based on interest or in something I have never tried based on the needs of the particular group of students I have at the time. I strive to extract as many new ideas and opportunities available to me so I can and try them out as part of my practice. As I progress through each opportunity, I make a conscious effort to introduce the concepts into my classroom as soon as possible so I won’t forget what I’ve learned. Unfortunately, as I progress into the middle of my career, the professional learning options seem to have become more redundant, less useful, and increasingly conventional. Regrettably, the constant lack of new professional development has dulled my interest in what my local union and administration have to offer. My desire for innovation led me to the Literacy and Language Masters program at the University of Victoria and as I progressed through this Masters program, I became enthralled with exploratory talk and student-centred inquiry. The deficiency of innovative professional learning options offered locally led me to create an informative workshop with a concentration around exploratory talk and student centered inquiry leading to a collaborative and supportive group of teachers who can share their development with each other. The school district I am associated with is in a unique position where persistent declining enrollment has led to the discussion on how teachers would like to change the way programs are delivered as to heighten student engagement and learning options. This extraordinary circumstance has opened the door for me to introduce an interactive inservice, to facilitate a
professional learning community and eventually facilitate meetings to develop inquiry through exploratory talk.

**Exploratory Talk**

Prior to enrolling in the Masters program at the University of Victoria, my philosophies leaned toward a conventional pedagogy. I would strive for quiet and individual information gathering where students relied on me as the deliverer of information and the learners acquired the facts and figures I deemed important. The Oracy course I took as part of my Graduate program helped me understand the importance of student discussion and talk to support meaningful learning. I now encourage discussion, foster group learning, create opportunities for informational talk, and I remove myself from the centre of attention, the authority figure at the front of the room as I attempt to facilitate student discourse. I try to have students share their thinking through different modes (e.g., writing, talking, using role), and to different audiences in order to promote code switching as well as model contrasting dialects, audience shifts, and role reversals that encourage alternative approaches and different ways of thinking about an issue. I support students to incorporate their individual ways of knowing knowledge by tapping into their personal backgrounds and encouraging them to share experiences with each other. Practicing in this way has become important to me because it supports students to recognize that everyone has a diverse knowledge set and can bring something different to the conversation. I strive to resist the urge to impart my own creativity on the learners so they can explore ideas together, talk in exploratory ways, establish relevant topics, and engage in authentic discussion.

The instructional significance of exploratory talk is essential for student and teacher success in the 21st Century. The mandates from the Ministry of Education are student-centered with a new focus on the oral component (2007). The Ministry of Education suggests students need to use oral language to interact, present, explain, listen and persuade as well as using oral language to
extend thinking, analyze and explore, self assess and set goals for oral improvement (p. 10).

Exploratory talk is a way of supporting students to engage in these ways. Exploratory talk is dialogue where partners participate in critical, yet constructive thinking in a collaborative fashion, expanding on others’ ideas (Mercer, 2008). Talk is deemed essential for learning, yet most teachers do not receive professional development focused on classroom talk (McElhone & Tilly, 2013). Innovative instructional practices are available, but at times potentially often due to familiarity and comfort, we can fall back into the stand and deliver, question and answer, we already know the answer approaches to ‘discussions’. In my opinion, exploratory talk could be an integral part of the plans for the Ministry of Education, but without inservice opportunities that are strategic for implementation, the benefits of exploratory talk can be a lost opportunity for learning.

**Exploratory Talk and Inquiry**

Inquiry and student-facilitated learning leads directly into exploratory discussions. As students direct their inquiry and as teachers foster questioning approaches, discussion among students can become more meaningful and relevant. As students question each other’s information and share new perspectives, they can uncover different avenues to pursue, and their inquiries can foster deeper understanding. Their willingness to work together, to sustain talk and support each other’s ideas can grow as the inquiry develops (Roser & Keehn, 2002). Their questioning and interest in their topics generates more enthusiasm and their natural curiosity stimulates discussion as they search for understanding (Roser & Keehn, 2002). I believe when students share ideas, the inquiry exploration generates a deep comprehension of diverse perspectives. Shared curiosity can drive the inquiry process supporting students to deep understanding of a topic or issue chosen by the individual.
Student-Centred Inquiry

The conventional paradigm of stand and deliver textbook-centric teaching is questioned by the newest research. Collaborative, interest-focused, and student-based knowledge acquisition has become more prevalent across British Columbia (Halbert & Kaser, 2013). Tanaka et al. (2013) described inquiry as a learning journey of constant exploration through validation, resistance, questioning, collaboration, time, and reflexivity. The government of British Columbia introduced educational plans to integrate a student-centred program where each learner would have a flexible educational path and a versatile system where student interest could drive learning and concentrate on promoting deeper understanding (Province of British Columbia, Premier’s Technology Council, 2010). Students learn at different rates, however our system can constrain deeper questioning and thought because it often feels like there is too much curriculum content to cover. Inquiry-based pedagogy concentrates on life experiences and initiating responsibility for individual and collective knowledge construction. The Province of British Columbia’s Premier’s Technology Council (2010, p. 26) mentions a blended system of online and face to face teaching that “plays to the students’ strengths … by providing flexibility in learning styles and time management”. By having time and learning style flexibility, the student-centred inquiry process can provide learning that can make spaces for engaging experiences that can enable students to delve deeper into a relevant topic rather than passively listening to a topic deemed important by a teacher. Student centred inquiry is an instructional technique that drives active where the learning can be an enthusiastic venture through interests (Tanaka, 2013). Students will take more responsibility for their learning as they are offered opportunities in which they are “doing” instead of reading or listening (Province of British Columbia, Premier’s Technology Council, 2010, p.28).
My teaching assignment, an inquiry based community of 75 grade eight students, offered me an opportunity to experience the implementation of an inquiry process. This framework (which was new to me and consisted of a block system where the teaching team saw the students for three quarters of the day) was introduced to counter balance low graduation rates within an, inner city stream of students, in an English program, who attended a combined French Immersion and English high school. The goal of the project was to encourage a community based inquiry-centric learning environment to stimulate student engagement and to build relationships with the teachers and their peers. The “Grade 8 Academy”, as it became known, attempted to foster lasting relationships with and between the students while establishing a spark for independent and inquiry learning. An additional goal of the program was to foster an attachment to school and to generate a strong peer base for marginal students, as well as to promote a learning environment conducive to choice and inquiry. The teaching team consisted of three facilitators: an English and Social Studies teacher, a Science and Math teacher and a Learning Assistance teacher. Collaboratively we planned activities and lessons based on the core tenets of student-centred inquiry. We tried to create authentic learning opportunities, to venture outside the classroom with students, to provide students with time to explore, and to collaboratively facilitate a positive learning experience for everyone, including ourselves. The community and inquiry processes supported my own understanding of the inquiry process. The initial success of the program and the growing engagement of students spawned an idea to share our learning about the benefits we experienced with inquiry with other educators.
Chapter 2: Literature Review

Professional Development

Over the course of my teaching career, the notion of professional development has shifted. In my experience, a typical professional development session included top-down sharing of lesson that had proved effective for the facilitator. The session’s participants would choose to implement the ideas or tools provided by the facilitator, or not. Participants would ask questions of the facilitator and once the session was complete, the participants would go back to their classrooms and continue on the path of repeating the successful lessons and disregarding the activities that are less successful. Halbert and Kaser (2013) resist the conventional trend of professional development and instead focus on “professional learning”. They believe professional learning “implies an internal process in which individuals create professional learning through interaction with new information in a way that challenges previous assumptions and creates new meanings” (Halbert & Kaser, 2013, p.64).

A top-down model where administrators dictate professional development ignores the diverse experiences of teachers by requiring teachers to sit passively and receive information from an expert without individual customization (Gates, 2010). This MEd project is attempting to shift away from top-down delivery modes. Gates (2010) believes the role of content provider should give way to the role of facilitator. The facilitator can support the group instead of dictating where the teachers should go with their learning. The facilitator should ensure participants understand that changing perspectives can take time and they need to collaborate with one another to promote success. While opportunities for courses, conferences, and workshops can provide inspiring ideas, time and collaborative adult learning experiences can support changes to the teaching and learning culture of the school context (Halbert and Kaser, 2013).
Time and expertise are essential to professional learning (Halbert & Kaser, 2013). A collaborative inquiry project often takes a minimum of one year for participants can engage deeply into the topic, reflect on the progress, and develop long term relationships (Goos, Dole & Geiger, 2011). Constructing new pedagogies collaboratively over time can support teachers to embed and sustain them (Swan et al., 2013). Time for reflective practice is vital as well. Supportive school cultures are also critical in enabling professional learning communities characterized by shared responsibility and deprivatization of practice through frequent and collegial interactions (Goos, Dole & Geiger, 2011). Trust and an emotionally safe environment, with suspended judgment and valuing the inclusion and equity for educators are important responsibility for the facilitators when starting a productive collaborative setting (Halbert & Kaser, 2013). Swan et al (2013) believe that learning is a social process where involved teachers are active and collectively participate in ongoing learning.

**Inquiry**

Humans are naturally curious. Inquiry based learning fosters curiosity as students learn what they want to learn. A student centred approach provides opportunities for students to make choices to help determine the direction of their learning (Joshina & Harada, 2006). The ultimate goal of inquiry is for students to construct personal knowledge about topics that are meaningful to them which involves questioning, planning, investigating and creating products from all components of the information search process (Joshina & Harada, 2006). This creates space for students themselves to decide specific direction for their inquiry and choose activities that can help them stimulate and provoke interest to reach their goals (Jarvela, Veermans & Leinonen, 2008). Student centred inquiry involves developing and implementing a plan to satisfy curiosity through collecting data, evaluating evidence, drawing conclusions, reflecting on strengths and weaknesses and engaging in a new sequence (Shore et al., 2011). The cyclical process enables
students revise, rethink, revisit and reevaluate information as they problem solve for deeper comprehension. Students determine what and how they will learn. Therefore the challenge for educators is to create an environment that fosters thoughtful questioning (Joshina & Harada, 2006). Questioning is at the heart of inquiry. The strongest inquiry topics are those that generate meaningful questions that can be framed for investigation (Joshina & Harada, 2006). The questions should be open-ended and should offer a variety of avenues to explore. They should be focused on big ideas rather than facts and they should point out what is important to learn about this topic as they lead to other questions. A Grade 10 Social Studies example of a strong inquiry question could be what or who from the American Civil War had the biggest impact on American society today.

Unfortunately for some educators, convention and apprehension makes it difficult to move beyond routines into an educational paradigm where inquiry drives learning (Halbert & Kaser 2013). Some teachers believe inquiry is more work and can be too taxing. According to Shih, Chuang and Hwang (2010), inquiry-learning increases student ownership and learning responsibility through active participation and involvement. The results can be significantly better as compared to a conventional classroom framework (Shih, Chuang & Hwang, 2010). The nature of student-centred learning, with encouraged independence for exploration can produce a deeper cognitive understanding and enhanced engagement without increasing the student workload (Shih, Chuang & Hwang, 2010). Students with learning challenges can experience reduced cognitive stress because they can investigate relevant topics through experiential modes rather than memorizing teacher directed information (Shih, Chuang & Hwang, 2010). In my experience, support for students in a conventional paradigm, usually consists of money allocated for textbooks or for instructional training in regards to the curriculum, content, or focused practices. Instead of purchasing the newest version of a text, professional learning can move away from content focused development and toward facilitating student-centric approaches. In
order for inquiry to be a successful venture, we as educators need to accept an overarching pedagogical system of learning, like inquiry, is not a “golden lesson”. The design of inquiry is not something educators can dabble with and use periodically; it is a pedagogy we need to be collaboratively persistent with. It will not happen over a week, or even a month. The development of inquiry is an ongoing fluid process that takes time and focused effort. In order to develop inquiry, teachers need to understand how to implement the student centred inquiry model and the benefits it can have on students’ learning as well as their own professional learning.

**Inquiry and Professional Development**

If inquiry as a method of instruction is to become a widespread educational pedagogy, teachers need to explore student-centred inquiry further. If educators are unfamiliar with implementation inquiry, the refining and reevaluating of ideas and instructional methods may not be a positive experience (Gerard et al, 2011). Halbert and Kaser (2013) stress, “Teachers need to know ‘why’ the new practice is more powerful” and “teaching effectively isn’t just using discrete strategies; teaching involves an integrated and holistic approach” (p. 54). If educators do not see success or data supporting results, they may not change. Informing our peers and describing the successful ventures the participants experience through specific and detailed professional development may help ease the transition to inquiry and more people may try the pedagogy. Inquiry-centric professional development should concentrate on teachers who engage as learners to build the necessary knowledge to co-construct alternative visions of practice (Nelson & Slavit, 2008). If the interested teachers engage in professional learning, they might then use successes to encourage others to try inquiry. Confusion and misconceptions of implementation and execution of inquiry lead to reluctance and default back to conventional practices. Grigg et al’s (2013) research indicates that if we do not use the information and receive implementation
opportunities, we will not use what we have learned. Grigg et al (2013) also find that the impact on a teacher’s practice corresponds with what they are most frequently exposed to during professional development. Halbert and Kaser (2013) introduce a concentration on professional learning where educators learn all the time through reflection and collaboration with peers instead of on our five or six designated days of professional development. By establishing a professional learning community, teachers may be more inclined to implement inquiry into a reoccurring and usable design. If teachers have little experience in an inquiry-based methodology, it is unlikely that the approach will be adopted without someone who has experienced success that can ease uncertainty (Pozuelos et al, 2010). Halbert and Kaser (2013) note, “Little or nothing will change for young people unless educators actually do things differently. It isn’t enough to sit in meetings, go to workshops, attend conferences and develop new insights – and then continue to do what we’ve always done.” (p. 56). With viable, research-supported professional learning, teachers can shift pedagogical practices and can collectively incorporate inquiry with confidence. A professional learning environment and explicit teacher education are essential for inquiry’s success in professional learning groups, classrooms, schools and districts.

**Inquiry and Teacher Collaboration**

Collaboration is essential for creating an inquiry-based school culture. Without support from our colleagues, educators are less likely to adopt a pedagogical change. Collaboration with peers and students is crucial and provides an opportunity for teachers to view and reflect upon their practices, techniques, student engagement, and student achievement (Lebak & Tinsley, 2010). Educators are compelled to build a repertoire through sustained development and collaborative support (Halbert, Kaser & Koehn, 2011). Collaborative time and professional learning teams are essential to the development of inquiry; team members need to be strong communicators,
efficient at implementing change (Nelson & Slavit, 2008). Ermeling (2010) supports the claim that meaningful pedagogical changes are more likely when teachers work in job-alike collaborative teams lead by experienced inquiry leaders who use inquiry focused protocols, and have stable contents in which to engage in the continuous improvement of cycles and reflective practices. A dedicated, knowledgeable, passionate, and focused group of teachers can unite through a collaborative inquiry process to address the important instructional and curricular needs of their particular learners (Nelson & Slavit, 2008). Pozuelos et al (2010) believe establishing cross-curricular groups is essential and their research emphasizes the importance of being able to draw on the experience of colleagues outside the group, as well as bring together teachers from primary through to tertiary levels in order to introduce diverse points of view. Broad groups can work together to create realistic plans and be aware of the interdisciplinary inquiry topics students choose. Reducing isolation, providing a framework and ensuring sustained opportunities for professional learning will help create the conditions for teacher and student inquiry to flourish (Halbert, Kaser & Koehn, 2011). Nelson and Slavit (2008) believe that critical and reflective collaboration within classroom practices will build the trust and potential of the inquiry process within the learning community by challenging beliefs and broadening the critical lens teachers frame as important. Collective support within a teacher network can draw on successful resources and increase awareness through reflection and collaboration. Nelson and Slavit (2008) caution that if inquiry processes are introduced without collaborative support from the staff, the result may be simply a structural change of daily routine. If teachers do not understand why change could be beneficial, the shift to inquiry will not likely happen. The collaborative support from peers provides a safety net to reinforce the benefits of student-centred inquiry and supplies encouragement when challenges arise. Halbert and Kaser (2013) indicate that seldom do things go swimmingly the first attempt and educators need to ensure they have a network of colleagues who are willing to participate in “dialogue, observation,
reflection the second, third or fourth tries without fear of judgment or failure.” (p. 56). We need to share both successes and failures in the teaching profession. This allows us to show our vulnerability, support each other, and learn from our mistakes.

**Teacher Challenges with Inquiry**

Teachers can be skeptical of the inquiry process because making changes to one’s practice can be a difficult process. Some teachers may find it difficult to let go of being the ultimate learning authority and embrace the notion that an engaged classroom context is often full of rich conversation and active learning. However, for those teachers who still strive for quietness and direct instruction, inquiry can also be used to support individual needs and strengths that include choice, competency and reflection (Alfassi, 2004).

According to Ireland et al (2011), curriculum documents and educational theory are somewhat at odds with teacher conceptions with student-focused inquiry. I believe that some teachers believe it is their role to ‘cover’ the prescribed curriculum and this need for ‘coverage’ could create a perceived barrier to development rich inquiry process. In contrast, the nature of student-centred inquiry stresses student ownership, accountability, and reflection. Ireland et al. (2011) believe inquiry learning focuses on providing choice and interest-based learning opportunities and are supported by Halbert and Kaser (2013), who describe a need to emotionally engage the imagination of the learner. Unfortunately, the conventional classroom may not necessarily be conducive to inquiry driven classrooms. Halbert and Kaser (2013) noted, “the curriculum is routinely taught as though its natural habitat is a textbook that students too commonly find dull and lifeless, and un-engaging-rather than through the fears, hopes and passions of real people” (p. 31). Educators may be concerned with a lack of resources, especially if inquiry encourages teachers to go beyond the textbook. Halbert and Kaser (2013) mention that educators need to emphasize building rapport with students, utilize assessment for and as learning, provide timely
feedback, and promote reciprocal teaching. These strategies and be transferred to any classroom situation and are certainly supportive in an inquiry learning context.

Based on my own experience teaching in the ‘Grade 8 Academy’, as well as discussions I’ve had with colleagues, I think that teachers are also concerned about how inquiry can be broken down into specific subjects. Some teachers might be concerned with how inquiry addresses the curriculum/prescribed learning outcomes for the courses they are teaching (e.g., English 9, Science 8, Physics 11). Some educators described a resistance to incorporating question-centred exploration because there is a risk that not all aspects of the curriculum are dealt with (Pozuelos et al, 2010). School timetables are strictly divided by discipline and, because of convention and familiarity; interdisciplinary thinking can be a challenge for some teachers. The constant push by the conventional regime of schools with blocks of time for specific courses stresses that learning needs to happen between a certain interval, which can reduce the desire for further learning through inquiry (Tanaka et al, 2013). The conventional block system pits teachers into preset teaching areas; looking beyond the curriculum requirements can be challenging. However, in order for an inquiry-focused process to be successful, the subject area and timetable blocks need to be blurred so that an interdisciplinary approach can be taken. Cross-curricular activities can cover such outcomes as organizational skills, interpretation, the scientific method, decision making and problem solving (Alberta Learning, 2004). With support from school administration and colleagues, the conventional block rotation system can sometimes be altered in order to accommodate an encompassing learning environment, instead of students attending, for example, a social studies class for a particular time period, English for another, and then moving to science.

By engaging in the inquiry process, many of the learning outcomes for several subject areas can be easily addressed. Instead of concentrating solely on the social studies, for example, students would have the opportunity to explore based on their own interests, and teachers can
collaboratively use their familiarity of the various curricula to determine which outcomes are met.

In addition to the ministry directed prescribed learning outcomes, some teachers of particular grades have concerns about covering the required content for a provincial exam. I have discussed my own apprehensions about this with colleagues who also had concerns. The choice and student-centred nature of inquiry becomes a perceived threat to achievement on provincial exams (Friesen 2010). Friesen (2010) suggests that too frequently teachers and administrators allow their fear of standardized examinations to get in the way of the innovations needed to re-engineer our pedagogy. Interestingly however, Marshall and Horton (2011) indicate that when students delve into deeper learning and comprehension, they perform higher on standardized tests.

The presumed pressures of the curriculum can create time constraints. Some teachers might have a presupposed perception that introducing different opportunities for learning is dependent upon the teacher creating endless material – a time consuming and onerous task. Some teachers believe they have to generate every learning opportunity of each learning day, from what to read, to what to written and in some cases, to what students think and there is little or no time available for the creation of these materials. They believe that facilitating inquiry-learning means they will have to work thus harder and longer (Pozuelos et al, 2010). However, in practice, inquiry creates a frontloaded scaffolding concentration at the beginning of the inquiry process, and through the gradual release of responsibility, the “work load” can be substantially reduced. As inquiry practices become more deeply engrained in school culture students will engage in more probing questions and deeper analysis (Halbert, Kaser & Koehn, 2011). The perceived course-specific ministry mandated prescribed learning outcomes have been a stumbling block for my own development for almost a decade and I ultimately decided to release the urge to concentrate instruction using textbooks in an attempt to make inquiry a be successful venture. I hope others
might decide to do the same because it was tremendous professional learning for me and I saw my students benefit from their experiences.

A conventional approach (e.g. utilizing a textbook and or specific worksheets for instruction) can create a barrier for establishing a student-centred inquiry environment. By directing and determining what students need to know, teachers control what the students will learn, thus creating a power dynamic in which the teacher is the centre figure for their understanding. Teachers can be reluctant to relinquish control and realize that our knowledge base may not be all encompassing. If teachers experience a gap of knowledge or misconception, the transition from conventional to inquiry-based learning can be easier. Once the teachers recognize a misinterpretation (cognitive dissonance), it can easier for them to be critical of their previous teaching model and can be more open to the inquiry-centric style of learning (Rushton, Lotter & Singer, 2011). For instance, if I am creating an opportunity for learning in a drama class and I have very little experience, I should accept that perhaps the students may have more background than I. By facilitating and allowing the students to guide their own learning, by stepping away from the expert roll and we all can learn together. The gaps of knowledge or misconceptions introduced empathy for the students’ learning and furthered the value of inquiry teaching (Rushton, Lotter & Singer, 2011). Our predictions, explanations, or ideas can be wrong and modeling a mode or path to understanding can foster an avenue of success for our learners.

**Exploratory Talk**

Exploratory talk is dialogue where partners participate in critical, yet constructive thinking in a collaborative fashion, expanding on others’ ideas (Mercer, 2008). According to Vygotsky (1962), a psychologist offering a focused explanation of social interaction and comprehension, dialogue between children is important to their development because it internalizes interaction through self-regulatory inner speech. In other words, thinking aloud is under the exploratory talk
‘umbrella’ because the individual is verbally formulating ideas and changing conceptions. Ideally, this social constructivist approach to learning is student-driven with little interruption from the facilitator. Boyd and Galda, (2011) indicate that children achieve a higher understanding and a greater ability to reason and problem solve when the teacher integrates the examination of ideas in a social context. It is also important to note that exploratory talk differs from presentational talk. Presentational talk is generally prepared and polished whereas exploratory talk is halting, scrambled, repetitive, and disordered. Mercer (2008) stresses the most important piece to collaborative understanding is when students have contrasting opinions during group work and benefit from reaffirming or altering their ideas as facilitators scaffold respectful and empathetic discussion. The discourse can be a sounding board for students to consider new perspectives and make shifts in their understanding. Conversation provides an opportunity to introduce, defend, reconsider, and refute ideas to broaden understanding. As Mercer (2008) describes, peer talk leads to a deeper understanding.

The instructional significance of exploratory talk is essential for students and teachers in the 21st Century. The mandates from the Ministry of Education are student-focused and the oral component is, I think, a fairly significant element. Students need space to discuss their thinking and integrate ideas with their own background knowledge.

The cooperative nature of exploratory talk can also lead to positive, cordial, and respectful students who strive to work together to achieve a common goal. Boyd and Galda (2011) discuss the importance of thinking together and sharing the cognitive load by taking turns that may overlap to generate new conceptions. Douglas Barnes (2008) is quoted as saying, “learning floats on a sea of talk,” where he reflects on what it means to “talk it through” to change what a learner knows and how they know (Simpson, Mercer & Majors, 2010). In addition, Barnes describes this type of discussion as hesitant and incomplete where it enables the participants an opportunity to try out ideas, to see what others think, and to rearrange information into different
schema (Barnes 2008). In this case, “hesitant” and “incomplete” are enablers for learning. The goal of exploratory talk is to use students’ existing knowledge and inquisitive discussions to construct meaning and ultimately increase understanding. Robin Alexander (2008) argues that speculating and thinking aloud helps one another rather than competing for the right answer. This allows children to listen more carefully, respect one another, and talk collectively to come to a common end – the basic tenets of exploratory talk. Barnes (2008) goes a step further by providing a few implementation options for the collective reasoning concept. For example, having students write about and discuss what they know about a topic or encouraging students to list what they understand and what they want to more about. Educators need to allow space for exploratory talk in classrooms to create an environment that values risk taking and questioning (Simpson, Mercer & Majors, 2010). In order for learners to engage in the conversation, Alexander (2008), Barnes (2008), Boyd and Galda (2011) as well as Simpson, Mercer and Majors (2010) all support the notion that students need to feel at ease as well as free from ridicule and aggressive disagreement; otherwise, embarking on a new instructional practice is nearly impossible for teachers and students alike.

**Exploratory Talk Improves Comprehension**

Vygotsky (1962) views children’s playful dialogues as critical for developing higher learning because they are internalized as self-regulatory inner speech (Korat, Bahar & Snapir, 2003). Boyd and Galda (2011) discuss the importance of “interthinking”, [a term coined by Mercer (2008)], as well as sharing the cognitive load, trying out ideas by taking turns, and generating ideas through incomplete, hesitant and recursive words. Exploratory talk is a key vehicle for supporting these social processes.

Mercer (2008) examines the significant contribution of exploratory talk to intellectual development, understanding, and reasoning. He supports the view that focused, reasoned, sustained
dialogue amongst peers, with few teacher interruptions, not only helps children solve problems, but can promote the learning and conceptual understanding of the individuals involved. Similar to Boyd and Galda’s (2011) assertions, the most productive interaction seems to come from the students proposing ideas and reasoning themselves – processes that create common and cumulative understanding that can further comprehension. To supplement Mercer’s (2008) findings, Evangorou and Osborne (2013) examined the correlation of dialogic and exploratory interaction between a group of middle school students and their comprehension and retention in two case studies. Even though the students made gains in understanding and reasoning, like Mercer’s (2008) study, they indicated the pupils need ownership and engagement for the exploratory talk to be worthwhile. In addition, Robins (2011) considers the impact of teaching exploratory talk on the learning of one specific class and concentrates on the developmental cognitive functions. She concludes, “there was no doubt, from both this activity and the observations of group work in maths and science, most children in the class were showing the ability to explicate their own thinking and challenge that of others” (Robins, 2011, p. 82). Clearly, exploratory talk is an important instructional tool, but engagement in the activity is necessary for meaningful student learning.

**New Professional Learning for the Implementation of Exploratory Talk**

Exploratory talk is an instructional strategy that requires students to become active learners and the teacher to facilitate conversation rather than direct the outcome. For some teachers, compelled to maintain a quiet undisruptive learning environment, this dialogic concept can evoke concern. Talk is deemed essential for learning, yet most teachers do not receive professional development focused on how to use it as an engaging learning tool (McElhone & Tilly, 2013). While the conventional instructional mode is based on a paradigm in which teacher asks questions which s/he already knows the answer to and hopes students will respond ‘correctly’, the evolution of exploratory talk involves teachers developing awareness and skill in
using discussion as a tool to help students toward self-awareness and communicative effectiveness (Mercer & Dawes, 2008). This requires the improvement on reflective and critical appreciation of exploratory talk and how the pedagogical strategy is utilized in the classroom (Simpson, Mercer & Majors, 2010). Discourse has become more symmetrical and communicative, but this change has not happened naturally; instead an immense amount of focus has been put on initial education and professional development for teachers (Mercer & Dawes, 2008). Teachers become comfortable with the implementation of an instructional strategy that reshapes the conventional paradigm of ‘stand and deliver’ (Mitchell 2008). Mitchell (2008) posits, in regards to talk, “teachers do not get quality learning without consistent and persistent use of teaching strategies that stimulate and support its various aspects.” (p. 185). Quality informative professional development is essential to moving toward a dialogic, exploratory classroom environment.

Fisher (2010) investigated pre-service teachers and their experiences with exploratory talk. She states, “at the heart of the matter are the ‘inflexible’ values and beliefs” pre-service teachers bring and default to upon observed practice (Fisher, 2010, p. 33). Fisher concludes (2010) that student teachers are inclined to undergo the “emotional pain of transformation” and give up some control of classroom dialogue and move away from “recitation scripts” toward collaborative exploratory thinking (p. 44) while teachers need to develop exploratory talk through classroom ethos as well as collective, reciprocal support and cumulative discussion even though management of these discourses can be a challenge. If we wish to create articulate classrooms where dialogue is recognized as a means of understanding and learning, more research is needed that focuses on pre-service teachers’ experiences with exploratory talk and their corresponding levels of confidence (Fisher, 2010; Mitchell, 2008). In addition, professional learning opportunities are required to promote and provide support for in-service teachers struggling with implementation of exploratory talk.
In conjunction with Fisher (2010), McElhone and Tilley (2013) address the challenges with professional development and talk. These researchers believe the tension for both pre-service and in-service teachers is worsened by the desire to walk away from teacher education experiences like professional development on the implementation of exploratory talk and revert to ready-to-use materials and ideas (McElhone & Tilley, 2013). They concluded that teachers can progress through professional learning and improve the classroom comprehension through offering students opportunities to share their thinking, try out strategies, and help engage students in authentic discussion.

Educators and curriculum designers need to find ways to scaffold exploratory talk into instruction in a manner that engages students. Without professional learning opportunities that stress the benefits and provide the tools for success, teachers are more likely to slide back into the question-answer paradigm conventionally taken up in schools. Teachers can develop classroom relationships that position students as more equal participants who take ownership of their thoughts and ideas where they establish trust to explore hypothetical, exploratory, and tentative talk (Mitchell, 2008). Teachers cannot receive quality in-service opportunities without steady and purposeful use of strategies to stimulate success (Mitchell, 2008). Without adequate professional learning in regards to exploratory talk in the classroom, how do teachers take the leap of faith and embrace a new instructional strategy deprived of resources that can be frowned upon by colleagues?

**Gradual Release of Responsibility and Exploratory Talk**

‘Gradual release of responsibility’ is a focal point to exploratory talk research. The idea is that the initial stages of the release process are teacher-centered, followed by a slow move toward student-directed activities. Scaffolding as part of the gradual release approach was mentioned by all of the researchers (Wilkinson & Son, 2011). Building proficiency for structured talk is
recommended before student-directed activities can take place. Modeling and providing an opportunity for students to see the acceptable manner to interact for effective dialogue is essential. If the scaffolding does not take place, the students will not engage in meaningful and genuine discussion. Even though strategies such as guided readings, fishbowls, literature circles, and read-alouds are commons suggestions within the publications I reviewed, they all describe how the exploratory discussion needs to be highly structured at first, in order to promote comprehension (Wilkinson & Son, 2011). To achieve deep understanding, on-task discussion and motivated students need to be present. Students need to be prepared to explore each other’s ideas and provide opinion and feedback where appropriate. In addition, Wilkinson and Son (2011) discuss the dialogic premise for comprehension by considering argumentation. The argumentation through exploring ideas verbally either alters or cements opinion and thus establishes a deeper comprehension for each participant (Wilkinson & Son, 2011). Students can learn to formulate knowledgeable opinions and have the capacity to defend their ideals.

Argumentation is a form of reasoning and when done collaboratively, can be a powerful tool for meaningful learning (Wilkinson & Son, 2011). For example, the development of argumentation is built into the processes of science and the strategy of formal debates (Wilkinson & Son, 2011). By seeing both sides of the discussion, the learner weighs their understanding and beliefs upon new information and can alter his principles as they see fit.

Time can be a major concern for educators. The gradual release of responsibility process can take an extended period of time. Understandably, some teachers are concerned with how much time students need on any given day or assignment to fully develop their ideas. The Ministry of Education in British Columbia outlines prescribed learning outcomes, and educators can sometimes feel pressure to ensure they cover all of them, thus time becomes precious. If we want students in our classrooms to receive the most out of exploratory talk opportunities, we need to instill the positive ideals for effective social interaction and gradually release
Conclusion

Exploratory talk can be a sounding board and a reasoning tool for students to reaffirm ideas and a chance to listen and change opinions or schema. As the learners change their perspectives through investigational discussions, they collaboratively solidify understanding. As the teacher relinquishes authority, through gradual release of responsibility, and becomes a facilitator rather than a lecturer, students co-reason with each other to broaden their scope and enhance problem solving skills. The learners draw on each other’s ideas while capturing and exposing themselves to their individual funds of knowledge. Quality professional learning is needed for the 21st century teachers to embrace dialogue and exploratory talk in the classroom and further develop an inquiry centric classroom environment. A series of in-service opportunities and collaborative groups can provide a safety net for those who begin to fall back into default modes of practice are needed to support teachers to engage in a new era of dialogue centric facilitation.

Teacher knowledge and professional learning is essential to the inquiry movement. Inquiry is a paradigm where students are the focal point of gathering information, and where choice and interest drive their learning. Challenges such as heavily prescribed curriculum, time, infringement on teaching areas, and lack of resources can shed a negative light on the inquiry process. However, based on my experience, it is indeed worth pursuing because I feel both teachers and students can benefit from the use of exploratory talk.

The tenets of exploratory talk and inquiry complement each other when combined together in a classroom environment. As students inquire, peer discussion becomes more important. As students question each other and find alternative avenues for their inquiry, they can foster a deeper understanding as they search for information and understanding. Student-focused inquiry deepens as students become more willing to interact with each other and exploratory talk can help share information and foster curiosity. Collaboration and professional development can
lead to a positive shift for inquiry, thus my final Masters project - a professional development informative in-service followed by the creation of a professional learning community based on the implementation of inquiry for students utilizing exploratory talk as a mode to facilitate the collaborative learning.
Chapter 3: Creation of an Inquiry-Centric Professional Learning Community

Rationale:

This Masters project for the Faculty of Education in Curriculum and Instruction focuses on professional development using exploratory talk in a student-centred inquiry context for teachers. The below table outlines a set of six professional learning community meetings, designed to encourage and support teachers who wish to develop student-centred inquiry and exploratory talk aptitudes. The progressive learning sessions incorporate the fundamental and theoretical background to student-based inquiry and exploratory talk as well as incorporate and integrate these two ideologies into classroom practice. By attempting to generate a metacognitive awareness of the successful nature of both exploratory talk and question based learning, it is my hope that the learning community sessions will improve the knowledge and capabilities of teachers through research and self-realization.

Organizational Structure:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Title</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1</td>
<td>Introductory Informational Session on Student Centred Inquiry and Exploratory Talk</td>
<td>1 hour 30 min</td>
</tr>
<tr>
<td>Session 2</td>
<td>Grade 8 Academy Observation and Debriefing</td>
<td>2 hours 30 min</td>
</tr>
<tr>
<td>Session 3</td>
<td>Individual Question Based Exploration</td>
<td>1 hour 30 min</td>
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<tr>
<td>Session 4</td>
<td>Designing Inquiry Activities</td>
<td>1 hour 30 min</td>
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<tr>
<td>Session 5</td>
<td>Review Successes – Maintain Momentum</td>
<td>1 hour 30 min</td>
</tr>
<tr>
<td>Session 6</td>
<td>Grade 8 Academy Open Forum Share Out</td>
<td>2 hours</td>
</tr>
</tbody>
</table>
**Unit Descriptions:** (for Professional Learning Community plans, see Appendix B)

**Professional Learning Community Meeting #1** (one hour and thirty minutes)

This project provides an initial professional development informational session, which leads to a collaborative professional learning group that concentrates on supporting teachers interested in implementing exploratory talk and student-inquiry into a classroom setting. The informative workshop will delve into comparisons between conventional pedagogical approaches and the research supporting new paradigms as well as provide an opportunity for teachers to become learners who will metacognitively explore the benefits of exploratory talk and student-centred-inquiry.

The informative in-service, delivered via an interactive Powerpoint presentation, addresses the importance of exploratory talk and student-centred inquiry so that participants can discuss and derive modes to incorporate a new paradigm into their classroom practice. The goal of the initial portion of the information session is to first communicate the importance of and benefits for exploratory talk and student-centred inquiry, and then offer options for classroom implementation as well as establish a collaborative learning group of participants who wish to further their development in this field (Mercer, 2008). Exploratory talk is the participation in critical and constructive thinking amongst peers to create critical, yet constructive conversations to drive and further learning (Mercer, 2008). I hope to discuss why some teachers might wish to push beyond conventional approaches and what the potential challenges they may face moving to a more discourse-oriented environment. I’ve planned an activity in which an obscure topic is provided and the participants must use their background knowledge to try to describe what subject matter they have been provided. The teachers will then gather with peers who may or
may not know what their topic is and collect more information. I hope participants will metacognitively think about the differences and how they could discover more information about their topic through discussion as well as consider how their discourse may be creating deep understanding.

I then plan to provide a definition for exploratory talk and venture into the benefits of using it in a classroom. I will do this by discussing Moll et al’s (1992) funds of knowledge and how each learner can bring something unique to a discussion based on their culture and background. I plan to discuss why investigational dialogue is beneficial in classrooms as well as discuss potential differences between presentational talk and exploratory talk. I will also include how teachers can develop resilience and empathy, and can scaffold the activities in a safe environment so the participants can implement exploratory talk into their classroom routines (Korat, Bahar & Snapir, 2003).

The second stage of the information session is the introduction of student-centred inquiry. Student-centred inquiry focuses on the development and learning of the students through questioning and research via active participation; individual facilitation with authentic exploration and applying, planning and evaluating the newly acquired knowledge. I plan to introduce, through exploratory discussion in small groups, a definition of student-centred inquiry as well as a collaborative definition based on the participants’ background knowledge. I will fill in the information gaps that the group does not touch on and, ultimately, we will have a working explanation as the session moves forward using Tanaka et al’s (2013) transformative inquiry model. I hope to then compare student-centred inquiry with the conventional traditional teacher-centred dictation of learning. I also plan to incorporate investigational dialogue to establish the group’s sentiment toward an inquiry approach in the classroom and share what I’ve learned about how teachers can incorporate student-centred inquiry into their pedagogy.
At this point in the session, I think it is important to introduce an inquiry activity. I will introduce obscure topics, which hopefully the participants have little background knowledge of in order to allow the collaborative teams to investigate what they find interesting about the topic. Prior to logging on to the internet, I will have the groups engage in some exploratory talk to discuss what they think the subject matter is and to generate some background on it as well as to pool background knowledge if they have any. Once it seems that participants have explored fully, I will attempt to facilitate a discussion on their experience, as learners, of the exercise and what problems arose as they worked through their discovery. This metacognitive dialogue will hopefully lead into show the facilitators can support their learners when incorporating student-centred inquiry. At this point of the informational session, I will create an opportunity for the participants to consider how they might implement exploratory talk and student-centred inquiry into their own classrooms.

By the end of the first informative inservice, teachers will have experimented with inquiry process while using exploratory talk and will hopefully created resources for using exploratory talk in their own classrooms. We will attempt to form a collaborative professional learning community for those who are interested in pursuing exploratory talk and inquiry further – a learning community in which we can discuss successes and challenges as well as provide support for each other as we move forward with the implementation of these philosophies.

I will propose that the professional learning community meets regularly throughout the school year to discuss their learning with exploratory talk and student-centred inquiry. I will create an Edumodo group where the participants can post information about their exploratory talk and student-centred journey, which can also provide a venue where they can pose questions. Finally, my personal reflection piece of the project will consider my delivery of the professional development information session and my own metacognitive experiences throughout. The reflection will address the encouraging and favorable aspects of the experience as well as
examine the limitations of the information session, which I hope to gain insight on through a short brief participant survey and my personal reflection. These reflective processes will support me in adapting the session for to future informational opportunities.

**Professional Learning Community Meeting #2** (half a day)

The second meeting of our student-centred professional inquiry group will revolve around seeing student-centred inquiry in action. The Grade Eight Academy provides a fantastic venue to watch students engage in inquiry learning processes. The teachers assigned to the Academy have offered their interactive and collaborative classroom as an observation opportunity for colleagues who are interested in learning how to integrate inquiry into their practice. According to Parsons (2013) one of the most important aspects of professional learning is the belief that teaching is collaborative and interdependent with other teachers. The Academy is a model of a professional learning community and provides an ideal opportunity for the observers to ask questions about how inquiry can be scaffolded into educational routines. Teachers who hold positive attitudes toward school, students, and change tend to avoid cynicism (Parsons, 2013). The five Academy teachers collaborate and discuss their craft every day and create a positive and progressive learning environment. This student-centred learning community similar to what we are trying to create with the professional learning community.

The PLC group will meet first to discuss the previous forum, to answer any questions, and address any concerns raised either on the spot or on the Edumodo website. I will have prompted the Academy teachers to consider the scaffolding that has taken place prior to our observation and the challenges that may have surfaced over the course of introducing student-centred inquiry. I plan to use Halbert and Kaser’s (2013) *Spirals of Inquiry for Equity and Quality* (chapter two) outlining the essentials of student-centred inquiry, (this will likely be a review from the prior PLC meeting). I will also briefly reintroduce Tanaka et al.’s (2013) notion of transformative
inquiry. The group will hopefully then discuss the classroom conditions important for creating inquiry processes such as building rapport through an emotionally safe environment, assessment for learning and as learning, and providing constructive and productive feedback (Halbert & Kaser, 2013). We want to ensure the Academy teachers discuss the amount of time they have dedicated to student-centred learning as well as ways in which their practice is different than the conventional block timetable system. The professional learning community participants will hopefully inquire about the benefits of moving beyond the block system. Tanaka et al. (2013) deems that extended periods of time are essential for the inquiry process. We will stress the importance of interaction with the students as we move about the student-centred learning environment and have them discuss their learning with us (Halbert & Kaser, 2013). Interaction with the students is more beneficial than strict observation, and from my experience with the Academy, the inquirers are often willing to discuss their discoveries and what they have observed.

After observation and interaction with the Academy students (e.g., 45-80 minutes, depending on the time available), we will debrief with the PLC members about what they observed. We will then invite the Academy teachers to participate in the discussion so that PLC members can pose any questions that may have come up as they interacted with the Academy students. Chapter two of Halbert and Kaser’s (2013) Spirals of Inquiry will provide a theoretical framework for supporting discussion, particularly that focused on building rapport, providing feedback, student exploratory discussion, assessment, as well as the challenges participants might be thinking about. One of the most important aspects of the debrief process will be to ask the Academy teachers how they collaborate and interact together every single day. Ideally, this will help members of the PLC consider how they can stay in on-going discussion with each other as they work to implement inquiry into their own classrooms. This, in itself, will be a challenge because the will not see each other every day because we will be at different schools.
Nevertheless, I hope the group will have some suggestions about how they can support each other throughout the process.

The final piece to the second meeting of the professional learning community is to formulate a way to experiment with the inquiry process themselves. Participants will be given a handout with a visual of the inquiry process from Mishra and Bhatnagar’s (2012) *Appreciative Inquiry: Models and Applications* as a reference to utilize as they attempt the inquiry process (Appendix A). The handout provides a simple yet effective rendition of how the inquiry process works and summarizes the different stages the learners may go through as they embark on an exploration. The PLC participants will be asked to attempt to engage in a personal inquiry exercise to document their experiences. We will also plan a date for the third meeting where we can share our experiences.

**Professional Learning Community Meeting #3** (an hour and thirty minutes approximately)

At the beginning of this meeting we will debrief how the participants individual inquiry journey is unfolding and share the successes and challenges the participants are experiencing. We should stress the cyclical fashion of the inquiry process and maintain that time, rephrasing, questioning and rethinking are essential using Mishra and Bhatnagar’s (2012) *Appreciative Inquiry: Models and Applications* as a visual and a guide for us. With experience in the inquiry process, I will also share my successes and failures of the student-centred inquiry course I took through the University of Victoria and how I have used it as a benchmark for my learning and metacognitively revisit the experience. By facilitating a discussion using myself as a model for the inquiry process, hopefully the other members of the PLC feel comfortable enough to discuss the new knowledge and understanding and will metacognitively relive their participation.

Comfort and openness is essential for a successful collaborative learning group (Halber & Kaser, 2013). The PLC can experience a learning perspective where they will have more empathy for
their pupils because they have been involved with the methods required for student-centred inquiry (Swan et al., 2013).

The second piece to the PLC meeting will be attempting to incorporate student-centred inquiry into the classroom. The PLC members will attempt to facilitate an exercise to introduce for their pupils. Khalid’s (2010) *An Integrated Inquiry Activity in an Elementary Teaching Methods Classroom* is a simple yet effective template for introducing the inquiry process to our learners. After we read the short article, we can discuss different ways to implement Khalid’s (2010) ideas in our classroom and the article provides a concise way in order to assess the learning that will go on. The photos at the end of the article offer an opportunity to make predictions on where our learners may go with the questions the students in the article pose and how or where they may find the information. We can discuss what tools and time needed as well as stress that the longer the duration, the more involved the student-centred inquiry will be. Understandably, as an introductory exercise for learner focused inquiry, we will need time to model and to scaffold for the students and to establish the process making sure we do not jump into a massive and complex assignment like what the group saw with the Grade Eight Academy (Tanaka et al., 2013).

Before we disband for the day, we need to ensure each of our PLC participants have a solid plan for implementing student-centred inquiry and they feel comfortable venturing to the realm of question based learning with their students. The participants should ensure that they reflect on their experiences and hopefully they are secure enough to discuss their experiences outside of the PLC meeting times and they can collaboratively problem solve as we move forward. Reflection is an essential piece to the inquiry process (Tanaka et al., 2013). The last item on the agenda is to set date for the next meeting. We need to take into consideration a longer duration between the sessions because the implementation phase of our learning community may take a little longer. It will be important that participants continue to use Edumodo site where they can field questions, support each other with ideas, and acknowledge successes, in between our gatherings.
Professional Learning Community Meeting #4 (an hour and thirty minutes – approximately)

To begin this session (which would ideally take place about a month after the last gathering), we would discuss our experiences with trying out inquiry activities in our classrooms. The participants will have been asked to reflect in writing and will hopefully be willing to share the positive and challenging aspects of their experiences. Ideally, we will realize that we all have similar challenges and be able to support each other by sharing the creative solutions we are using to overcome any barriers. It’s my goal to create an engaging enough experience for participants of this PLC that they will be interested in continuing the process.

At this point, we will introduce the fourth chapter, “Designing Inquiry Activities” of the Alberta Learning’s (2004) *Focus on Inquiry A Teacher’s Guide to Implementing Inquiry Based Learning*, which begins with a concise review of the tenets of student-centred inquiry, as well as describes a planning cycle that support teachers in implementing question-based learning (Alberta Learning, 2004). We also want to ensure the group has a strong sense of community so participants will continue to support each as we move forward. “Designing Inquiry Activities” will help participant to understand the power of being involved in such a community by presenting cooperative planning and implementation strategies (Alberta Learning, 2004).

The most important piece to this chapter focuses on assessment approaches for student-centred inquiry activities. The Alberta Learning Group (2004) believes assessment strategies need to match learner outcomes and are integrated into instruction; students should be involved with their own assessment and get immediate and meaningful feedback – from each other and their teachers; and assessment frameworks should incorporate both product and the process-oriented demonstrations of learning. Assessment should provide on-going opportunities for students to re-visit their work in order to improve learning, involve students in identifying and demonstrating what they understand and can do, as well as use a variety formative, summative
and diagnostic approaches (Alberta Learning, 2004). As part of the PLC discussion, we will also discuss the checklist of capabilities suggested by Alberta Learning (2004), which establishes grade specific competencies for student-centred inquiry. These competencies are not set in stone and they should be used as a guide to assess. I hope to facilitate critical and construction dialogue in which we consider if/how are students are engaging in their learning in meaningful ways as well as the ways our own is supporting shifts in teaching practice. We will then plan when to meet for session number five and ask the members to bring an example of their student-centred inquiry to the next meeting.

Professional Learning Community Meeting #5 (approximately one hour and a half)

To start the fifth meeting, we can discuss our assessment experiences and draw on the groups’ expertise to collaboratively solve any challenges we may be experiencing. It is important to discuss where each member is on the inquiry cycle and collectively provide support for the participants who may be struggling. The goals are to engage in dialogue about how we can maintain the student-centred momentum and how we can encourage additional colleagues to come onboard with question-based learning. As Halbert and Kaser (2013) suggest, we will also consider how we can share our successes with the rest of the district in order to display our results and perseverance will be a focal topic.

Professional Learning Community Meeting #6 (two and a half hours)

This is the final meeting of this PLC series and we hope participants will be interested in attending the inquiry showcase presented by the Grade Eight Academy students. This showcase is an open forum where the students set up mini booths displaying their student-centred inquiry journeys – much like one would see at a science fair. This opportunity is a powerful and interactive experience that engages both students and teachers in discussions about inquiry
learning journeys. The participants can ask the students questions about their learning in a friendly and unintimidating space where we can view the progress of each of the discoverers. Because participants will have some familiarity of where these students began, we can see the living essence of inquiry and how the process melds and meanders as the students inquire. After PLC participants wander around connecting with students, we will debrief and discuss what we noted as viewed the student presentation. A discussion with Academy teachers about their assessment techniques and their views inquiry-learning will be very helpful as part of this debriefing process as well.

After our final official meeting and discussion, we should propose a regular forum where we can share our experiences in an informal setting and we can troubleshoot each other’s challenges and continue to move forward with student-centred inquiry. Hopefully the participants will have developed strong relationships with each other throughout the year and will want to continue connecting with and supporting each other through practice-based shifts. It is incredibly important to sustain our meetings to provide collaborative support and discuss ways to involve other teachers to join our student-centred inquiry movement.
Chapter 4: Reflection

University of Victoria, Literacy and Language Masters Program

Prior to applying to the University of Victoria Literacy and Language Masters Program, I was an English and Social Studies teacher with very little literacy experience. Due to seniority, lack of other qualified people and my own personal desire to diversify, I accepted an English teaching position. My goal as I entered into the MEd program was to broaden my perspective and gather a series of tools I could use to incorporate literacy into my practice. I was generally concerned about my lack of knowledge and expertise incorporating reading, writing, and speaking into the classroom and hoped the MEd program would help me gain increased understanding. I came into the program with an open mind.

My pedagogy before this program concentrated on building rapport with my students, creating a safe environment void of ridicule, and maintaining a quiet, respectful classroom. I was a firm believer in having students think on their own and refused to provide answers because I believed students need to problem solve. I passionately lectured on topics I felt were important, relying on theatrics for student engagement, and regularly told students what to learn. I had students memorize facts and regurgitate on multiple-choice tests or in written paragraph form. I used textbooks, handouts, and questions regularly, but felt I needed to expand my repertoire. I often wondered whether I was doing the students justice with their learning. I never considered how challenging comprehension questions could be if students struggle with reading and writing. My assessment practices were generally writing-based and attempted to improve essay skills through practice and assessment for and of learning. I differentiated a little, but I rarely changed the products to a representation or a technology-based creation. The Literacy and Language Masters Program reaffirmed that problem solving is essential and students need to think on their own, which I had generally instituted into my lessons.
The concentrated summer sessions of my program were both a positive and challenging experience. I enjoyed the opportunity to complete two courses in rapid fashion, however the final two weeks were a challenge because I struggled with the workload. The combination of writing papers, reading articles for papers as well as for classwork overwhelmed me, and at times and I would end up confusing the information in class. I felt like a walking zombie trying to wrap my head around what the cohort had discussed and the information we were given. I found myself using extrinsic motivation to complete assignments and papers so I could take advantage of the Victoria landscape. I am a notorious procrastinator and by dangling the golf carrot, or concert treat in front of my nose, I found I would accomplish more prior to the deadline. The rapid succession of information taught me to prioritize and weigh importance. I would strive to complete the major assignments first and then concern myself with the smaller tasks. Prior to this experience, I probably would have tackled them the other way around, because the smaller exercises are easier and less work. In this way, the Literacy and Language Masters program altered my work habits for better. This experience helped me understand the process of inquiry more in depth because cognitive exploration using a question centric model relies on the development of large concepts first before understanding the specifics.

The University of Victoria, Literacy and Language Masters Program changed almost every aspect of my instructional practices. The Reading: Research and Processes course introduced me to the nuances of reading as well as the importance of background knowledge and making connections to various experiences. Now, I incorporate background knowledge activity into almost every exercise and strive to have students think about where their information came from and how they attained such experiences. I now understand that more experience and having students think about their background knowledge helps students comprehend in more meaningful ways and read more fluently. I realized memorization is not necessarily comprehension and have since structured my practices to concentrate on the latter.
The Writing and Representing course altered my thinking about assignments and assessment techniques. I now incorporate a variety of representation options into classroom activities, especially drawing. I am a terrible artist but I now understand cognitive processes that come to the forefront when learners graphically or symbolically represent something. Once I overcame the apprehension around drawing, I learned how important it is to express through art. I was a writing centric teacher who believed explaining through written text was the best way to express knowledge. I never understood the value of alternative representation options, nor did I value the cognitive benefits of different products. I have since moved away from writing centric assessments and create assignments with a variety of options for representation. Since I enrolled in the Masters program, my students seem to appreciate the options for expressing their knowledge, even though they approached the options with reluctance at first. Engagement in assignments has increased greatly.

The Literacy and Technology course changed my approach to technology in the classroom. In the past, I would use technology in an archaic manner, such as using Powerpoint presentations or having students type out a poem to make the product look aesthetically pleasing. I never thought about using technology as the learning tool. Even though I think I’m when it comes to technology, I did not understand the problem solving needed to manipulate a program and the commutative aspects of technological discovery. Once a learner solves a problem, the information disseminates quickly and they all move on to the next challenge. Technology is a collaborative venture for students. I have attempted to entice students to move away from their familiar programs for producing assignments and have begun to ask them to think outside their comfort zones and try to figure out new skills and problem solve using their high tech abilities instead of using the same processes over and over. Unfortunately, technology in my school district is a challenge because we have such a conventional approach to using it in a classroom. The district has old computer rooms where only two thirds of the desktops work and there are too
few rooms; we have one projector per department with six or seven teachers vying for them; we have VCRs and televisions on wheels and one or two smart boards per school. I have truly struggled to incorporate technology regularly, but when given an opportunity, I have changed how I approach technology in school. My Inquiry course challenged me to create a PowerPoint presentation with a voice over. I had used PowerPoint in the past, but had never used a voice over option so had to wade through a series of temporary and expiring programs to ultimately record my voice around twenty times as I described each slide. I found myself constantly troubleshooting and problem solving and as I slowly figured out how to implement the ideas I wanted within the PowerPoint presentation, I developed a knack for using the program.

The Oracy course had a profound effect on me. Prior to starting the Masters Program, I believed talk was important, but it was more presentational talk and I worked on enhancing student comfort levels talking in front of each other. The exploratory talk techniques we discussed in class broadened my horizons and inspired me to incorporate the methods into my everyday instruction. I understood that more perspectives provided more knowledge, but I never considered where the information came from. By providing students an opportunity to work through ideas among themselves, they would have to evaluate and revaluate ideas, problem solve, refute, and decide on what they believed was the right answer. Prior to my MEd program I would generally resolve the disputes and was the ‘keeper’ of knowledge, but had no idea how much more beneficial the exploratory discussion could be. The Oracy class led me to discovering the benefits of discussion and the problem solving skills needed to develop articulate arguments where each student has the opportunity to make an informed decision based on what has been said. I now appreciate the culturally diverse setting we experience in a classroom and every student has a different perspective feeding their background knowledge that they bring to discussions in school. I now strive to facilitate a discussion each class and try not to offer an opinion to resolve disputes to allow the learners to create an opinion on their own.
The Self-Directed Inquiry course I enrolled in with Dr. Kathy Sanford became the most influential opportunity for development. The inquiry course turned out to be a metacognitive inquiry based four-month learning journey. I used knowledge I gained from the readings to generate new avenues and questions for learning. I employed the tenets of student-centred inquiry to delve deeper into student-centred inquiry. For me, the entire initiative allowed me to submerge myself into question-based learning to truly understand what a student in an inquiry-centric learning situation might experience. I experienced the entire inquiry process, from initial questioning and curiosity, to assessment, and the creation of a final product. I feel I can now empathize with the challenges students may face while engaged in inquiry. I realized how important it is for students to be motivated, how questions, and explore in open-ended ways. I also now understand how difficult it is to move from one task to another, especially when a topic feels unfulfilled. I recognize the importance of refining ideas to gather different information and how extended periods of time are needed to progress into deeper understanding and move beyond rote memorization and surface learning. The one key tenet of inquiry-based learning I believe I missed out on was collaboration. Almost every article I read on inquiry discussed the importance of collaboration from both the facilitator and the learner perspectives. By not having a group of people to bounce ideas off of and share challenges and successes, I think I struggled.

My expertise in literacy and language was minimal before applying to the University of Victoria Literacy and Language Masters Program. I felt I was an innovative teacher who tried to incorporate different lessons into the classroom as often as possible, but I was an English and Social Studies teacher with very little literacy experience. I believe this program has broadened my perspectives and has bestowed upon me literacy theories and tools that have altered my approach to teaching. This program opened my mind to new pedagogies that I’m now working to incorporate into my practice. I have moved beyond dependence on memorization and rote learning, and I am now focusing on how problem solving, critical thinking, exploration,
comprehension skills, technology, and discussion that invites diverse perspectives can support meaningful student learning.

Exploratory Talk and Student-Centred Inquiry Information Session

I offered my newly discovered insights at a professional development session at a local secondary in November, 2013. The session was called “Student Centred Inquiry: An Informative and Practical Inservice for the Teachers”. Staff feedback (via an informal poll) suggested a split in the number of participants who found the session effective; a more positive number than I anticipated.

The most beneficial part this session was my emergent understanding that perhaps the session was not a linear exercise and I needed to adapt to the discussions, instead of determining the conversation. Fittingly, I incorporated a quote by Brand and More (2011) into the visual that encompasses the entire inservice experience, “the learning process is not linear and is accompanied by experimentation and error” (p. 909). By adapting, adding, removing slides and glossing over parts, I felt the discussion was more authentic and guided by the participants (much like the inquiry process). The biggest adjustment I made during the session was that I needed to jump around the slides and provide information as the discussion dictated instead of halting the discourse because it was not the next slide. A less linear program may help with this challenge in the future. This is a recurring theme as I reflected on how the session unfolded and is mentioned in almost every paragraph.

I treated this in-service like a scaffolding inquiry-learning opportunity for participants – I made space for them to facilitate, share, and let the important issues emerge. I tried to incorporate the inquiry model as well as exploratory talk opportunities into the exercises as we progressed through the information session. Looking back, I might search for a way to link the possible threads of discussion through a PowerPoint, or Prezi. My challenge with this solution is that I
will not know where the conversation will go and what information I will need to support conversations. By being a facilitator, the conversation dictates where and what we discuss about inquiry and exploratory talk. Being a facilitator, rather than a lecturer, is a goal I’ll continue to work on as my career continues.

The most common sentiment or concern expressed by participants is the lack of funding from the government, which monopolized the conversation for quite some time. I had a hunch the funding formula would become a discussion topic, so I prepared myself by reviewing the Twenty-First Century Learning Promotions from the Ministry of Education. The conversation did also touch on a few of the sentiments I wanted to discuss regarding inquiry-learning and exploratory talk. I then tried to curtail the funding discourse to an attainable and changeable concern for the school, lack of technology, and tried to utilize my familiarity with Twenty-First Century Learning to have them think in a different way. The fatalistic conversation spiraled into negativity, so I jumped ahead a little to the last point on the sentiment slide, which was what can we do to get beyond these challenges. The change of thought processes altered the focus of the discussion on ways to overcome the deficiencies. In retrospect, I think, next time, I would acknowledge the challenges we face with funding, but reiterate, the formula is probably not going to change and we are required to find a solution within the confines of the system.

The conventional approach slide offered the first opportunity for resistance from some of the tenured, habitual teachers. They believed the silent classroom proved to be the best way for students to learn because this had been working for teachers for quite some time. Those participants who were interested in exploring inquiry defended the need for change and I wondered how to interject without offending anyone. I decided to skip to the teacher sentiment slide and the exploratory talk exercise to have teachers share their concerns about student led inquiry. I thought I could revisit the deeper versus surface learning and how inquiry concentrates on the deeper perspective.
In addition, I am amazed with the usefulness and effectiveness of mini white boards as facilitation tools, and plan to use them regularly in my own classroom. The whiteboards provided a venue for the teachers to jot down ideas and expand on their discussions. I had never used them before and I could not believe how engaged teachers can get when discussing ideas. The white boards had the teachers all huddled into what I would consider a positive discussion posture and they seemed to enjoy the inclination that their ideas were not set in concrete and could be adapted or even erased.

The first introductory discussion focused on asking participants to the share what “inquiry” means to them; this proved to be a beneficial exchange of views and a positive experience. Our district is currently attempting to promote professional inquiry and long-term development, so participants’ background knowledge eased the burden on me as the person who is ‘supposed’ to have all the knowledge. During this conversation, I used Tanaka, Abra, Tse and Archer’s (2013) transformative inquiry model as a basis for understanding the process. I mentioned time, resistance, community, and question gathering (Tanaka et al, 2013). We discussed the information on the slide and I added some other key pieces such as reflexivity and becoming learners with our students. The active participation bullet became a contentious issue where students discuss their findings with each other and expand on each others’ ideas because some of the participants prefer a quiet classroom environment, yet this resistance led into the differences between the conventional learning and the inquiry approach (a nice transition into the rest of the presentation). In fear of becoming redundant, I removed a few of the comparisons between tradition and inquiry because and, for the most part, we discussed the distinctions in depth.

The exploratory talk and inquiry process exercise where teachers were asked to apply the method to what we discussed was an extremely positive experience. I was truly surprised when almost every teacher actively engaged in the activity. I think the engagement was due to something new and different, and their interest was sustained throughout. Usually I see the
educators who are keen to learn and try new ideas dominate over the naysayers, but in this case, the majority participated. I think the mass involvement could be attributed to the cross-curricular collaborative groups I had the teachers assemble in at the beginning of the session. Because they are not necessarily familiar with each other, professional courtesy and respect also fueled the engagement. The informative sharing that followed this activity supported participants (teachers) to experience inquiry just as a student would. I was impressed with how in depth we managed to get with the metacognitive aspects of the exercise and how we did not concentrate on the information they gathered. The new knowledge was a considered welcomed bonus to the exercise. I then asked how the teachers felt not knowing some information and how curiosity drove their learning throughout the twenty-five minute exercise. In retrospect, I think it would have also been helpful to hear their views on the value of peer discussion while uncovering new information.

The discussions amongst the participants were both beneficial and a detriment. I felt the conversations were positive in nature and rarely ventured off task and I believe I facilitated the conversations to go in a direction that was beneficial for the group. The challenge was, of course, time. I was caught in a dilemma: I had argued that time was essential for getting into deeper learning and to truly experience the effects of the inquiry process yet, the discussions consumed so much time I had to gloss over parts of the session. The dilemma of fostering quality conversation within tight time constraints posed a significant challenge because I wanted to ensure we had enough time to try to create our own inquiry opportunities. Originally I did not intend on having an immense amount of participant discussion, but the time spent was well investment, I think, because it created ownership in the process.

If we change the learning culture and have a curious mind, we can be better teachers. An ongoing collaborative professional learning community is a way to explore teacher learning and hopefully, the participants will be willing to explore ways in which their practice can shift.
Overall, the inquiry inservice was both a positive experience and a challenge. My involvement with this project was a major learning experience and I believe it was a success. If I could do it over again, I would change a number of conditions and circumstances, especially the funding discussion, because it can be such a difficult state of affairs to discuss and the opinions can be polarizing. I expected some negative debate and the attempt to dispel the pessimism was a rewarding adventure. I enjoyed facilitating the discussions, although, I think my management of time was unsatisfactory. I will promote a Professional Learning Community (PLC) to continue our exploration of student-centred inquiry.

**Professional Learning Community**

I had not been a part of a collaborative learning community before, so the research and the development of a professional learning community (PLC) was a new experience for me. My professional development experiences in the past revolved around guest speakers who have one lesson that works great and they believe their successes can be transplanted to additional educational contexts. I was often unsatisfied and disappointed, and had thought many times of creating something better and more informative. This interest eventually fueled this Masters project – the development of an in-service where I could support other teachers in learning about the benefits of inquiry and exploratory talk. Unfortunately, prior to researching PLCs, I believed I could potentially establish a session strong enough to entice teachers to buy in to what I had to sell, but I never really thought about the learning that needed to happen after the informational session and how teachers could continue their development instead of reflecting on what I had to offer in the hour and twenty minutes and either trying it or not. By investigating the collaborative learning communities, I realized that the initial professional development session would need to lead to on-going collaborative professional learning for participants.
My school district offers six or seven in-school collaborative times where groups of teachers get together and discuss what are supposed to be explorative topics to further our professional learning. In the past, these sessions generally turn into forums for protests and bleats on how unhappy teachers are with the system, school, or students. Other times, they turn into boast filled rants on fantastic golden lessons. By investigating the true nature of PLCs, I came to understand the importance of teacher collaboration and the willingness to learn, not only in the designated times established by the province and the school district, but at all times. To sincerely experience success in PLCs, we need to establish a like-minded group of colleagues willing to expand our knowledge and change our instructional practices for the purpose of better supporting student learning. If we want school-wide or district-wide change, we will need to have the support from our peers to do so. If teachers are not willing to alter their practices, they can become a detriment to the professional learning and can breed negativity. It can be challenging to entice teachers who do not want to try because all a facilitator or the group can really do is provide the research on how beneficial the new practices can be for our students. For success and to promote a shift from traditional textbook centric teaching, participants need to be engaged in the subject. Without engagement, the PLC becomes useless and a waste of time. I’ve learned that the collaborative learning opportunity needs to be progressive as well, with a fluid and flexible agenda rather than a rigid set in stone program that has a definitive end goal. Not all PLCs are alike and not all PLCs will end up in the same place at the same time. I think the openness and the fluidity of collaborative learning groups can scare some people because they need an end goal or an established routine. If we provide a comfortable, supportive environment when establishing the communities, perhaps we can appeal to the contrary thinkers and create an opportunity for change.

One of the challenges that came to mind as I was creating this set of professional learning community meetings was that not all teachers involved will have the same drive or motivation
to implement theories or ideas at the same rate. We can collectively decide when we are going to meet, what we will try to implement, and what we hope to bring back to the next meeting, but not all teachers will be on the same page. Some may have reluctance to implement the ideas into their classroom for various reasons and others will put everything we discuss into effect immediately. When the PLC meets, we will more than likely be at different stages of enacting the ideals into practice. I think if the decisive members of the PLC provide support for the teachers who are a little hesitant, we can all move toward helping each other change how we approach a classroom.

The second challenge I thought about as I was generating the professional learning community meetings was how the group was going to consistently meet. The nature of the small district leads to relatively small schools and the more undersized the schools, the smaller the collaborative group may be, potentially two or three people. If the PLCs are to be district wide, the difficulty for setting consistent meeting times where the majority of people can congregate increases substantially. Teachers can be reluctant to give up their own time for more meetings and their out-of-school lives should take precedence. Ideally, the PLC would be made up of driven teachers who will give up everything to change and learn to help students succeed, but from past experience, I know this may not be the case. Social media is a competent means for staying in touch, but I believe true collaboration needs to happen face to face. The Edumodo site is fantastic for small posts and offering brief descriptions of positive and not so positive experiences, but in depth descriptions, discussions, and student examples are best shared in person.

The final challenge I came considered as I was designing establishing the professional learning community meetings was funding. Money can be a strain on professional development opportunities. Each teacher is allocated a certain amount of funds per year that are available for learning opportunities. The sum varies per year and is the same throughout
the district. Unfortunately, the monies distributed are not necessarily enough to encompass the two PLC activities I planned that happen during school time. I believe viewing other teachers is essential to personal learning and I believe the interaction with the Grade Eight Academy is invaluable, but there are limits to the amount of money available. The payment for the teachers-on-call to cover for an afternoon exceeds the funding available for each participant. Unfortunately, monetary resources may impact the development of the PLC.

I began to think of ways around the money issue and have had hypothetical conversations with my principals. One of the solutions would be for each teacher to discuss their dilemma with their individual administrators and hopefully the principals can find money to allocate for the two half days the group proposed. This option has less paperwork and has potential for success, but if there are too many participants from the same school, the less likely the funding will be available. My administrators have indicated to me that I could go to the superintendent and discuss special funding for the collaborative learning group. This option takes time and paperwork. The likelihood of receiving the funding is uncertain and would depend on how many groups are lobbying for the resources and how generous the superintendent is. I fear the professional learning community may hit a snag when attempting to incorporate class visits and teacher observations.

I found I struggled with the hypothetical aspect of the PLCs. As I reviewed the possible challenges, I realized that the collaboration process and facilitation leads to endless opportunity for learning, and endless avenues that could develop. It is impossible to truly know where the PLC will end up, even if I planned six potential meetings. If the group were to openly collaborate, we may choose to take a different route with inquiry and exploratory talk and move away from my original plans. The nature of professional learning communities leads to forthright discussion and decisions made by the group and as the facilitator, I would be
constantly learning as well, but should not dictate where the group will go or how to arrive at our destination.

By researching professional learning communities, my view on professional development has changed. The ‘one and done’ workshops, which I found lacking, are becoming a thing of the past and fostering ongoing learning for educators has come to the forefront. I believe the nature of the PLCs invites teachers to learn what they want to learn and to inquire into what they believe is important. Choice breeds engagement and interest fosters learning and if we as educators can have a say in our own learning, we are more than likely going to develop our practices and philosophies long term. Professional learning communities provide a like-minded, hopefully motivating, collaborative settings where we can strive to improve our craft.


Appendix A:

(Mishra & Bhatnagar, 2012, p. 547)
**Appendix B:**

**Professional Learning Community Lesson Plan #1**

**Lesson Title:** Introduction to Exploratory Talk and Inquiry

**Rationale:**
To introduce the tenets of exploratory talk and student-centred inquiry

**Instructional Objective(s):**
Attempt to encourage the participants to further consider and examine exploratory talk and student-centred inquiry by immersing the learners in a collaborative and interactive metacognitive journey.

**Materials and Resources:**

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Projector</td>
<td>1. Pen</td>
</tr>
<tr>
<td>2. Internet access and computers</td>
<td>2. Paper</td>
</tr>
<tr>
<td>3. Powerpoint presentation</td>
<td>3. An open mind and positive attitude</td>
</tr>
<tr>
<td>4. Intimate setting</td>
<td>4. log in information (varies per school)</td>
</tr>
<tr>
<td>5. Mini white boards and expo pens</td>
<td></td>
</tr>
<tr>
<td>6. Edumodo login information</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Learner Activities</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Exploratory Talk introduction/discussion.</td>
<td>1. discuss need for quiet classrooms and what exploratory talk looks like.</td>
<td>1. 5 min</td>
</tr>
<tr>
<td>2. Tenets and benefits of Exploratory Talk.</td>
<td>2. Watch, listen, note, realize.</td>
<td>2. 3 min</td>
</tr>
<tr>
<td>3. What is needed for implementation.</td>
<td>3. Discuss what they believe is necessary for implementation.</td>
<td>3. 5 min</td>
</tr>
<tr>
<td>4. Compare presentational talk to exploratory talk.</td>
<td>4. Watch, listen, note, realize.</td>
<td>4. 2 min</td>
</tr>
<tr>
<td>5. Exploratory talk a definition for inquiry and determine a definition.</td>
<td>5. Discuss their interpretation of student-centred inquiry in small groups – establish a definition.</td>
<td>5. 5 min</td>
</tr>
<tr>
<td>6. Inform about traditional approach versus inquiry approach including deeper learning and surface learning.</td>
<td>6. Absorb the differences, pose questions, perhaps compare to their own practices.</td>
<td>6. 5 min</td>
</tr>
<tr>
<td>7. Exploratory talk with teacher sentiment toward student centred inquiry.</td>
<td>7. Discuss their idea of how inquiry works, their fears or problems with inquiry. Share out.</td>
<td>7. 5 min</td>
</tr>
<tr>
<td>8. Review the inquiry process and how it works – show different graphics.</td>
<td>8. Watch, pose questions, take note.</td>
<td>8. 5 min</td>
</tr>
<tr>
<td>9. Exploratory talk discussing what teachers need to incorporate student centred inquiry into their classrooms and review the</td>
<td>9. Discuss what teachers need to incorporate into classrooms and why they may hesitate. Note the common necessities for incorporation.</td>
<td>9. 5 min</td>
</tr>
</tbody>
</table>
10. Organize an inquiry exploration in groups of three. Distribute obscure topics and have the participants discover.

11. Discuss the results and their sentiment about collaborative investigation and lead into information about what we need to provide for students as facilitators.

12. Allow for time for implementation into classrooms – how are the participants going to put what they have learned into practice.

13. Reflection opportunity to share their sentiment on the information session and if they are would like to continue in a professional learning community. Provide Edumodo login information.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Explore the internet collaboratively searching for information about the topics given. Metacognitively make note of how their investigation went and what they needed as students.</td>
<td>10. 20 min</td>
</tr>
<tr>
<td>11. Share how their investigation went concentrating on the thinking part and less on the results of the search and what they as students lacked while exploring.</td>
<td>11. 5 min</td>
</tr>
<tr>
<td>12. Individually or as a group determine a way to incorporate inquiry into their classroom as a trial.</td>
<td>12. 10 min</td>
</tr>
<tr>
<td>13. Write down their sentiment, their interest and if they want to continue.</td>
<td>13. 5 min</td>
</tr>
</tbody>
</table>

**Organizational Strategies:**
- Group creation – either random or fixed. Ideally, have cross curricular participation – not essential
- Space for group deliberation. Find alternative spaces depending on size of the group
- Laptops or Computer access is essential – book a computer lab or host session in the computer lab
- Seating arrangement in 4s or 3s – perhaps mix groups once we start.

**Assessment and Evaluation:**
- Satisfaction survey
- Interest survey

**Extensions:**
- Promote the Edumodo collaboration site
- Encourage collaborative discussions on experiences for the session – further exploration for learners.
Professional Learning Community Lesson Plan #2

Lesson Title: Grade 8 Academy Observation

Rationale:
To provide a venue for the professional learning community to observe student-centred inquiry in action.

Instructional Objective(s):
The collaborative group will wander around and interact with the Grade 8 Academy students while they explore their individual topics. The teachers will interact with the students in the class through observation, questions, interaction and learning.
The group will discuss what they saw, learned, noticed with the professional learning community and the Grade 8 Academy teachers.

Materials and Resources:

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Permission to observe</td>
<td>1. Note pad/writing utensil for observations (if needed)</td>
</tr>
<tr>
<td>2. Organize leave time from PLC teaching classes</td>
<td>2. Inquisitive approach to the morning/afternoon.</td>
</tr>
<tr>
<td>3. Coordinate time with Academy Teachers</td>
<td>3. Relevant questions for the Grade 8 Academy teachers</td>
</tr>
<tr>
<td>4. Venue for the debrief</td>
<td></td>
</tr>
<tr>
<td>5. Halbert and Kaser (2013) - chapter 2</td>
<td></td>
</tr>
</tbody>
</table>

Lesson Activities:

<table>
<thead>
<tr>
<th>Teacher Activities</th>
<th>Learner Activities</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Discuss Edumodo questions as a group.</td>
<td>1. Share questions, challenges, issues that arose from the last meeting.</td>
<td>1. 10 min</td>
</tr>
<tr>
<td>2. Introduce Halbert and Kaser (2013) chapter 2, discuss the importance of rapport, safe environment, student collaboration.</td>
<td>2. Discuss ways we establish rapport, safe environments and promote collaboration in our classes.</td>
<td>2. 10 min</td>
</tr>
<tr>
<td>3. Observe Grade 8 Academy and student-centred inquiry.</td>
<td>3. Observe, mingle, interact with students.</td>
<td>3. 1 hour 20 min</td>
</tr>
<tr>
<td>4. Debrief the observation session with the PLC and what we noticed and what worked and what didn’t.</td>
<td>4. Discuss what we noticed, what worked, what didn’t.</td>
<td>4. 15 min</td>
</tr>
<tr>
<td>5. Ask the Grade 8 Academy teachers questions and listen to the prompted information.</td>
<td>5. Listen to the Grade 8 Academy teachers discuss their experiences and pose questions.</td>
<td>5. 30 min</td>
</tr>
</tbody>
</table>

Organizational Strategies:
Ensure leave forms for the PLC participants
Book a venue for the debrief
Prompt the Academy teachers on what we will be discussing – rapport, environment, collaboration
Internet access needed – for Edumodo site

Extensions:
How to try inquiry ourselves – try the process for the next meeting
PLC teachers utilize the Mishra and Bhatnagar’s (2012) graphic on the inquiry process
# Professional Learning Community Lesson Plan #3

**Lesson Title:** Professional Learning Community Student Centred Inquiry Implementation

**Rationale:**
To discuss individual metacognitive experiences for student centred inquiry.
To derive a way to incorporate student-centred inquiry into a classroom.

**Instructional Objective(s):**
To have teachers discuss their experiences with inquiry and to share their metacognitive realizations as learners.
Provide a forum for the PLC participants to develop a student-centred inquiry exercise for the classroom.

**Materials and Resources:**

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mishra and Bhatnagar’s (2012) Graphic</td>
<td>1. noted inquiry experiences – successes and challenges</td>
</tr>
<tr>
<td>3. Internet access.</td>
<td></td>
</tr>
<tr>
<td>4. A room.</td>
<td></td>
</tr>
</tbody>
</table>

**Lesson Activities:**

<table>
<thead>
<tr>
<th>Teacher Activities</th>
<th>Learner Activities</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bring up Edumodo questions or concerns.</td>
<td>1. Discuss any challenges or concerns the PLC from the Edumodo site – attempt to collaboratively solve.</td>
<td>1. 10 min</td>
</tr>
<tr>
<td>2. Discuss Mishra and Bhatnagar’s (2012) inquiry process and the individual attempt at student-centred inquiry.</td>
<td>2. Discuss the individual experiences, dealy discovering common threads and discuss how to collaboratively resolve challenges.</td>
<td>2. 30 min</td>
</tr>
<tr>
<td>3. Introduce Khalid’s (2010) <em>An Integrated Inquiry Activity in an Elementary Teaching Methods Classroom</em> and have the PLC read the brief article.</td>
<td>3. Read the article.</td>
<td>3. 10 min</td>
</tr>
<tr>
<td>4. Discuss the article.</td>
<td>4. Discuss the article.</td>
<td>4. 10 min</td>
</tr>
<tr>
<td>5. Derive individual ways to incorporate student-centred inquiry into classrooms.</td>
<td>5. Create a student-centred experience for the classroom.</td>
<td>5. 30 min</td>
</tr>
<tr>
<td>6. Share progress.</td>
<td>6. Share progress.</td>
<td>6. 5 min</td>
</tr>
</tbody>
</table>

**Organizational Strategies:**
Find a room for the next meeting in a month.
Ensure the PLC members have a confident hold on establishing student-centred inquiry in the classroom.
Copies of Khalid’s article.

**Extensions:**
Have PLC members note assessment successes and challenges as they introduce inquiry into classrooms.
## Professional Learning Community Lesson Plan #4

**Lesson Title:** Student-Centred Inquiry Assessment Strategies

**Rationale:**
To introduce and exchange assessment strategies for student-centred inquiry

**Instructional Objective(s):**
To establish a relatively concrete approach to student-centred assessment in the classroom.

**Materials and Resources:**
<table>
<thead>
<tr>
<th>Teacher</th>
<th>Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Varied rubrics for student-centred inquiry</td>
<td>4. Assessment experiences</td>
</tr>
</tbody>
</table>

**Lesson Activities:**

<table>
<thead>
<tr>
<th>Teacher Activities</th>
<th>Learner Activities</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Address Edumodo questions or concerns.</td>
<td>1. Discuss and collaboratively address challenges.</td>
<td>1. 10 min</td>
</tr>
<tr>
<td>2. Establish a forum for discussion of the implementation of student-centred inquiry into classrooms.</td>
<td>2. Discuss the implementation of student-centred inquiry and review successes and challenges.</td>
<td>2. 30 min</td>
</tr>
<tr>
<td>4. Discuss assessment and student-centred inquiry.</td>
<td>4. Collaborative establish assessment opportunities for individual student-centred inquiry exercises.</td>
<td>4. 25 min</td>
</tr>
</tbody>
</table>

**Organizational Strategies:**
Ensure collaborative solutions, provide different rubrics that can be utilized for assessment.

**Extensions:**
Continue to concentrate on introducing different inquiry activities into individual pedagogies.
Professional Learning Community Lesson Plan# 5

Lesson Title: Sharing Success in the PLC and Beyond

Rationale:
To share successes and challenges within the group and report and describe our development to the district.

Instructional Objective(s):
To facilitate collaborative discussion around troubleshooting individual challenges with classroom inquiry and to develop a sharing out process that can resonate throughout the district.

Materials and Resources:

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A room for the meeting</td>
<td>1. A list of successes and challenges</td>
</tr>
</tbody>
</table>

Lesson Activities:

<table>
<thead>
<tr>
<th>Teacher Activities</th>
<th>Learner Activities</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Discuss our successes and our challenges to collaboratively find similar threads and troubles.</td>
<td>1. Discuss our successes and our challenges to collaboratively find similar threads and troubles.</td>
<td>1. 45 min</td>
</tr>
<tr>
<td>2. Discuss how we are going to share our ideas with the rest of the teacher population and our district administration.</td>
<td>2. Discuss how we are going to share our ideas with the rest of the teacher population and our district administration.</td>
<td>2. 20 min</td>
</tr>
</tbody>
</table>

Organizational Strategies:
Ensure facilitation and foster collaboration instead of dictating information.

Extensions:
Prepare for the next meeting with new lessons we have tried in the class and note how the development of student-centred inquiry has matured in our classes.
Professional Learning Community Lesson Plan #6

Lesson Title: Grade 8 Academy Final Presentations

Rationale:
To observe the final products of the Grade 8 Academy students and complete the inquiry cycle.

Instructional Objective(s):
To finalize the process and see the development of student-inquiry from start to finish.
To debrief with the Academy teachers about how they developed as facilitators for the inquiry process.

Materials and Resources:

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Permission to observe</td>
<td>1. Note pad/writing utensil for observations (if needed)</td>
</tr>
<tr>
<td>2. Organize leave time from PLC teaching classes</td>
<td>2. Inquisitive approach to the morning/afternoon.</td>
</tr>
<tr>
<td>3. Coordinate time with Academy Teachers</td>
<td>3. Relevant questions for the Grade 8 Academy teachers</td>
</tr>
<tr>
<td>4. Venue for the debrief</td>
<td></td>
</tr>
</tbody>
</table>

Lesson Activities:

<table>
<thead>
<tr>
<th>Teacher Activities</th>
<th>Learner Activities</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Observe Grade 8 Academy and student-centred inquiry.</td>
<td>1. Observe, mingle, interact with students.</td>
<td>1. 1 hour 20 min</td>
</tr>
<tr>
<td>2. Debrief the observation session with the PLC and what we noticed and what worked and what didn’t.</td>
<td>2. Discuss what we noticed, what worked, what didn’t.</td>
<td>2. 30 min</td>
</tr>
<tr>
<td>3. Ask the Grade 8 Academy teachers questions and listen to prompted information.</td>
<td>3. Listen to the Grade 8 Academy teachers discuss their experiences and pose questions.</td>
<td>3. 20 min</td>
</tr>
<tr>
<td>4. Discuss our successes and challenges for the PLC and their inquiry ventures.</td>
<td>4. Discuss our successes and challenges for the PLC and their inquiry ventures.</td>
<td>4. 20 min</td>
</tr>
</tbody>
</table>

Organizational Strategies:
Facilitate discussion with the PLC members about our successes and challenges.
Facilitate discussion with the Grade 8 Academy teachers and the PLC members.

Extensions:
Attempt to maintain momentum with our collaboration and the PLC. Encourage continuation and utilization of the Edumodo site and we will set up periodic meetings to share our successes.
Recruit more participants and promote student-centred inquiry.
Appendix C:

Exploratory Talk and Inquiry Workshop Powerpoint Presentation

**An Introduction to Exploratory Talk!**

**Does your classroom look like this everyday?**

**Are we scared this is going to happen?**

**How does an everyday classroom like this make us feel?**

**Exploratory Talk**

**Definition**

Exploratory talk is communication where partners participate in critical yet constructive thinking in a collaborative fashion while expanding on others’ ideas.

- The discussion is hypothetical and tentative when partners interact critically and constructively.

**What is it?**

**Let’s Try It!**

**Why?**
Definition (cont)
- hesitantly and incomplete thoughts
- enables students to try out ideas
- see what others think
- rearranges information into different schema
- assemble a common, cumulative understanding to further comprehension

Why use Exploratory Talk?
- Cooperation positive, cordial respect for and with each other
- strive to work together to achieve a common goal
- reflection on meaning to where students “talk it through” to problem solve
- leads to a deeper understanding through suggestion, validation, disapproval

Why use Exploratory Talk too?
- external dialogue creates internal dialogue
- formulate knowledgeable opinions and defend their ideas because argumentation is a form of reasoning
- “The new mandate from the Ministry of Education

PresentaConal Talk vs Exploratory Talk
- generally cold, practiced and prepared
- usually don’t need to defend own personal mentalized information
- no change of opinions or dialogue complexities
- in front of everyone, increased pressure

PresentaConal Talk vs Exploratory Talk
- healthy, spontaneous, reflective and diverse
- with conflicting opinions, learners gain the risk, play, learning, forming and sharing their ideas
- a standing board for students to hand in ideas and a chance to react and change opinions
- great dynamic – less pressure to work together
INQUIRY PLC WITH EXPLORATORY TALK

What we should try to incorporate Exploratory Talk

- Safe environment for discussion
- Empathy for the teacher and students
- Engagement, accountability and ownership from students
- Gradual release of responsibility
- Resilience

Student-Centred Inquiry

- Inquiry 'Based Learning'
  - Authentic situations - students explore and solve relevant problems
  - Students become more involved with their learning - more responsible - we become facilitators
  - Learn how to learn
  - AcCe 'parCipaCon'
  - ApplicaCon 'planning, evaluaCon'

Participants CONTENT

World CONTENT

ExplORATory

Inquiry
Conventional Approach

- Focuses on the transmission of knowledge
- Students are passive learners
- Stand and deliver and/or handouts with the information we want them to know or understand
- Role learning/memorization
- "Why can’t we just have a test?"

Deep Learning

- Fundamental principles that can be applied and exercise the imagination.
- There is more emphasis on skill-based principle, and the imaginative and creative perspectives
- Active learning takes more front-loaded preparation

Surface Learning

- Note memorization – store information without analyzing, interpreting, or reflecting
- For recitation and relies on passive learning
- Students take down their own notes verbatim or just handouts that are made available, either in printed form, or downloadable from a webpage
- My schooling – read, memorize, regurgitate and forget

"It's a clear case of PLS: Repetitive Lecture Syndrome."
Teacher Sentiment and Conception of Inquiry

- Professional Development needed in this area
- Kids won’t self direct — no drive
- Lack of tech
- Lack of time
- Concerns about home support
- Educational policy
- Tradition = familiarity
- How can we get beyond these?

Discovery vs Inquiry-based Learning

- Discovery is no-holds-barred — fly at it and see what happens
- Inquiry-based learning has an established structure - scaffolded

The Process of Inquiry

Introduction Phase ➔ Preparation Phase
Imagine Phase ← Inquire Phase
Innovate Phase ➔ Implement Phase
A third version of student led inquiry
What do teachers require to utilize the Inquiry Process?

Collaboration
- Break groups - cross curricular
- Groups of Science, English, Math, and Woodwork, for example
- Sustained - going to take more than one meeting
- Everyone has different perspectives and reflective ideas for implementations.

Time
- Find an alternative to the traditional block system paradigm

Block Schedule

Reflection - questions to ask ourselves
- What knowledge and skills do we, as professionals, need to meet the learning needs of our students?

Questions (continued)
- What do we already know that we can use to promote better outcomes?
- What do we need to learn and do to promote better outcomes?
- What sources of evidence/knowledge can we utilize?
Still Reflecting

- How have we contributed to existing student outcomes?
- In what areas and with whom are we most effective?
- In what areas and with whom are we less effective and why?

Outside the Classroom

- Beyond the desks, board, and room
- Make education applicable to life?

Administrative Support

- Traditionally, support for instruction was Crisis Management, special teaching interventions.
- More collaborative, distributed model
- Rooted in accountability and efficiency
- There can be systemic, structural barriers to the re-organization process

Administrative Support (continued)

- Administrators' current efforts and vision seemed to be based on general concepts of "best practices" not based in a particular content area.
- The construction of a shared vision of teaching and learning with the teacher teams, particularly at the secondary level, could be thwarted by content-related barriers.

Establish norms

- Standard classroom norms are required for behavior and work ethic.
- Each facilitator will be different.

Accountability and Efficiency

- Key for re-culturing
- If we don't hold our students accountable, they can choose to do very little.
- The same policies facilitators have in traditional classrooms would work in the Inquiry Model.
**Cognitive Dissonance and Acceptance**

- It's okay not to be the expert.
- Be open to students investigating topics you aren't an expert in.
- We are not experts and do not know everything about our content area.
- Teachers need to learn with the inquiry process too.
- Maybe our "golden lesson" isn’t as golden.

During inquiry-based instruction, the teacher does not need to be aware of all the potentially correct answers.

**MAKE LEARNING PUBLIC**

- Share successes and failures (especially failures).
- Express risks - laugh about mistakes.
- It's a learning process for everyone.

**What Students Need from Us**

- Establish rapport.
- Establish a purpose (learning intention).
- Design inquiry according to interests, passions, talents, and curiosities.
- Relevant, genuine problems.
- Co-construction criteria.
- Feedback - meaningful and timely (right or wrong, the process, self-regulation, positive reinforcement).

- The learning process is not linear and is accompanied by experimentation and error. (Brand & Moore, 2013)

- “Being right keeps you in place, being wrong forces you to explore.”
I don't think I can express what I have to say in just colored paper and glue.

Create our Own!